Paid Work and Volunteer Work: Do Flexible Working Arrangements Make a Difference?

Hans-Peter Y. Qvist, Department of Sociology and Social Work, Aalborg University.

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Abstract:

Previous research has established that people who work part-time contribute more time to volunteer work compared to people who are either out of the labor force or work full-time. However, previous research also shows that among full-time workers, the number of volunteer hours increase with paid work hours. In this paper, I evaluate a possible explanation for this counterintuitive finding; that people who work full-time or overtime are more likely to enjoy flexible working arrangements. Towards this end, I use rich survey data from Denmark combined with information from administrative registers to which I apply an exponential type-2 Tobit model. The results suggest that paid work hours has positive effect on the decision to volunteer for people who work full-time or overtime (30 or above hours per week). However, in contrast to previous research, the results suggest that paid work hours has a negative effect on the amount of hours that volunteers who full-time or more (30 or above hours per week) contribute. In addition, the results suggest that flexible working arrangements is not significantly associated with the likelihood of participation nor with time use.

Keywords: Paid work hours, volunteer work, flexible working arrangements, exponential type-2 Tobit model

Corresponding author: Hans-Peter Y. Qvist, Dept. of Sociology and Social Work, Aalborg University, Kroghsstræde 5, 9220 Aalborg East. Email: hpq@socsci.aau.dk

The link between paid work and volunteer work has received considerable attention from volunteering researchers (Wilson and Musick, 1997; Rotolo and Wilson, 2003, 2007; Taniguchi, 2006; Einolf, 2011). A central question is whether and to what extent paid work hours substitute volunteer work hours. From a time-economic perspective, one would clearly expect a substitution effect, because people can only allocate as much time to volunteering as their work responsibilities permit. Yet, having a paid job not only reduces the time available to the individual, but also provides the individual with human capital, social resources, and civic skills that enable participation in volunteering (Brady, Verba and Schlozman, 1995; Musick and Wilson, 2008). This theory is supported by a large body of empirical evidence that shows that people who participate in paid labor market are more likely to volunteer compared to people who are out of the labor force (Wilson, 2012). On these grounds, most researchers currently agree that participation in the labor market actually *increase* the likelihood of participation in volunteer work.

However, there is less agreement about the nature of the relationship between paid work hours and volunteer work hours within the population who participate in the labor market. Most researchers argue that beyond the positive effects of labor market participation on the likelihood of participation in volunteer work, paid work hours is a constraint that limits the time available for volunteer work (Goss, 1999; Rossi, 2001; Taniguchi, 2006, 2012). This interpretation is supported by previous research that shows that part-time workers who can benefit from being socially integrated within a work place, but are not hampered by time constraints in the same way as full-time workers contribute more time to volunteer work compared to full-time workers (Einolf, 2011).

In sum, the research to date suggests that having a paid job increases the likelihood of participation in volunteer work, but paid work hours has a negative effect on volunteer hours (Musick and Wilson, 2008). Yet, according to Musick & Wilson (2008, p. 151) it is important to distinguish between people who a work a standard forty hour work week and people who work overtime (40 < hours), because for people who work forty hours or more per week there is a positive relationship between paid work hours and volunteer hours (Wilson and Musick, 1997). This result has been corroborated by a study from the US that shows that women who work forty hours or more per week (Rotolo and Wilson, 2007). In Wilson's latest review of empirical studies he summarizes the results in the following way:

"Counterintuitively, among full-time workers, volunteer hours **increase** as paid work hours increase" (Wilson, 2012, p. 188). These findings are puzzling because they imply that the effect of work hours is non-linear, and that different mechanisms might explain the association between work hours and volunteer hours depending on peoples' workloads.

A possible explanation for this counterintuitive finding is that people with high workloads are more likely to enjoy flexible working arrangements compared to people with lower workloads (Rotolo and Wilson, 2007; Musick and Wilson, 2008). Flexible working arrangements might in turn allow people with high workloads to find available hours for doing volunteer work. Yet little empirical research has been conducted to support this theory. To close this gap in the literature, I use Danish survey data combined with data from administrative registers to examine the relationship between paid work hours and volunteer hours within the population who participate in the paid labor market. Using linear splines of paid work hours with knots at 30 and 40 hours, I examine the effect of work hours on volunteer hours for people who work part-time (1-30 hours per week), a standard workweek (30-40 hours per week), and overtime (40 < hours per week). Second, I examine whether the alleged positive association between paid work hours and volunteer hours among people who work full-time or overtime is explained by differences in the availability of flexible working arrangements.

The main contribution the paper makes is that I show that volunteer hours does not increase with paid work hours for people who work overtime. The effect of paid work hours on volunteer hours indeed differs between people who work part-time compared to people who work full-time or overtime, but I find no important differences between people who work a standard workweek (30-40 hours per week) and people who work overtime (40 < hours per week) as argued by previous research. Re-running the analysis with a more efficient model with only one knot at 30 hours per week, I show that paid work hours has a significant positive effect on the likelihood of participation for people who work full-time or overtime, paid work hours substitute volunteer hours. In addition, I show that the availability of flexible working arrangements has no significant effects on the likelihood of participation in volunteer work nor on the amount of hours volunteers contribute.

Flexible Working Arrangements and volunteer work

The term flexible working arrangements has been used to refer to a number of different work characteristics. Broadly, the term involves increased spatial flexibility (flexibility in *where* to work), and temporal flexibility (flexibility in *when* to work) (Rau and Hyland, 2002).

Few previous studies have examined the relationship between flexible working arrangements and volunteer work. A study that uses data from the US found that people with flexible working arrangements are more likely to volunteer (Freeman, 1997). Another study based on US data found that people with flexible working arrangements spend more hours on their volunteer work compared to people with less flexible working arrangement (Marshall and Taniguchi, 2012).

Empirical hypotheses:

Based on my review of the literature, I test the following four empirical hypotheses:

H₁: For people who work part-time (1-30 hours per week), volunteer work hours *decrease* with paid work hours.

H₂: For people who work a standard work week (30 to 40 hours per week), volunteer work hours *decrease* with paid work hours

H₃: For people who work overtime (40 < hours), volunteer work hours increase with paid work hours

 H_4 : The positive association between work hours and volunteer hours among people who work fulltime or more *decrease* is partially explained by differences in the availability of flexible working arrangements.

Self-selection on unobservables into participation in volunteer work

Psychological research shows that the subjective experiences of time are influenced by personality characteristics (Zimbardo and Boyd, 1999). This implies that for people who objectively work the same

amount of hours some people will be hassled by their paid workloads while others will not. We might expect that people who work full-time and choose to volunteer anyways are very active people who make the most of their time. Following this idea the positive association between work hours and volunteer hours, which previous research has found might be explained by self-selection that arise because people with certain personality characteristics are able to make the most of their time. This would lead to an upward biased estimate of the effect of work hours on volunteer hours. This is so, because due to the selection process into volunteer work, we will have the most active people with heavy workloads.

Data, Measures, and Analytical Strategy

Data

The data I use is from the third wave of the Danish Volunteer Survey (Fridberg and Henriksen, 2014), which is merged with data from administrative registers. The survey contains 2809 respondents aged 16-85 (response rate 67 %). The data was collected by telephone interviewing. The data collection involved multiple contact attempts and personal follow-up interviews for individuals who could not be reached by telephone, which explains the high response rate. Moreover, the data from the survey is merged with highly reliable information from administrative registers at the individual level. This is possible, because all of the residents in Denmark are required to hold a unique personal identification number in the Danish Civil Registration System, which are made available to researchers in anonymized form from Statistics Denmark.

For the analysis, I restrict the sample to include only people in the working age (aged 16-65), which reduces the sample from 2809 individuals to 2226 individuals. Moreover, I restrict the sample to include only people who are in the labor force at the time of survey, which further reduces the sample from 2226 individuals to 1514 individuals. Finally, I remove 18 individuals with missing data on any of the variables included in the analysis, which results in the final analysis sample of 1496 individuals.

Measures

Dependent variable. The dependent variable is the total amount of hours the individual report to have contributed within the previous year. The respondent is asked about participation in volunteering within 14 different, which corresponds to the International Classification of Nonprofit Organizations (Salamon & Anheier, 1992)¹. For each area, the respondent is asked to report the amount of hours they have spent within the past year. To create the total amount of hours I have summed the amount of hours across all the areas.

Independent variable. The independent variable is weekly work hours obtained from the survey.

Mediators. The availability of flexible working arrangements is measured by an indicator variable that takes the value of 1 if the respondent reports to have flexible working arrangements including the possibility to work from home as well control over own work hours², and 0 otherwise.

Covariates. Occupational prestige is measured with the Standard International Occupational Prestige Scale (SIOPS) (Ganzeboom and Treiman, 1996, 2010). Recently, the SIOPS scale has been updated to the sub-major groups in the International Standard Classification of Occupations (ISCO), which I have followed to create a SIOPS scale using administrative register data (Ganzeboom and Treiman, 2010). Educational level is based on information from administrative registers and it follows the International Standard Classification of Education (ISCED). Educational level is measured as highest completed education in six levels from primary school to doctoral qualifications. Children in the household is a nominal scaled variable with four categories: 1) no children, 2) pre-school children (aged 0-5), 3) school-children (aged 6-16) 4) both types of children. Finally, demographic covariates include gender and age.

Table 1 presents descriptive statistics for all variables included in the models for the full sample and volunteers, respectively.

Table 1. Descriptive statistics

¹ The areas include culture, sports, hobby, education, health, social services, environment, housing and community, unions and work organizations, advice and legal assistance, political parties, international organizations, religion, and other. ² Control over own work hours includes complete employee control as well as work arrangements where work hours are settled in agreement between the employee and employer.

	Full	sample	Volunteers		
	Mean	SD	Mean	SD	
Volunteer	0.374	0.484	-	-	
Ln(volunteer hours)			3.778	1.336629	
Work hours	38.321	8.806	38.946	9.464	
Occupational prestige	43.234	15.653	45.934	15.523	
Flexible working arrangements	0.186	0.390	0.238	0.426	
Educational level	2.796	1.297	3.052	1.371	
No children	0.538	0.499	0.463	0.499	
Pre-school children	0.112	0.315	0.100	0.301	
School-children	0.259	0.438	0.304	0.460	
Both types of children	0.091	0.288	0.132	0.339	
Female	0.507	0.500	0.481	0.500	
Age	44.326	11.055	44.850	9.795	

Analytical strategy

The outcome to be modelled is the amount of hours spent on volunteering within the previous year. The outcome is characterized by being strictly positive for observations greater than zero, and by containing a large clump of zero values. The zeroes are not somehow left-censored as implied by some previous studies of people's voluntary contributions of time (DeVoe and Pfeffer, 2007), but simply represent the individual choice not to participate in volunteer work. An additional methodological challenge is that the positive observations are heavily skewed to the right, because most individuals spend only a modest amount of hours while a small group of individuals spends a high amount of hours.

The standard Tobit model is frequently used in studies of people's voluntary contributions of time (Musick, Wilson and Bynum, 2000; Rotolo and Wilson, 2004, 2006; Taniguchi, 2006; Brown and Ferris, 2007; DeVoe and Pfeffer, 2007; Einolf, 2011; Marshall and Taniguchi, 2012) However, the standard Tobit model suffers two important drawbacks. First, the standard Tobit model does not address the skewness of the positive observations, but must either use volunteer hours in levels, or be 'tricked' into accommodating the logarithm of hours (Cameron and Trivedi, 2005), because the logarithm of zero is not defined. Second, the standard Tobit model relies on the restrictive assumption that the same set of factors affect peoples' decision to participate in volunteer work and the amount of hours they decide to contribute in the same direction and with the same magnitude (Forbes and Zampelli, 2011). This is a particularly problematic assumption, because empirical evidence suggests

that many factors affect the decision to participate and the amount decision in different ways is mounting (van Ingen and Dekker, 2011; Forbes and Zampelli, 2014; Qvist, 2015).

A family of models known as two-part models provide a flexible and robust alternative to the standard Tobit model (Wooldridge, 2010). A two-part model bifurcate the expected amount of volunteer hours into two parts: 1) the probability that the individual participates, and 2) the expected amount of time given participation. If the dependent variable is log-transformed, and it is assumed that the decision to volunteer and the amount decision is conditionally independent, the estimation of a two-part model is straightforward, because the decisions can be modelled completely separately. First, a binary choice model (logit or probit) is used to model the decision to participate. Next, the natural logarithm of volunteer hours is predicted by Ordinary Least Squares (OLS) regression using the sample of volunteers. However, if people make the decision to volunteer not only based observed factors, but also unobserved factors are correlated with the amount decision, the error terms of participation equation and the amount equation will be correlated. This correlation of the error terms will lead to biased estimates in the amount equation³.

Therefore, I use an exponential type-2 Tobit that is a particular kind of two-part model that allows for correlation between the error terms of the participation and amount equation (Wooldridge, 2010). The model is very similar to the well-known Heckman sample selection model, but to emphasize that the zeroes are not censored or missing, I follow Wooldridge (2010) and refer to the model as an exponential type-2 Tobit model (ET2T).

As the key explanatory variable, I use a linear spline of paid work hours. Following Musick & Wilson (2008, p. 151) I place knots at 30 and 40 weekly paid work hours. This setup allows the effect of the paid work hours on volunteer hours to take on different values for people who work part-time (1-30 hours), a standard workweek (30-40), and overtime (40 < hours). Thus, the models I estimate can be represented by the following set of equations:

³ For a thorough discussion of the problem; see (Agrist and Pischke, 2009).

$$\begin{split} v^* &= \alpha_1 + \gamma_1 \text{workhours}_{\text{part time}} + \gamma_2 \text{workhours}_{\text{standard}} + \gamma_3 \text{workhours}_{\text{overtime}} \\ &+ \sum_{i=1}^n \theta_i \text{covariates} + u \end{split}$$

$$\mathbf{v} = \begin{cases} 1 \text{ if } \mathbf{v}^* > 0 \\ 0 \text{ if } \mathbf{v}^* \le 0 \end{cases}$$

 $\ln(\text{hours}) = \alpha_2 + \beta_1 \text{workhours}_{\text{part time}} + \beta_2 \text{workhours}_{\text{standard}} + \beta_2 \text{workhours}_{\text{overtime}}$

$$+\sum_{i=1}^{n} \delta_i$$
 covariates $+\epsilon$, if $v = 1$

Where *v* is an indicator function for participation in volunteer work, and ln(hours) is the natural logarithm of volunteer hours. The parameters γ_1 , γ_2 , γ_3 indicate the effect of paid work hours on the likelihood of participation for people with part-time work (1-30 hours per week), people with standard workweek (30-40 hours per week), and people working overtime (40 < hours per week). Similarly, β_1 , β_2 , β_3 indicate the effect of paid work hours on volunteer hours for people working part-time, standard, and overtime. Thus, to support hypothesis 1 and 2 we would expect $\beta_1 < 0$ and $\beta_2 < 0$. To support hypothesis 3, we would expect $\beta_3 > 0$.

The model can be estimated by maximum likelihood based on the assumption that error terms are homoscedastic and bivariate normal:

$$\binom{u}{\varepsilon} \sim N\left[\binom{0}{0}, \binom{1}{\rho\sigma} \frac{\rho\sigma}{\sigma^2}\right]$$

The correlation between the error terms is summarized in the parameter, ρ . That is, if $\rho \neq 0$ the errors are correlated. This implies that unobserved factors associated with the participation decision is correlated with unobserved factors associated with the amount decision.

The empirical analysis proceeds in three steps. In the first step, I estimate the effect of work hours on volunteer hours including covariates, but not the indicators for occupational prestige and flexible working arrangements. In the second step, I additionally control for occupational prestige. Third, I additionally control for the availability of flexible working arrangements. To support hypothesis 3, we would expect the magnitude of β_3 to significantly decline when flexible working arrangements is controlled for.

Results

Descriptive analysis

Figure 1 shows the bivariate associations between paid work hours on volunteer hours using a linear spline of paid work hours with knots at 30 and 40 paid work hours. The figure shows that none of the estimated coefficients are statistically significant at the 90 % level. However, we note that the coefficient for people who work a low workload is negative and close to significant at the 90 % level. However, for people who work full-time or more the coefficients are very close to zero.



Figure 1: The bivariate associations between paid work hours on volunteer hours using a linear spline of paid work hours with knots at 30 and 40 paid work hours with 90 % confidence intervals

Next, we examine the bivariate relationship between paid work hours and the availability of flexible working arrangements in figure 2. Figure 2 provides strong that the prevalence of flexible working arrangements is much higher among people who work a high workload (40 < hours). A one-way anova-test indicates that the association is highly significant (p < 0.01).



Figure 2: The prevalence of flexible working arrangements by work hours

In sum, the descriptive analysis provides strong evidence in favor of flexible working arrangements being more prevalent among people who work a high work load, but I find no evidence to suggest that work hours is positively associated with volunteer hours among people who work full-time or more. However, the alleged relationship between paid work hours and volunteer hours among people who work full-time or more might be suppressed by various confounders. Therefore, we move on to examine the relationship using multivariate regressions.

Multivariate analysis

The first step of the analysis choose between the Tobit model, the log-normal hurdle model, and the exponential Type-2 Tobit model. First, the Tobit model is tested against the log-normal hurdle model with a likelihood-ratio test. Likelihood-ratio tests provides clear evidence against Tobit model in favor of the log-normal hurdle model (p < 0.001). This result indicates that at least one of the explanatory variables affects the participation and amount decision in different ways or with different magnitude. Next, the log-normal hurdle model assumes that no correlation between the error terms predicting the participation decision and the amount decision, is present. This assumption is equivalent to the assumption that rho = 0 in the exponential Type-2 Tobit model. Therefore, given that rho is different from zero in the ET2T model and statistically significant (p < 0.001), the log-normal hurdle model is rejected in favor of the two equations is present. Therefore, table 2 presents the results of the ET2T models, but the Tobit model and the log-normal hurdle model are presented in table A2 and A3 in the online appendix.

Model 1 in table 2 indicates that paid work hours has a significant negative effect on the likelihood of participation for people who work part-time, but no significant effect on the amount of hours volunteers contribute. Moreover, we see that the coefficients of paid work hours are positive in the participation equation, and negative in the amount equations for people who work full-time as well as for people who work overtime, but none of the estimated effects is significant. Since the empirical results suggest that there are no marked differences between people who work a standard workweek (30-40 hours per week) and people who work overtime I re-run the analysis with a more efficient model with a single knot at 30 paid work hours.

In model 4, I estimate the effect of work hours without controlling for occupational prestige or the availability of flexible working arrangements to provide a baseline estimate of the effect of work hours on volunteer hours. The model shows that work hours has a statistically significant negative effect on the decision to volunteer for people who work part-time (p < 0.10), but it has a significant positive effect for people who work full-time or more (p < 0.05). This result indicates that paid work

hours affects the decision to volunteer in opposite direction for people who work under and above 30 hours per week. Model 1 also shows that work hours has no statistically significant effect on the amount of hours volunteers contribute for people who work part-time, but for people who work full-time or more there is a statically negative effect of paid work hours in volunteer hours. This result suggest that for people who work full-time or more paid work hours substitute volunteer hours. The coefficient of 0.017 suggests that volunteers who work full-time or more in their paid work spend 1.7 % less hours on their volunteer work for each additional paid work hour. The results does not support hypothesis 1, since paid work hours have no effect on volunteer hours for volunteers who work part-time, nor is hypothesis 2 supported, since paid work hours have a *negative* effect on volunteer hours.

Next, in model 5 I add occupational prestige. The results show that occupational prestige has a significant positive effect on the participation decision (p < 0.05), but a significant negative effect on volunteers contributions of time (p < 0.05). However, we see that the coefficients from the work hours variables are left virtually unchanged by the inclusion of control for occupational prestige. This result suggest that occupational prestige directly affects both the participation and the amount decision, but the effect of paid work hours on both decisions are not transmitted via occupational prestige.

In model 6, I add the availability of flexible working arrangements. Surprisingly, the model shows that the availability of flexible working arrangements is neither has a statistical significant effect on the participation decision, nor on the amount decision. This result does not support hypothesis 3.

	Models with 2 knots				Models with 1 knot		
	Model 1	Model 2	Model 3		Model 4	Model 5	Model 6
Participation decision				Participation decision			
Work hours: [1;30]	-0.024**	-0.025***	-0.024**	Work hours: [1;30]	-0.020^{*}	-0.022**	-0.021*
	(0.012)	(0.012)	(0.012)		(0.011)	(0.011)	(0.011)
Work hours: [30-40]	0.020	0.019	0.017	Work hours: [31-80]	0.010**	0.010***	0.009*
	(0.014)	(0.014)	(0.014)		(0.005)	(0.005)	(0.005)
Work hours: [40-80]	0.007	0.007	0.007		_	-	-
	(0.007)	(0.007)	(0.007)		-	-	-
Mediators				Mediators			
Occupational prestige		0.006^{**}	0.006^{**}	Occupational prestige		0.006^{**}	0.006^{**}
		(0.003)	(0.003)			(0.003)	(0.003)
Flexible working arrangements			0.085	Flexible working arrangements			0.089
			(0.089)				(0.089)
Controls	YES	YES	YES	Controls	YES	YES	YES
Constant	-2.324*	-2.444^{*}	-2.426*	Constant	-2.368*	-2.485^{*}	-2.462*
	(0.618)	(0.622)	(0.621)		(0.615)	(0.618)	(0.618)
Amount decision				Amount decision			
Work hours: [1;30]	0.005	0.007	0.006	Work hours: [1;30]	-0.002	0.000	-0.001
	(0.022)	(0.022)	(0.022)		(0.020)	(0.020)	(0.020)
Work hours: [30-40]	-0.036	-0.033	-0.032	Work hours: [31-80]	-0.017*	-0.016*	-0.016*
	(0.028)	(0.028)	(0.028)		(0.009)	(0.009)	(0.009)
Work hours: [40-80]	-0.011	-0.011	-0.011				
	(0.012)	(0.012)	(0.012)				
Occupational prestige		-0.010***	-0.010***	Occupational prestige		-0.010**	-0.010**
		(0.005)	(0.005)			(0.005)	(0.005)
Flexible working arrangements			-0.006	Flexible working arrangements			-0.013
			(0.164)				(0.164)
Controls	YES	YES	YES	Controls	YES	YES	YES
Constant	5.945	6.205^{*}	6.154*	Constant	5.993*	6.253*	6.191*
	(1.443)	(1.459)	(1.461)		(1.444)	(1.459)	(1.462)
Rho	-0.816***	-0.816***	-0.806***	Rho	-0.815***	-0.815***	0.806***
	(0.065)	(0.065)	(0.070)		(0.064)	(0.064)	(0.070)
N	1496	1496	1496	N	1496	1496	1496

Table 2. Exponential Type-2 Tobit models predicting Ln(volunteer hours).

Standard errors in parentheses. * p < 0.10, ** p < 0.05, * p < 0.01. Control variables include: educational level, children in the household, gender, age and age squared.

Discussion

This paper set out to examine the relationship between paid work hours and volunteer hours within a sample of people who participate in the labor market. Moreover, the paper examined whether a higher prevalence of flexible working arrangements among people with a high workload could explain why previous research has found that volunteer hours increase with paid work hours among people who work overtime. The results suggest that paid work hours has negative effect on the decision to participate in volunteering for people who work part-time, but for people who work full-time or overtime paid work hours has positive effect on the decision to previous research, the results show that paid work hours has a *negative* effect on volunteer hours for people who work full-time or overtime in their paid work. This results show that for volunteers who work full-time or overtime, paid work hours substitute volunteer hours.

The findings run counter to previous results that suggest that volunteer hours increase as a function of paid work hours for people who work full-time workers or more (Wilson, 2012). Based on the results of this paper, I argue that this counterintuitive result might appear in previous research, because the Tobit model returns misleading results when some factors affect peoples' decision to participate in volunteer work in a very different way from how they affect the amount of hours volunteers decide to contribute. In fact, the Tobit model I have estimated, which is presented in table A1 in the online appendix, provides results similar to those reported in previous research. That is, in model 4 in table A1, we see that paid work hours has a significant positive effect on volunteer hours for people who work full-time or more. However, as we know from the ET2T model this result arise only, because paid work hours positively affects the decision to participate in volunteer work, whereas the effect on the amount of hours volunteer contribute is negative.

Since the findings show that the effect of paid work hours on the amount of hours volunteers contribute is negative, and not positive as argued by previous research, it is highly unlikely that the negative effect of paid work hours is explained by the availability of flexible working arrangements. In fact, the findings suggest that the availability of flexible working arrangements has no statistically significant effect on volunteer hours.

Another interesting finding is that occupational prestige positively affects the decision to participate in volunteer work, but negatively affects the amount of hours volunteers contribute. A plausible explanation for this finding is that people with high occupational prestige are more likely to be recruited by voluntary organizations, and are more likely to possess the civic skills needed to respond to an invitation. However, once the people with high occupational prestige are recruited, their contributions of time are likely to be hampered by the time constrains that their high prestige jobs impose on them.

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Appendix

	Μ	odels with 2 k	knots		Models with 1 knot		
	Model 1	Model 2	Model 3		Model 1	Model 2	Model 3
Work hours: [1;30]	-0.114**	-0.117**	-0.112**	Work hours: [1;30]	-0.096**	-0.101**	-0.097**
	(0.047)	(0.047)	(0.047)		(0.042)	(0.042)	(0.042)
Work hours: [30-40]	0.079	0.074	0.066	Work hours: [31-80]	0.035^{*}	0.033^{*}	0.030
	(0.055)	(0.055)	(0.056)		(0.019)	(0.019)	(0.019)
Work hours: [40-80]	0.020	0.020	0.018	-	-	-	-
	(0.025)	(0.025)	(0.025)	-	-	-	-
Mediators				Mediators			
Occupational prestige		0.021^{**}	0.021^{**}	Occupational prestige		0.022^{**}	0.021^{**}
		(0.010)	(0.010)			(0.010)	(0.010)
Flexible working arrangements			0.388	Flexible working arrangements			0.405
			(0.345)				(0.345)
Controls	YES	YES	YES		YES	YES	YES
Constant	-9.918 [*]	-10.360*	-10.235*	Constant	-10.095^{*}	-10.528^{*}	-10.381*
	(2.515)	(2.526)	(2.523)		(2.506)	(2.516)	(2.514)
Observations				Observations	1496	1496	1496

 Table A1. Tobit model predicting Ln(volunteer hours).

Standard errors in parentheses. * p < 0.10, ** p < 0.05, * p < 0.01. Control variables include: educational level, children in the household, gender, age and age squared.

	Models with 2 knot				Models with 1 knot		
	Model 1	Model 2	Model 3		Model 1	Model 2	Model 3
Participation decision				Participation decision			
Work hours: [1;30]	-0.026**	-0.028**	-0.026**	Work hours: [1;30]	-0.022^{*}	-0.024**	-0.022**
	(0.012)	(0.012)	(0.012)		(0.011)	(0.011)	(0.011)
Work hours: [30-40]	0.022	0.021	0.019	Work hours: [30-80]	0.011***	0.010^{**}	0.009^{*}
	(0.014)	(0.014)	(0.014)		(0.005)	(0.005)	(0.005)
Work hours: [40-80]	0.007	0.007	0.006		-	-	-
	(0.007)	(0.007)	(0.007)		-	-	-
Mediators				Mediators			
Occupational prestige		0.006^{**}	0.006^{**}	Occupational prestige		0.006^{**}	0.006^{**}
		(0.003)	(0.003)			(0.003)	(0.003)
Flexible working arrangements			0.102	Flexible working arrangements			0.107
			(0.090)				(0.090)
Controls	YES	YES	YES	Controls	YES	YES	YES
Constant	-2.312^{*}	-2.427*	-2.405^{*}	Constant	-2.364*	-2.477*	-2.449^{*}
	(0.624)	(0.627)	(0.626)		(0.620)	(0.623)	(0.623)
Amount decision				Amount decision			
Work hours: [1;30]	-0.022	-0.022	-0.021	Work hours: [1;30]	-0.024	-0.023	-0.023
	(0.018)	(0.018)	(0.018)		(0.016)	(0.016)	(0.016)
Work hours: [30-40]	-0.011	-0.009	-0.012	Work hours: [30-80]	-0.006	-0.006	-0.007
	(0.024)	(0.024)	(0.024)		(0.008)	(0.008)	(0.008)
Work hours: [40-80]	-0.005	-0.005	-0.005		-	-	-
	(0.010)	(0.010)	(0.010)		-	-	-
Mediators				Mediators			
Occupational prestige		-0.004	-0.004	Occupational prestige		-0.004	-0.004
		(0.004)	(0.004)			(0.004)	(0.004)
Flexible working arrangements			0.104	Flexible working arrangements			0.102
			(0.140)				(0.140)
Controls	YES	YES	YES	Controls	YES	YES	YES
Constant	2.301^{*}	2.449^{**}	2.520^{**}	Constant	2.304^{*}	2.453^{**}	2.524^{**}
	(1.196)	(1.206)	(1.210)		(1.195)	(1.205)	(1.209)
Observations	1496	1496	1496		1496	1496	1496

 Table A2. Log-normal hurdle models predicing ln(volunteer hours)

Standard errors in parentheses. * p < 0.10, ** p < 0.05, * p < 0.01. Control variables include: educational level, children in the household, gender, age and age squared.