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WORK AND VOLUNTEERING: LONGITUDINAL RELATIONSHIPS BETWEEN WORK-RELATED EXPERIENCES AND VOLUNTEERING BEHAVIOR

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ABSTRACT

This study examines the effect of work-related experiences on employees' engagement in community volunteering, using data from a British longitudinal panel of employees. Using a novel analytical approach that separates variation in volunteering due to within-person changes in work conditions from variation due to between-person work differences, we more robustly test existing and new hypotheses about the effects of work on volunteering. New to this literature, we find that commuting and satisfaction with job experiences are significant predictors of community volunteering, both the likelihood to volunteer and volunteering frequency. In turn, volunteering determinants previously explored with cross-sectional data, such as managerial and professional jobs, employment sector and hourly-paid contracts are no longer statistically significant in the within-person models. We discuss a number of important theoretical and practical consequences of these findings.

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Introduction

As the involvement of modern states in the delivery of public services diminishes, it is hoped that citizens will help deliver some of these services through volunteering. Whether in the form of policy initiatives such as the UK's "Big Society" or as part of corporate social responsibility (CSR) actions, open support for volunteering is expected to encourage employees to engage more actively with their communities. Such expectations, however, tend to overlook the experiences that employees have at work and the consequences that work-related experiences might have on employees' volunteering behavior. This study examines the effect of work-related experiences on employees' engagement in volunteering for the community using a longitudinal research design.

Despite increasing evidence that what happens at work affects behaviors in the non-work sphere, research on the relationship between work experiences and non-work behaviors has primarily focused on the impact of work on employees' family domain (Bianchi and Milkie 2010; Edwards and Rothbard 2000). Instead, research exploring the link between work and community engagement in the form of volunteering has remained surprisingly scant (Pocock et al 2012; Rodell 2013; Voydanoff 2001; Wilson and Musick 1997). Indeed, Wilson and Musick (1997: 252) lamented the lack of attention paid to the relationship between the workplace – "the institution where most of the people spend most of their waking time" – and engagement in community volunteering. Similarly, Rodell et al. (2016) noted that, despite increasing interest in the topic of volunteering among researchers and practitioners alike, our understanding of how work experiences affect involvement in the volunteering domain is still limited, while Pocock et al. (2012) suggest that employment relation scholars should engage more with issues at the intersection of work, family and *community* (2012: 394).

A second, and perhaps the most critical limitation of the work-volunteering literature is the scarcity of longitudinal evidence about the relationship between work experiences and

volunteering, with the occasional longitudinal study including only basic work-related variables such as employed/unemployed, part-time/full-time and paying more attention to life events such as change in number of children or marital status (Lancee and Radl 2014). Lack of longitudinal analysis is problematic because it does not allow for further theoretical developments. For instance, existing theories of volunteering emphasize, in turn, either relatively time-invariant values that individuals possess (e.g. altruism, civic values) as the main cause of volunteering, or resources and constraints that individuals face as their life and work conditions change. However, cross-sectional data does not permit the disentangling of effects due to individual altruism and other stable attitudes and values from work-related effects. Hence, to more robustly test causal claims about the work-volunteering relationship, longitudinal data is critical. Furthermore, with little longitudinal evidence the question whether changes in work circumstances have an immediate effect on volunteering or whether individuals need to spend a longer time in a specific circumstance for a change in volunteering behavior to occur remains a moot point.

Third, most of the existing studies on volunteering have included both employees and individuals not in work. While these studies allow us to assess whether employees in certain work contexts have different volunteering behaviors than individuals who are not in employment, it does not allow for comparing volunteering between employees with different work experiences. Moreover, many of the existing studies investigate factors that affect the incidence or frequency of volunteering, but not both. Thus, we do not know how work-related conditions affect both employees' propensity to volunteer and their volunteering intensity, despite the fact that both aspects are relevant for researchers and practitioners (Rodell et al. 2016).

Finally, existing literature has not sufficiently discussed the extent to which organizations, as places in which work is carried out, might bear some responsibility for

employees' volunteering, or not, for the community. For instance, there is increasing acknowledgement among researchers and policy makers of a downward trend in job satisfaction across developed countries (Green et al. 2013; Rose 2005), in part due to an overall worsening of work conditions inside organizations. Yet, we currently do not know whether and how employees' satisfaction with their job-related experiences affects their engagement in unpaid volunteering work. Nevertheless, if it turns out that employees who are satisfied with their jobs are more likely to volunteer and to volunteer more, and that those who are dissatisfied retreat from civic life and volunteer less, then organizations might become more accountable for the job satisfaction of their employees. Understanding whether job satisfaction has positive effects on employees' volunteering could also support organizations with high levels of job satisfaction in making stronger, more credible claims of citizenship and social responsibility, thus helping them to become more attractive to new recruits. It could also prompt organizations with low levels of job satisfaction to become proactive and to more thoroughly investigate the sources of dissatisfaction among their employees.

This study more rigorously investigates the relationship between work and volunteering by using rich longitudinal data from the British Household Panel Survey (BHPS). Specifically, the study expands current research by: 1) simultaneously investigating the impact of a wider range of work-related conditions and experiences on volunteering behaviors, while at the same time controlling for relevant non-work factors; 2) using longitudinal data and a novel analytical approach that allows to distinguish between variation in volunteering due to within-person changes at work and variation due to between-person differences in work conditions, that could be affected by self-selection; 3) assessing the impact of work on both the likelihood and frequency of volunteering; 4) proposing and testing a link between job satisfaction and volunteering, so far underexplored by current

research. Overall, by unpacking the relationship between work and volunteering, this study contributes to a better understanding of how work conditions shape employees' civic engagement within their communities.

2. Work and Volunteering: Theory, Evidence and Gaps

As a form of prosocial discretionary behavior, volunteering represents “any activity in which time is given freely to benefit another person, group or cause” (Wilson 2000: 215).

Volunteering, however, is different from spontaneous helping that arises in situations in which an individual encounters “an unexpected need for help, calling for an immediate decision to act” (Clary et al. 1998: 1516). It is also different from the extra-role helping behavior displayed at work such as helping colleagues or supporting one's boss (Bateman and Organ 1983, George and Brief 1992) in that it is not oriented toward members of one's work organization. What distinguishes unpaid voluntarism from other helping behaviors is that it represents purposeful helping, which requires actively seeking opportunities to help others with whom someone is not immediately connected (e.g. family members, work colleagues), planning and commitment of time and energy (Clary et al. 1998; Rodell et al. 2016; Wilson 2000).

Working and volunteering involve the performance of two roles that are interdependent. Thus, on one hand, work poses demands and limitations that could negatively affect volunteering initiatives, but can also provide resources that enhance volunteering. However, questions still prevail regarding what work experiences impede volunteering, what experiences are inconsequential to volunteering and what constitutes resources that facilitate volunteering. As a result, gaps and contradictory results still persist. Moreover, because these inquiries have not been systematically investigated within a longitudinal framework, there is little understanding regarding the timing of these effects. Do changes in work conditions

affect volunteering in a relatively short time or only after employees have been exposed to a work condition for a longer period? Below we summarize current findings regarding the relationship between work and volunteering behavior, focusing on work-related factors that have been investigated in previous studies (see Wilson 2012 for a review), but not with longitudinal data. We make an additional contribution by theorizing about the likely effects of two new factors: commuting to work and job satisfaction. These factors have been shown to affect family behaviors, but their impact on other non-work domains such as volunteering has not been explored.

Time Spent at Work: To the extent that they impose demands on one's time and ability to meet and interact with others, longer working hours are likely to negatively affect non-work social activities. Indeed, the literature on work-family interference counts longer working hours as one of the most serious demands that work imposes on individuals (Voydanoff 2004). Lack of time is one of the most cited reasons for not volunteering (Sundeen et al. 2007), although it is not clear from these accounts whether working hours is the only source of time constraint invoked by respondents.

Empirical findings on the effect of working hours on volunteering behavior are mixed. Freeman (1997) found no relation between hours worked and hours volunteered, Wilson and Musik (1997) found a negligible relation between hours worked and number of volunteering activities, while Rotolo and Musick (2004) found that part-timers are more likely to volunteer. Lancee and Radl's (2014) research is the only longitudinal study showing that part-time workers volunteer more than full-time workers. However, the part-time/full-time distinction does not always capture the actual hours spent working, with part-timers complaining that they work more than the contracted hours (Kelliher and Anderson 2010; Van Echtelt et al. 2006). Thus, overall, the relationship between time spent at work and volunteering remains inconclusive.

Commuting Time: A further complication concerns the time employees spend commuting to work, a factor that so far has not received enough attention in the employment literature. While not necessarily productive time, commuting is time that employees need to spend to reach available jobs. Across all Western countries, statistics show that the percent of people commuting to work, as well as the duration of travel to work, have increased in the past decades, and that commuting time affects individuals' personal well-being as well as their satisfaction with non-work activities (ONS 2014). Yet, evidence on the relationship between commuting time and volunteering does not exist.

There are a number of reasons to expect that volunteering for the community is also likely to be affected negatively by an increase in commuting time. First, commuting adds unplanned limitations to one's free time, especially when employees travel on congested routes on which delays are frequent. Second, longer commuting has been associated with higher levels of stress and with negative affect (Kahneman et al. 2004; Koslowsky et al. 2014). Finally, commuting takes employees away from their communities and therefore further from volunteering opportunities.¹ Consequently, we expect that an increase in commuting time will negatively affect employees' engagement in volunteering.

Hourly Payment: A number of studies have shown that the way in which employees evaluate time resources affects their allocating time between work and non-work activities. For instance, DeVoe and Pfeffer (2007) propose that, compared to salaried employees, those paid hourly value their time more because the economic value of time is more salient to them. As a result, hourly paid employees are inclined to spend less time in non-work activities. Using data from a national cross-sectional survey, they showed that employees paid hourly were less likely to participate in volunteer activities and that they volunteered fewer hours than employees not paid hourly. Yet, since this evidence is cross-sectional, its causal claim is still untested. Experimental evidence from the same study also showed that employees who

calculated the hourly worth of their time indicated less willingness to volunteer. Although this finding suggests causality between individuals' calculating value of time and their willingness to volunteer, whether willingness to volunteer translates to actual volunteering is not as clear.

In an attempt to further unpack the mechanisms that links contract types to work preferences, DeVoe et al. (2010) found, in a longitudinal study, that hourly payment increases individuals' preference toward more work and that this effect persisted for up to two years. Nonetheless, the psychological persistence of this effect does not mean that employees might be able to immediately change their behavior. Specifically, while moving to an hourly contract affects individuals' willingness to engage in more work, finding opportunities to increase the hours worked might take time. Thus, it is possible that the effect of hourly payment not only takes longer to disappear, but also takes longer to translate to less volunteering. The longitudinal feature of the data in our current study allows us to better test the nature of the relationship between hourly contracts and volunteering behavior.

Permanent Job: Despite ample discussions about the growth of precarious work and increasing evidence of the unfavorable work conditions in jobs performed on non-permanent contracts (Booth et al. 2002; Kalleberg 2011), the effect of contract type – permanent or temporary – on volunteering has received little attention. The security offered by a permanent job could be seen as providing incentives for employees to invest in their career inside the organization, instead of spending time on developing new skills and contacts that could lead to the next job. To the extent that volunteering is a way to expand one's skills and social contacts – both of which are important resources for finding jobs – employees on temporary contracts might be more likely to volunteer than those on permanent contracts. On the other hand, it is possible that working on temporary contracts is correlated to other individual characteristics or that decisions over type of contract reflect intrinsic preferences for a certain

balance between time spent on work and time spent on non-work activities. In the latter cases, changes from one type of contract to another will not affect volunteering behavior. Given the longitudinal nature of our data we can investigate these conjectures and shed light on the relationship between type of contracts and volunteering.

Managers and Professionals: Existing empirical evidence typically shows that, compared to those working in lower-skill occupations, employees with high-status jobs, such as professionals and those with managerial roles, are more likely to volunteer (Smith 1994; Webb and Abzug 2008; Wilson and Musick 1997). The literature suggests that this is a result of high-status jobs creating resources, such as access to a wider range of stakeholders, more diverse knowledge and skills, including decision-making skills that could be deployed in volunteering activities. However, because the link between the status of the job and volunteering has not yet been tested in a longitudinal framework, it is not clear whether the development of these resources derives directly from one's job or whether self-selection mechanisms are involved. Moreover, the literature does not distinguish between employees in higher- and lower-level managerial and professional jobs. This distinction is important because different status levels are associated with differences in both resources and demands. For instance, because high-level managers are more likely to have the leadership experience and networks that could benefit others, as well as higher visibility, they might be more often invited to volunteer. New to the existing literature, in this study we distinguish between managers and professionals in high and low-level positions to better investigate the relationship between job status and volunteering.

Wage: Empirical studies have typically investigated the link between family income and volunteering and found that those with high family income tend to volunteer more. Little is known, however, about the relationship between employees' work wage and their propensity to volunteer. On one hand, it is possible that the wage-volunteering relationship is

positive, because those with higher earnings are less likely to need additional work to supplement their income. Thus, they have more free time that could be used for volunteering. Alternatively, it is possible that higher income makes one more aware of the market value of their time (DeVoe and Pfeffer 2011), and, therefore, reduces one's inclination to participate in non-work activities. Existing evidence regarding the wage-volunteering relationship is mixed. For instance, Freeman (1997) found a positive relationship between earnings and likelihood to volunteer, and some indication of a negative relation between one's income and the time spent on volunteering. More recently, Bekkers (2005) found that, after accounting for individual traits, hourly wages showed no substantial relation with volunteering, a finding replicated by other studies (Gomez and Gunderson 2003). As it is the case with most of the other determinants of volunteering, the wage–volunteering relationship has only been tested with cross-sectional data.

Employment Sector: The sector in which one works might also affect volunteering behaviors. Existing literature suggests that those working in the public sector and in the non-profit sector are more connected with civic groups (Brewer 2003). The more connected with the civic sphere, the more likely it is that an individual will be aware of volunteering opportunities and needs and, thus, more likely to engage in volunteering activities. Cross-sectional empirical evidence typically supports this hypothesis, showing that public and non-profit sector employees are the most likely to engage in volunteering and that they volunteer more hours than those working in the private sector (Rotolo and Wilson 2006). However, because the longitudinal evidence is missing here as well, we cannot disentangle the self-selection mechanism (e.g., altruistic people self-select in certain sectors) from the social contact mechanism (e.g., contact with the civic sphere enhances volunteering).

Satisfaction with Job-Related Experiences: Research on work-life interface has long established that job satisfaction, the “pleasurable or positive emotional state resulting from

the appraisal of one's job experiences" (Locke 1976: 1304), is a useful concept for understanding differences in engagement with non-work activities (Edwards and Rothbard 2000; Greenhaus and Powell 2006). Studies have shown that employees who are satisfied with their jobs have more emotional availability to the demands of their family roles and are less likely to feel that they do not have enough time to spend with their family and on activities in which they are interested (Voydanoff and Kelly 1984). Moreover, individuals with positive work experiences are more likely to report high involvement in and satisfaction with their marital relations (Heller and Watson 2005; Ilies, Wilson, Wagner 2009) and more intense parental involvement that has positive consequences on their relationship with children and on children's behaviors (Perry-Jenkins et al. 2000). The theoretical insight coming from these studies is that job satisfaction is a resource valued for itself, but also important for building further resources (Hobfoll 1998, 2001) such as more positive emotions and energy (Greenhaus and Powell 2006) that facilitate engagement in family activities. In turn, low satisfaction with work experiences results in individuals withdrawing from and lack of appetite to engage in new family activities.

While existing research has demonstrated the positive link between job satisfaction and engagement in family activities, the questions of whether and how individuals' satisfaction with their job-related experiences also affect their engagement in volunteering is under-researched. Following the theoretical line exposed above, we expect that employees who are more satisfied with their jobs are more likely to have the emotional disposition and energy to engage in further resource building by participating in community volunteering activities. Volunteering is a resource building activity in so far as engagement in volunteering is a way for individuals to acquire new resources such as social relations, knowledge and skills, a sense of achievement, fulfilment of their altruistic vocation and meaningfulness (Booth et al. 2009; Clary et. al. 1998; Rodell 2013). Hobfoll (1989) also mentions that

helping members of one's community is as an important way in which one invests available personal resources, such as the sense of satisfaction with one's work, to build new resources (e.g. social capital, skills). The conjecture is also supported by Rodell's (2013) findings that employees who have meaningful work experiences are more likely to be motivated to search for new but similarly satisfying experiences and, as a result, more likely to engage in volunteering activities in the community.

In turn, employees dissatisfied with their jobs are more likely to engage in behaviors that protect them from further resource losses rather than to initiate actions oriented toward building other kinds of resources, especially resources that are not immediately useful in alleviating work dissatisfaction (Hobfoll 1989, 2001). As a result, they are less likely to search for new volunteering opportunities or to increase their level of volunteering engagement. Therefore, we expect that an increase in job satisfaction will have a positive effect on individuals' engagement in volunteering. Table A.1 includes a summary of all factors, including their hypothesized effects on volunteering and the mechanisms through which they affect volunteering.

3. The Data

To investigate the relation between work-related demands and resources, and volunteering we used data from the British Household Panel Survey, a long-running panel survey of a representative sample of British households (Taylor et al. 2010). From 1996 through 2008 individuals were asked biennially about their volunteering behavior. After 2008 the BHPS was replaced by a new survey called *Understanding Society* and many of the variables of interest were not recorded in the new survey. Also, many respondents to the BHPS were not transferred to the new survey. Therefore, it is not possible to extend the analysis presented here beyond 2008. We considered all employed individuals, excluding self-employed, aged

between 16 and 65 with information on the variables of interest. This produced an unbalanced sample of 12,178 distinct individuals (32,562 observations).

Dependent variables: To capture engagement in volunteering we used two variables. The first one, a binary variable, captures whether an individual engaged in ‘*doing unpaid voluntary work*’. Unlike many surveys in which unpaid volunteering work is measured less precisely, such as volunteer intention, involvement in voluntary organization or by asking whether the respondent donated time to political or social causes (see Rodell et al. 2016 for details regarding operationalizing volunteering work), the BHPS question precisely indicates the two important components of the volunteering concept: that volunteering represents work to the benefit of others and that such work is unpaid (Wilson 2000). The second variable, an ordinal one, indicates, in increasing order, how often the respondent volunteered (‘never/almost never’; ‘once a year or less’; ‘several times a year’; ‘at least once a month’; ‘at least once a week’). We use both binary and ordinal variables so that we can account for both changes in likelihood to engage with voluntary work as well as for changes in volunteering frequency following changes in work-related factors.

Work-related determinants of volunteering: We explore the effect of all variables described in the theory section: hours worked, time spent commuting, hourly paid work, permanent contracts, wage, sector of employment, managerial and professional jobs (both high and low-level). Detailed definitions of all variables in the analysis are in Table B.1, including information about within-person variation over time for the theoretical variables examined. Because existing research has shown that individuals’ satisfaction with their job relates to a number of job-related experiences, we construct a composite measure of job satisfaction that captures respondents’ ratings of satisfaction with all job facets recorded in BHPS: satisfaction with work itself, satisfaction with pay, satisfaction with the time worked, satisfaction with job security, and general overall job satisfaction (for use of the same

measure, see DeVoe et al. 2010; Wu and Griffin 2012). Each of these variables takes values from 1 (“completely dissatisfied”) to 7 (“completely satisfied”). Cronbach alpha =0.78.

Ideally we would have liked to include other relevant facets of one’s job, such as satisfaction with co-workers, supervisors and promotions (see Spector 1997 for an inventory of job facets and scales), but they are not available in the BHPS. Our composite measure has typically been used in studies that use the BHPS; in this respect, although an imperfect measure, it ensures comparability between our study and other studies based on the BHPS, including the article by DeVoe et al. (2010) on the relationship between hourly pay and trade-offs between money and time whose results are of relevance to our study.

Control variables: Our selection of control variables was informed by studies summarized in Wilson (2012), the most comprehensive inventory of volunteering factors to date. In preliminary analyses we considered a number of control variables, such as health, region, new job, but after careful analysis (following Becker et al. 2016), we retained a smaller number. To account for individual characteristics we controlled for the following: age categories, gender, education categories and work tenure. We also include controls for family context: marital status, number of children, family income and number of hours worked in the household. All of these variables have been theorized to affect volunteering. Year controls are also included.

4. Analytical Strategy

Given the longitudinal nature of our data we analyze both the cross-sectional and longitudinal variation in our data using a within-between random effects specification developed by Bell and Jones (2015), in which both within- and between- observation unit effects are estimated in the same equation.

The basic equation is given by:

$$y_{ij} = \beta_0 + \beta_1(x_{ij} - \bar{x}_j) + \beta_2\bar{x}_j + (u_j + e_{ij})$$

where y_{ij} is a volunteering measure; subscripts i denote level-1 units, which in our case are survey waves, whilst subscripts j denote the level-2 units, which are individuals. β_0 are the random intercepts, β_1 are the level-1 time-varying coefficients capturing within-individual effects and $\beta_2 z_j$ are the level-2 coefficients capturing between-category effects. The residuals e_{ij} (for level-1) and u_j (for level-2) are assumed to be normally distributed. We fit logit models for our binary dependent variables (volunteer yes/no) and ordered logit for the ordinal variable (volunteering frequency).

For modeling volunteering behavior, this technique has a number of advantages. First, when modeling within- or between- individual effects separately, one often has to adjudicate between the two using a Hausman test. The advantage of the technique used here is that it overcomes difficulties related to deciding whether a pooled or random effects model (which combines the within- and between- conditions effects into a single coefficient) or fixed effects (which perform less well in situations in which changes in the dependent variable is infrequent, as it is the case with volunteering behavior) is a more adequate description of the phenomenon at hand (Mundlack 1978). Indeed, regarding volunteering behavior, there is no reason to assume that the within- and between- individual variation are the same. For instance, there might be different processes occurring as a result of variation in socio-demographic characteristics that do not appear immediately, but accumulate gradually, as a person experiences being part of a socio-demographic group; alternatively, some changes in the volunteering determinants might have more immediate consequences on the outcome variable. Second, in the simultaneous within- between- effects specification the individual advantage of each of the two methods is preserved: as in the fixed-effects model, β_1 is not biased because the between-individual variation is modelled in $\beta_2 z_j$. Also, because the

within-person effects are mean-centered, they are uncorrelated with the between-person random effects, thus removing the commonly-held limitation of the random effects approach.

5. Findings

Table 1 shows descriptive statistics. In line with previous studies, compared to non-volunteering employees, volunteers in our sample are more likely to be older than 35, female, more educated, married and with higher household incomes. They are also more likely to be employed in the volunteer and public sector and to occupy managerial and professional positions. There are lesser differences in terms of wage, hours worked and commuting, but relatively larger differences between volunteering and non-volunteering employees with respect to type of contract. Specifically, volunteers are less likely to work on hourly contracts or have permanent jobs. Finally, volunteers appear more satisfied with their job experiences.

Table 2 and 3 present analyses for the likelihood of engaging in unpaid voluntary work and for frequency of volunteering respectively, with the between and within-person effects specifications. For each work-related factor, we report and compare both between and within-person effects, with the former used to benchmark against existing results in cross-sectional studies and the latter to examine changes in volunteering due to changes in work factors. Also, consistent with the flow of presentation in the theoretical section, we present the findings factor by factor and discuss both the factor's impact on the likelihood to volunteer and on volunteering frequency.

Time Spent at Work: In Table 2, the between-person column shows a statistically significant negative association between work time and the likelihood of volunteering. However, the within-person effects are negative but not statistically significant. Regarding the effect of work time on volunteering frequency, Table 3 shows the same pattern: between-person effects are negative and statistically significant, but the within-person effects are not

different from zero. Given that the variable describing working time displays a high variation across waves (58.8%) the lack of a statistically significant effect gives a relatively powerful indication that an increase in working time is not necessarily accompanied by a lower engagement in volunteering activities.

Commuting Time: In Table 2 both the between- and within-person effects of commuting time are negative and statistically significant. Specifically, in the between-person model, compared to employees whose commuting time is about 20 minutes, about the average commuting time in the sample, those commuting around 50 minutes have a 9.4 percent lower chance of volunteering. Similarly, in the within-person specification, an employee's odds of volunteering decrease as their commuting time increases. The magnitude of the effect is relatively similar to that observed in the between-person model; for an employee whose commuting time increases about half an hour, from an average of about 20 minutes to 50 minutes, the chance of volunteering decreases by 8.8 percent. The same pattern is visible in Table 3: an increase in commuting time makes volunteering employees reduce the frequency with which they volunteer. Overall, the results show that additional working hours do not have an immediate impact on volunteering, but that more commuting time negatively affects employees' likelihood to volunteer as well as the frequency with which they volunteer. Moreover, because the effects for commuting hold and are statistically significant in the within-person model, and given the relatively high variation in commuting across panel waves (65.3%), these results are unlikely due to self-selection. Instead, they suggest that longer commuting time poses a serious obstacle to engagement in volunteering.

Hourly Payment: The between-person effects in Table 2 shows that, compared to those paid a salary, employees paid hourly are less likely to volunteer. Specifically the chance of an hourly pay employee not volunteering is 1.6 times higher than a salaried employee not volunteering. These results are consistent with previous evidence (DeVoe and Pfeffer 2007).

The within-person effects, although still negative, are no longer statistically significant. The effect of hourly pay on volunteering frequency (Table 3) display the same pattern, with between-effects negative and statistically significant and within-effects negative but not statistically significant. Thus, an immediate conclusion is that changes to hourly contracts are not accompanied by a decrease in actual volunteering. However, given the rate of change across waves (about 18%), coupled with previous findings that the impact of hourly contracts on individuals' accounting for time value has a longer-lasting effect (DeVoe et al. 2010), this result warrants more attention. We analyze this effect in more detail in the discussion section.

Permanent Job: The between-person effects in Table 2 and Table 3 show a negative and statistically significant association between working under a permanent contract and volunteering. That is, the chance of a permanent employee volunteering is only 42.8 percent of the chance of a part-time employee volunteering. The within-person specification shows, however, that moving to a permanent job has no effect on the volunteering behavior, neither on the likelihood to volunteer, nor on its frequency. This suggests that the effect of permanent contracts on volunteering in cross-sectional models might be driven by selection into jobs that offer permanent versus temporary contracts, as taking on a permanent job does not appear to immediately deter those who volunteer from continuing their involvement in such activities. It is however worth noting that, across waves, only 7.2 percent of the employees in the sample move into permanent employment.

Managers and Professionals: In Table 2, the between-person effects show that professional and managerial positions – both high and low level – are associated with a higher likelihood to volunteer. This result is consistent with previous results obtained in cross-sectional samples. However, when the within-person changes in occupational status are considered, the positive impact of occupational status is only present for high-status managers. Nonetheless, this result should be considered in light of a rather lower rate of

transition to higher management; only 4.67 percent of the sample is promoted to a high managerial position. Turning to frequency of volunteering, in Table 3, the between-person effects show that managerial positions and lower professions are associated with a higher volunteering frequency. The within-effects, however, remain statistically significant at a higher alpha level ($p < 0.1$) for only high-level managers and lower-level professionals. Taken together, these results suggest that the higher level of engagement in voluntary work of higher-status employees found in cross-sectional studies might be in part due to selection. We further elaborate on these aspects in the discussion section.

Wage: Table 2 shows that both between and within-person effects for wage are negative and statistically significant, thus adding weight to the previous hypothesis that those paid more have a high overall time value and therefore might be less likely to volunteer (DeVoe and Pfeffer 2011). For instance, in the between-person model, compared to employees whose wage is about £1,500 per month (about the average wage in the sample), employees whose monthly wage is higher by £500 have a 6.43 lower chance of volunteering. Similarly, in the within-person model, the effect and increase from the average by £500 per month sees a decrease of 7.02 percent in the chance of volunteering. Table 3 shows a similar effect of wage on the frequency with which one volunteers. Given that the variable wage displays high within-person variation across waves (98.2%), the statistically significant effects give a relatively powerful indication that for volunteering employees an increase in wage is accompanied by a decrease in the frequency with which they volunteer.

Employment Sector: In our review of the literature, nearly all cross-sectional studies that included the sector of employment found that non-profit and public sector employees were more likely to volunteer than those working in the private sector. We found a similar effect in our between-person effect models in both Table 2 and 3. However, the within-person effect shows that those working in the non-profit and the public sector are not more likely to

volunteer than employees in the private sector. The differences in the two estimates suggests that the relatively large effect produced by the between-person model might be driven by baseline differences (e.g. altruism, civic values) between employees who take up working in organizations that belong to various economic sectors, although for the non-profit sector coefficient it is worth mentioning that only 3.11 percent of the sample transitions into this sector. For the public sector, the change across waves is higher – 13.75 percent.

Job Satisfaction: In Table 2, both between and within-person effects for the job satisfaction measure are positive and statistically significant. In the between-person specification, the percent increase in volunteering chance when job satisfaction measure increases by 1 (scale 1-7) is about 9.5 percent; in the within-person specification the increase is about 6.5 percent. Table 3 shows the impact of job satisfaction scores on volunteering frequency. The contribution made by job satisfaction to volunteering frequency is positive and statistically significant in both between and within-person models. Overall, as both between- and within-person effects are positive and statistically significant in all models, and given the relatively high variation in job satisfaction values across panel waves (88.5%), there seems to be support for the hypothesis that an increase in job satisfaction scores will increase the likelihood and frequency with which individuals engage in unpaid volunteering work.

Control Variables: Although this study's focus is on the relationship between work experiences and volunteering, it is worth mentioning that the effects for control variables are in line with previous studies. Employees in the age group 25-35 are less likely to volunteer, and they also volunteer less frequently. There is also evidence that employees over the age of 55 volunteer more than employees in other age categories. Overall, employed women volunteer less than employed men. Consistent with cross-sectional evidence, higher education and vocational education have a positive effect on volunteering in the between-person model,

but the effect in the within-person models is negative, albeit at a higher alpha level ($p < 0.1$). Children have a positive effect on an individual's volunteering likelihood and the frequency of volunteering. Married individuals tend to volunteer more, although the immediate effect upon getting married on volunteering frequency appears negative. Finally, household income is positively associated with volunteering, but the effect does not hold in the within-person models.

6. Discussion and Conclusions

While scholars have long emphasized that work experiences affect employees' engagement in the non-work sphere, most of the recent theoretical advancements and empirical evidence have happened with respect to the work-family link. In contrast, the relationship between work and volunteering has received much less attention, with empirical evidence scattered across studies that typically investigate just a small number of work-related conditions, using cross-sectional data.

The aim of the current study was to advance the literature on work and volunteering in three ways. First, we brought together the main work-related factors captured by previous studies and analyzed their simultaneous impact on volunteering, while at the same time controlling for non-work conditions known to affect volunteering. Second, we expand the theories on work-volunteering by theorizing and testing two new work-related factors that might affect volunteering – commuting time to work and satisfaction with work experiences – thus expanding the range of work-related factors to be considered when analyzing employees' volunteering behavior. Third, we analyzed the work-volunteering relationship using longitudinal data, thus moving beyond a conception of work factors as correlates of volunteering behavior at one point in time. To the best of our knowledge this study is the first to test long-standing assumptions about the impact of work factors on volunteering using a

large longitudinal dataset. Our finding that a number of previous effects based on cross-sectional designs do not hold when within-person models are used raise questions regarding some of the mechanisms thought to link work and volunteering while also suggesting boundary conditions for some of these mechanisms. Below we discuss some of these mechanisms and possible amendments in more detail.

The results of our study have a number of implications for advancing the scholarly understanding of the link between work and volunteering. First, the different effects obtained in between- and within-person models suggest that some of the conventional mechanisms used to explain volunteering behavior are in need of revision. For instance, previous explanations for lack of engagement in volunteering often refer to time limitations, but did not fully make clear what time limitations mostly impact volunteering. The results of our study show however that, for those already working, an increase in hours worked does not immediately translate in a decrease in volunteering. Transition from temporary jobs to permanent work also does not result in lower engagement in volunteering. The only time-related constraint that translates into less volunteering is an increase in commuting time. These results do not mean that a reduction in discretionary time due to increase work time is not a burden for volunteering; rather they suggest that, for many volunteering employees, working hours might have been factored in at the time when they decided to take on volunteering. Another possibility is that the effect of number of hours worked is consequential only when the additional hours are interrupting the patterning of one's life. The negative additional commuting time effect, which typically prolongs the working day, is robust and provides some support to this hypothesis. This is consistent with existing evidence that an increase in commuting time is associated with more stress and negative experiences at home. Finally, commuting time is correlated to the physical distance between work and home community; thus, it is possible that the further away employees spend their time, the less

attached to the local community from where many of the volunteering opportunities arise. Further studies are needed to clarify how working time and commuting affect volunteering, especially at a time when longer commuting is increasing (ONS Labor Force Survey 2015).

Another potential revision suggested by our results concerns the relationship between work contracts and volunteering. Whereas previous studies proposed that hourly contracts create mental representations of time that reduce employees' volunteering motivation, our study did not find evidence of within-person changes in volunteering following moving to hourly pay contracts. Additionally, we did not find evidence that moving from temporary to permanent contracts is followed by changes in volunteering. These results suggest the need to investigate employees' selection into various types of contracts and assess to what extent characteristics that affect selection might also be positively correlated with volunteering. For instance, rather than changes in work contracts leading to immediate changes in volunteering, employees who aim to find permanent jobs might be already volunteering less because they invest more in job search activities as opposed to community work. Another explanation is that market-mediated relationships between employers and employees have increasingly blurred the differences between permanent and temporary work (Kalleberg 2012) and that the conditions under which previous effects were obtained are no longer present.

Similarly, the relationship between hourly contracts and volunteering might be more complex than initially thought. For instance, it might be that the mental accounting for the value of one's time does not immediately change with contract type, but rather the change is more gradual (as suggested by the results of DeVoe et al. 2010). Detecting such a mechanism is less likely with the type of data available for this study, and future studies should create samples purposefully designed to unveil it. Another scenario, related to the previous one, but not tested so far, is that while hourly pay is likely to increase willingness to engage in more work (and to reduce their non-work activities), as suggested by DeVoe and Pfeffer (2007),

various contexts such as a depressed labor market might affect employees' ability to immediately find opportunities to increase their working hours. In turn, lack of immediate work opportunities could affect employees' willingness to unload ongoing volunteering. Finally, social contexts, such as ongoing membership in organizations that promote civic engagement, might keep an individual's altruistic values salient and thus neutralize the effect of hourly pay on volunteering. Further studies are needed to shed light on the theoretical mechanisms that link contracts and volunteering, especially at a time when the variety of work contracts is increasing.

A novel contribution proposed by our study relates to the link between employees' satisfaction with work experiences and their volunteering behavior. Specifically, our findings that an increase in job satisfaction score is accompanied by an increase in the likelihood of volunteering as well as by an intensification of the existing volunteering encourages a more complex discussion about the importance of good work experiences. While researchers have long suggested that affective resources and psychological predispositions developed in relation to one's work domain are likely to affect other life domains (Edwards and Rothbard 2000; Voydanov 2001; Pocock et al. 2012), existing studies primarily have focused on explaining the work-family interface. To date, scholars have shown that job satisfaction is an important resource, with a positive impact on employees' family life. Our study shows that satisfaction with job experiences also has a positive impact on employees' engagement in the community domain in the form of volunteering. This evidence also suggests that volunteering behavior is more likely a result from work satisfaction spillover than compensating for work unhappiness or trying to make up for what work does not fulfill. Moreover, because our within-individual effects account for time-invariant personal characteristics that would correlate with community volunteering (e.g. altruism, civic values), the positive and statistically significant effect of the job satisfaction score on volunteering is free of biases

from personality predispositions. The link between the job satisfaction score and volunteering behavior in our study is limited by the fact that the job satisfaction score only uses the job facets available in the BHPS. While the same job satisfaction composite has been used by other studies (e.g., DeVoe et al. 2010; Wu and Griffin 2012) and thus its use here enables comparison across studies, it also calls for further research to re-test the impact of job satisfaction on volunteering using a measure that is all encompassing of the various job satisfaction facets. Additionally, the finding that changes in job satisfaction have potential to affect community engagement points to the need for more scholarly effort to understand how other workplace psychological resources and/or demands can spill over into individuals' lives to affect civic engagement.

Although the BHPS allows for a nationally representative analysis of the relationship between work experiences and volunteering behavior, the number of waves over which we can explore this relationship is limited. One consequence of this limitation is that some variables display smaller variation across waves (managerial and professional occupations, permanent job, employment sector and hourly pay), thus constraining the ability of the within-person analysis to more definitively conclude on the effect of these variables. Specifically, lack of statistically significant effects for lower-variation variables might be due to the respective factor actually having no impact on volunteering, but also might be due to the increased role of measurement error. We aim to address the latter by presenting effects that are statistically significant up to the 0.1 p-level.² Also, in all our discussion of results we included the percent change in variable levels across waves.

A second limitation of the BHPS data relates to the lack of information about the local attitudes toward volunteering in employees' own organizations. While it is unlikely that this information would affect direct within-individual effects, a finer-grained account of organizational initiatives that encourage volunteering would be useful for clarifying potential

moderating effects. For instance, evidence exists that in organizations that offer employer-supported volunteering benefits, such as time off or expense reimbursements, employees are more likely to increase their participation in volunteering (Booth et al. 2009). Further studies could investigate if such organizational policies moderate the relationship between work-related factors analyzed in the current study and employees' volunteering.

Our study has a number of practical implications for both policy makers and organizations. The first implication relates to recent efforts to boost individuals' engagement in their communities. Many local government initiatives have focused on disseminating more information about existing volunteering opportunities as well as on developing more opportunities for under-represented groups. The results of our study suggest that local initiatives could be enriched if the realities of work life are also considered. For instance, local initiatives could look at the composition of their communities with respect to work factors: based on the findings presented in this study, a community with a high percent of commuters might be less difficult to engage. Such a community requires more creative, tailored approaches that encourage volunteering.

A second implication relates to the role that organizations play in society. In the past decades, organizations across sectors have increasingly signaled their desire to fulfill broader social goals, to act as 'citizens' and contribute to the communities from which their members are drawn. Setting up corporate volunteering programs that encourage employees to get involved in activities that benefit communities is one initiative championed by many organizations. The insight coming from existing evidence is that while such programs have a positive impact in the communities, getting employees to systematically engage in volunteering is not easy. The results of our study suggest that, before setting up volunteering programs, organizations need to pay more attention to the work experiences of their employees. Most importantly, the finding that job satisfaction is a determinant of

volunteering should trigger a more serious investigation into the compatibility between the experiences that organizations offer to employees and their desire to be viewed as a responsible citizen. Unless organizations pay closer attention to work quality, their claims of citizenship behavior via volunteering could likely be challenged.

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Table 1: Descriptive Statistics

	Overall	Volunteers	Non-volunteers
Percent doing unpaid volunteering work	19.62		
Volunteer Frequency			
Percent volunteering once a year or less	6.48		
Percent volunteering several times a year	4.78		
Percent volunteering at least once a month	3.62		
Percent volunteering at least once a week	4.75		
Work Time (log)	3.48 (0.47)	3.43 (0.52)	3.50 (0.46)
Commuting Time (log)	2.91 (0.78)	2.93 (0.79)	2.91 (0.78)
Hourly Pay (percent)	41.64	32.04	43.84
Permanent Job (percent)	95.74	94.26	96.11
Wage (log)	7.15 (0.70)	7.21 (0.77)	7.14 (0.68)
Non-Profit Sector (percent)	3.49	6.87	2.68
Public Sector (percent)	30.52	39.48	28.33
Higher Managerial (percent)	4.34	6.25	3.87
Lower Managerial (percent)	9.09	9.37	9.02
High Professional (percent)	6.55	8.43	6.09
Lower Professional (percent)	17.23	24.76	15.40
Job Satisfaction	5.30 (0.98)	5.38 (0.94)	5.28 (0.98)
Job Tenure (log)	4.77 (6.17)	4.88 (6.22)	4.75 (6.16)
Female (percent)	52.59	54.75	52.07
<i>Age categories (percent)</i>			
Age 16-24	13.65	11.31	14.23
Age 25-34	24.78	20.89	25.73
Age 35-44	27.96	30.11	27.44
Age 55-64	11.67	13.05	11.33
Number of Children	0.68 (0.95)	0.76 (1.00)	66.74
Marital Status (percent)	55.21	62.08	53.53
<i>Education categories (percent)</i>			
University	19.31	29.74	16.78
Vocational	8.36	10.56	7.83
High School	51.08	47.08	52.07
Household Income (log)	8.01 (0.54)	8.10 (0.54)	7.98 (0.54)
Housework (log)	1.98 (0.87)	2.06 (.83)	1.96 (0.87)

Note: Standard deviation in parentheses.

Table 2: The Impact of Work-Related Factors on the Likelihood of Volunteering: Odds-Ratios Effects

	Between effects			Within effects		
	Effect		95% Interval	Effect		95% Interval
Work Time	0.646***	(0.060)	0.538 - 0.775	0.951	(0.057)	0.845 - 1.070
Commuting Time	0.906*	(0.043)	0.825 - 0.994	0.912*	(0.039)	0.839 - 0.992
Hourly Pay	0.624***	(0.057)	0.522 - 0.746	0.925	(0.071)	0.796 - 1.077
Permanent Job	0.428***	(0.079)	0.298 - 0.616	0.949	(0.109)	0.757 - 1.189
Wage	0.793***	(0.048)	0.705 - 0.893	0.777***	(0.047)	0.690 - 0.875
Non-Profit Sector	8.035***	(1.501)	5.571 - 11.58	1.069	(0.165)	0.790 - 1.445
Public Sector	1.710***	(0.137)	1.461 - 2.001	1.08	(0.097)	0.905 - 1.288
Higher Managerial	1.997***	(0.445)	1.291 - 3.090	1.253†	(0.171)	0.959 - 1.636
Lower Managerial	1.577***	(0.244)	1.164 - 2.136	0.938	(0.100)	0.761 - 1.157
High Professional	1.362†	(0.222)	0.989 - 1.876	0.956	(0.124)	0.741 - 1.233
Lower Professional	1.605***	(0.183)	1.285 - 2.006	1.125	(0.101)	0.943 - 1.342
Job Satisfaction	1.095*	(0.045)	1.010 - 1.186	1.065*	(0.030)	1.007 - 1.126
Tenure	0.997	(0.007)	0.984 - 1.011	1.002	(0.006)	0.991 - 1.014
Age 16-24	0.949	(0.147)	0.700 - 1.286	0.77	(0.160)	0.513 - 1.157
Age 25-34	0.661***	(0.082)	0.519 - 0.841	0.606***	(0.091)	0.451 - 0.815
Age 35-44	0.887	(0.128)	0.669 - 1.176	0.798*	(0.079)	0.657 - 0.968
Age 55-64	1.614*	(0.313)	1.104 - 2.361	1.013	(0.114)	0.813 - 1.262
Female	0.752***	(0.055)	0.652 - 0.868	-	-	-
Number of Children	1.162***	(0.046)	1.075 - 1.257	1.114**	(0.047)	1.026 - 1.210
Marital Status	1.306***	(0.108)	1.111 - 1.537	0.89	(0.086)	0.736 - 1.075
University	4.303***	(0.518)	3.398 - 5.449	0.464†	(0.190)	0.208 - 1.033
Vocational	3.142***	(0.393)	2.458 - 4.016	0.416†	(0.208)	0.156 - 1.108
High School	2.094***	(0.174)	1.778 - 2.465	0.624	(0.229)	0.304 - 1.281
Household Income	1.379***	(0.100)	1.195 - 1.590	1.091	(0.071)	0.960 - 1.240
Housework	1.007	(0.006)	0.996 - 1.018	1.008†	(0.004)	0.999 - 1.016

Notes: Intercepts and year effects omitted to save space.

Statistical significance: ***p<.001; **p<.01; *p<.05; †p<.10 (standard errors are in parentheses).

Table 3: The Impact of Work-Related Factors on Volunteering Frequency: Odds-Ratios Effects

	Between effects			Within effects		
	Effect		95% interval	Effect		95% interval
Work Time	0.637***	(0.060)	0.530 - 0.767	0.927	(0.052)	0.830 - 1.034
Commuting Time	0.909*	(0.042)	0.826 - 0.991	0.912*	(0.037)	0.842 - 0.988
Hourly Pay	0.635***	(0.060)	0.528 - 0.764	0.905	(0.067)	0.782 - 1.046
Permanent Job	0.379***	(0.072)	0.262 - 0.549	0.937	(0.102)	0.758 - 1.160
Wage	0.776***	(0.046)	0.691 - 0.872	0.765***	(0.045)	0.681 - 0.859
Non-Profit Sector	8.237***	(1.543)	5.705 - 11.892	1.110	(0.157)	0.841 - 1.466
Public Sector	1.802***	(0.150)	1.531 - 2.121	1.057	(0.090)	0.895 - 1.249
Higher Managerial	1.841**	(0.421)	1.176 - 2.882	1.264†	(0.161)	0.986 - 1.621
Lower Managerial	1.611**	(0.258)	1.176 - 2.206	0.966	(0.098)	0.792 - 1.179
High Professional	1.312	(0.221)	0.943 - 1.824	1.040	(0.125)	0.821 - 1.316
Lower Professional	1.548***	(0.182)	1.230 - 1.948	1.164†	(0.098)	0.987 - 1.372
Job Satisfaction	1.122**	(0.047)	1.033 - 1.219	1.061*	(0.029)	1.006 - 1.119
Tenure	0.999	(0.007)	0.985 - 1.013	1.004	(0.006)	0.993 - 1.015
Age 16-24	0.822	(0.131)	0.601 - 1.124	0.800	(0.158)	0.543 - 1.178
Age 25-34	0.635***	(0.081)	0.495 - 0.814	0.640**	(0.091)	0.484 - 0.846
Age 35-44	0.870	(0.129)	0.651 - 1.163	0.840†	(0.078)	0.701 - 1.008
Age 55-64	1.668**	(0.331)	1.130 - 2.462	1.009	(0.106)	0.822 - 1.239
Female	0.758***	(0.057)	0.654 - 0.879	-	-	-
Number of Children	1.170***	(0.048)	1.079 - 1.268	1.132**	(0.046)	1.046 - 1.225
Marital Status	1.364***	(0.117)	1.153 - 1.614	0.851†	(0.080)	0.709 - 1.023
University	4.128***	(0.512)	3.238 - 5.263	0.505†	(0.200)	0.233 - 1.096
Vocational	3.270***	(0.423)	2.537 - 4.214	0.441†	(0.215)	0.170 - 1.145
High School	2.120***	(0.183)	1.790 - 2.512	0.644	(0.230)	0.320 - 1.296
Household Income	1.341***	(0.100)	1.159 - 1.553	1.055	(0.066)	0.934 - 1.193
Housework	1.005	(0.006)	0.994 - 1.016	1.008†	(0.004)	1.001 - 1.016

Notes: Intercepts and year effects omitted to save space.

Statistical significance: ***p<.001; **p<.01; *p<.05; †p<.10 (standard errors are in parentheses).

Appendix A

Table A.1: Summary of Work-Related Factors and Their Effect on Volunteering Behavior

NEGATIVE EFFECTS	POSITIVE EFFECTS
<p data-bbox="300 398 673 465">Hours worked per week (depletion of time resources)</p> <p data-bbox="220 510 759 658">Commuting time * (depletion of time; loss of energy, via stress and unplanned disruptions; dilution of ties with community)</p> <p data-bbox="228 703 751 806">Hourly pay (willingness to trade non-work activities for more work)</p> <p data-bbox="236 851 743 954">Wage (willingness to engage in more work as wage increases)</p> <p data-bbox="244 999 735 1102">Permanent job (willingness to increase investment in career)</p>	<p data-bbox="847 398 1305 465">Managerial and professional jobs (skills; invitations to volunteer)</p> <p data-bbox="871 510 1281 613">Non-profit employment (exposure to needs; exposure to opportunities; skills)</p> <p data-bbox="895 658 1257 725">Public sector employment (exposure to needs)</p> <p data-bbox="799 770 1353 918">Job satisfaction * (emotional disposition and energy to invest in new activities that build further resources)</p>

Notes: Hypothesized mechanisms through which each factor affects volunteering are in parentheses.

* New factor, not previously tested

Appendix B

Table B.1. Variables Description and Within-Person Change across Waves for Variables of Theoretical Interest

Variable	Description	Percent Change
Volunteering	1 if respondents indicate that they do unpaid volunteering work; 0 otherwise	22.23
Volunteer Frequency	Ordinal variable taking values 1 (volunteering once a year), 2 (several times a year), 3(at least once a month), 4 (at least once a week)	26.97
Job Satisfaction	Composite variable that captures respondents' ratings of satisfaction with all job dimensions recorded in the BHSP: satisfaction with work itself, satisfaction with pay, satisfaction with the time worked and satisfaction with job security, and the overall job satisfaction. Values 1-7	88.50
Work Time	Hours worked per week (logarithm)	58.80
Commuting Time	Minutes spent commuting daily (logarithm)	65.29
Hourly Pay	1 if pay is calculated by hour; 0 otherwise	17.94
Permanent Job	1if the job is permanent; 0 otherwise	7.20
Wage	Personal monthly income from work (logarithm)	98.20
Non-Profit Sector	1 if working in the non-profit sector; 0 otherwise	3.11
Public Sector	1 if working in the public sector (excluding non-profit); 0 otherwise	13.75
Managerial and Professional Class	Categories based on NS-SEC code: HM='Higher Managerial'; 'LM=Lower Managerial'; HP='High Professional'; LP='Lower Professional'; less than above (reference category)	4.67 (HM) 8.97 (LM) 5.57 (HP) 12.32 (LP)
Job Tenure	Years working in current job	
Age	Age categories: 16-24; 25-34; 35-44; 45-54 (reference category); 55-65	
Female	1 if female; 0 if male	
Number of Children	Number of children in household	
Marital Status	1 if married; 0 otherwise	
Education	Education categories: university; vocational; high school (1 if educated at A/O level); less than above (reference category)	
Household Income	Household monthly income (logarithm)	
Housework	Hours spent of housework per week (logarithm)	

ENDNOTES

¹ We thank one of the anonymous reviewers for the suggestion that commuting time might be a proxy for community attachment.

² We acknowledge that using an alpha level of 0.1 to reduce Type II error implicitly increases the chance of a Type I error. However, in all tables, we include a wider range of p-values, from 0.001 through 0.1, as well the standard deviation so that the exact p-values could be easily inferred.