



Part-Time Work and Activity in Voluntary Associations in Great Britain

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Abstract

This paper evaluates both the economic, or rational choice, and sociological theories to examine the effects of part-time working on employees' activity in voluntary associations. Using longitudinal data analysis of the British Household Panel Survey from 1993 to 2005, this study demonstrates that, in Britain, part-time work increases the likelihood of individual level involvement in expressive voluntary associations (i.e. associations orientated to relatively immediate benefits for their members) but it is negatively related to their involvement in instrumental-expressive (such as trade unions and professionals' associations) and instrumental (political, environmental, and voluntary service) associations. The main conclusion is that time is an important resource for activity in expressive voluntary associations; however, for activity in instrumental and instrumental-expressive associations other factors are more important.

Keywords: *Part-Time Work, Political Groups, Social Capital, Trade Unions, Voluntary Associations*

Introduction

1.1 Voluntary associations are private, voluntary membership-based organisations which are self-governing, and non-commercial in objective and behaviour (Anheier, 2001, p.16302). Individuals' involvement in these associations is a vital component of modern democratic processes (Fung, 2003), social capital (Putnam, 2000), civil society (Etzioni, 1997), the non-profit sector (Salamon & Anheier, 1997), and civic engagement (Baum, 2004). Voluntary associations also play an increasingly important role by delivering services that neither government nor businesses are willing or able to provide (Hansmann, 1996; Weisbrod, 1972, 1977), especially in a period of economic recession.

1.2 Several scholars have raised alarm that in economically advanced countries individuals' involvement in voluntary association has been declining, (Putnam, 1995, 2000) and becoming more passive, predominantly membership based (Halpern, 2005). Although not all studies have found support for such pessimistic trends (Dekker & Broek, 2005; Hall, 1999; Y. Li, Savage, & Pickles, 2003; Rotolo, 1999; Warde et al., 2003), voluntary associations' demand for volunteers and members, continuously exceeds supply (Bussell & Forbes, 2002). In this context, social scientists seek to identify the factors that facilitate or inhibit voluntary affiliation and the differences in individuals' involvement in voluntary associations have been explained according to their psychological (e.g. Bekkers, 2005; Carlo, Okun, Knight, & de Guzman, 2005; Matsuba, Hart, & Atkins, 2007) or socio-demographic characteristics (e.g. Cutler & Hendricks, 2000; Y. Li, Savage, Tampubolon, Warde, & Tomlinson, 2002; McPherson & Smith-Lovin, 1982; Thomas Rotolo & John Wilson, 2007; Themudo, 2009), their involvement in parental or marital roles (e.g. Rotolo, 2000; T. Rotolo & J. Wilson, 2007), resources available to them (Brady, Verba, & Schlozman, 1995; Schlozman, Burns, & Verba, 1994, 1999), and by the socio-economic, political, and cultural contexts of the society (Curtis, Baer, & Grabb, 2001; Schofer & Fourcade-Gourinchas, 2001).

1.3 Although a wealth of information about participation in voluntary associations exists, relatively little attention has been paid to individuals' employment as potential factors explaining involvement. This is surprising, because the unemployed and retired tend to have lower rates of involvement (Chambrière, 1987; Choi, 2003), therefore the employed constitute the largest and most important pool of participants. In addition, structural changes in employment conditions and experiences, such as increased women's participation in the labour market, longer working hours and shorter contracts have been hypothesised as one of the factors contributing to the decline of social capital and civic participation in developed countries (Andersen, Curtis, & Grabb, 2006; Putnam, 2000; Tiehen, 2000).

1.4 This paper specifically focuses on part-time work as a factor that could potentially affect employed individuals' involvement in voluntary associations. Part-time work, where individuals are in paid employment for less than a full working week, is the most widespread 'atypical' employment practice in

Europe and other industrialised countries. It has increased considerably over the past fifteen years and the proportion of employees working part-time has reached 46% in Netherlands and 25% in the UK (Anxo, Fagan, Smith, Letablier, & Perraudin, 2007); the rate varies widely between countries, but in all cases the prevalence is much higher in women than in men. As Warren (1998) has pointed out, while the effects of part-time work on individuals' well-being and their family lives have been well-documented, the consequences of part-time working on other domains of individuals lives, including involvement in voluntary associations, have been rather under-explored. Although the economic or rational choice and sociological theories predict that part-time work might be more conducive to employees' involvement in voluntary associations than full-time work, reliable empirical evidence is limited to a few cross-sectional analyses. However, as individuals working part-time tend to differ from those working full-time on a range of characteristics (for example, income level, occupation, skills, and family responsibilities) which could also affect their involvement in voluntary associations, we can reliably test (some aspects) of these predictions only by employing longitudinal analyses that focus on within-individual differences. Therefore, the aim of the study presented in this paper is to examine the relationships between transitions between part and full-time working modes and changes in employed individuals' activity in voluntary associations.

Part-time work and employees' activity in voluntary associations: the rationale and previous studies

2.1 The economic, or rational choice, and the sociological theories suggest that part-time work might be more beneficial to involvement in voluntary associations than full-time work. From the economic or rational choice viewpoint, participation in religious and political groups, parents and teachers' associations and other voluntary associations requires time, money, skills and other resources (Brady et al., 1995; Freeman, 1997). Time pressures and constraints are among the most important factors perceived to affect volunteering in voluntary associations (Price, 2002; Sundeen & Garcia, 2007). Approximately 41% of British volunteers said that they started volunteering because they had the spare time to do so (Low, Butt, Paine, & Smith, 2007). Time is a limited resource that is shared with other activities in an individual's life, including their employment. Taking into account that employment is the central and most time consuming activity of most employees, it could be hypothesised that the more time individuals spend at work, the less time is available for them to spend on other activities, including involvement in voluntary associations. Taking into account that full-time employees not only spend more time at work but also are the most vulnerable to 'time crunch'- feeling stressed or rushed because of the need to squeeze multiple roles into a limited time period and time pressures (Jacobs & Gerson, 1998; Roxburgh, 2002), it can be argued from the rational choice perspective that people working part-time might be more active in voluntary associations than those working full-time because they simply have more time.

2.2 From the sociological standpoint, other factors, such as involvement in social networks in the workplace and being recruited through them, are as important as the availability of time (Putnam, 2000). According to Putnam, full-time work has two conflicting effects on community involvement. On one hand, full-time work provides social networks for making new connections through which to get involved. Many employers offer corporate volunteering schemes and as many as 80% of those who have been involved in these schemes have also reported involvement in civic activities and voluntary associations outside of work (Hardy, 2004). On the other hand, full-time work reduces the time available for using these opportunities and becoming actively involved in voluntary activities. Therefore, according to Putnam, part-time work might be the 'golden mean' for involvement in voluntary associations because it offers both – more free time for participation and exposure to social networks and volunteering opportunities at work.

2.3 Some existing studies indeed support the hypothesis that part-time work might be more conducive for activity in voluntary associations than full-time work. Thus, Kamerde and Burchell (2004) found that in 27 European countries the levels of involvement in voluntary associations were higher among individuals working part-time than individuals working full-time. Similarly, Taniguchi's (2006) and Rotolo and Wilson's (2007), studies in the USA suggest that women working part-time are more likely to volunteer than women working full-time. Based on the General Household Survey, (Coulthard, Walker, & Morgan, 2002) report that 16% of part-timers compared to 14% of full-timers reported activity involvement in local organisations in Britain. The current study builds on this work by addressing the issues that have been left under-explored.

2.4 Firstly, a major limitation of previous studies is that even those using longitudinal data (e.g. T. Rotolo & J. Wilson, 2007) have made cross-sectional comparisons of individuals working part-time with those working full-time. This approach has left room for unobserved heterogeneity, in other words stable individual differences that have not been controlled for but which could affect the relationship between full/part-time status and involvement in voluntary associations. For example, individuals who are less career-orientated might self-select themselves into part-time work (for example, see Hakim, 2000) and they might also be more willing and interested in doing voluntary work than more career-orientated individuals who prefer to work full-time. The current study addresses this issue of heterogeneity and focuses on 'within-individual' differences. It examines how an employee's activity in voluntary associations changes when he or she moves from full to part-time work and vice versa instead of just comparing the experience of individuals working part-time with the experiences of full-time employees.

2.5 Secondly, the current study not only examines transitions between full and part-time work but also the changes in activity in voluntary associations that come with these transitions. Previous studies have focused on the current status of involvement in voluntary associations - in other words whether an individual at the time of survey is active in a voluntary association or how many hours s/he devotes to volunteering - but not on the changes in this involvement. As Rotolo (2000) has pointed out, such an approach is conceptually problematic. The measurement of activity status as 'active vs. inactive' groups conceptually different types of individuals in one category. Thus, if someone reports at time t that s/he is active in any voluntary group, this response identifies two different types of individuals: 1) those who continue their activity and 2) those who recently joined the group.

2.6 To address this issue the current study focuses on starting and stopping activity in voluntary associations and not on the activity status at a certain point in time as previous studies have done. Although not perfect, this method is a more reliable way than cross-sectional analyses to determine the causal relationship between employment and voluntary associations.

2.7 Thirdly, the current study examines the effects of part-time work on activity in different types of

voluntary associations. Previous studies have employed aggregate measurements of involvement in voluntary associations. They have asked whether someone is active or not active in any association, or have recorded the total number of hours volunteered in any type of voluntary association, without distinguishing the involvement in different types of associations. However, it could be hypothesised that the effect of part-time work could vary for different types of association. For example, in the UK and many other countries employees working part-time have lower rates of membership in trade unions (Grainger & Crowther, 2007; Visser, 2006). Therefore it could be expected that trade union activists who moved from full-time work into part-time might be more likely to cease their activity in trade unions than if they continued working full-time.

2.8 In order to examine the relationships between part-time work and employees' activity in different types of voluntary associations, the current study uses the typology of voluntary associations proposed by Babchuk and Edwards (1965). This typology, traditionally employed by social scientists, classifies voluntary associations into instrumental, expressive and instrumental-expressive. Where the intended beneficiaries of an association's activity are outside of that association and the effects of participation and activity of the association are deferred in time, it is classified as an *instrumental association*. *Expressive associations* are those where the intended and main beneficiaries are the members of the association and the effects of involvement are more or less immediate. *Instrumental-expressive associations* are where the intended benefits are for both members and people outside the association, and the benefits could be both immediate and deferred.

2.9 In the current study, activity in instrumental associations includes activity in any political, environmental or voluntary service group or association. Religious groups, social clubs, sports clubs, Scouts and Guides, parents' associations, tenants and residents groups, the Women's Institute or women's groups are classified as expressive associations. Activity in trade unions and professional associations is categorised as activity in instrumental-expressive associations.

2.10 The classification employed in this study is theory-based because it was not possible to test this classification empirically. Cluster or latent class analysis that might seem appropriate in this case, would classify individuals according to their involvement in different types of associations, but not the associations themselves. A bivariate analysis, not reported in this paper, suggested that all voluntary associations categorised as the same type had similar relationships with part-time work. For example, activity in each type of expressive association had a positive relationship to part-time work.

Analytical model

3.1 The analytical model employed in this study focuses on the relationships between changes in an individual's full and part-time working arrangements in all pairs of waves two years apart (i.e. between time t-1 and time t) and changes in the same individual's activity in voluntary groups during the same time period (i.e. starting or stopping activity). In addition, this model controls for other potentially significant variables (and/or changes in them) that could create spurious relationships because in previous studies they have been found to be related to both part-time work and involvement in voluntary associations: gender, age, changes in health status and occupation, changes in the household income per person, childcare responsibilities, changes in employment status and changes in job, and year of the interview. The year of the interview is included to control for the period effect and any structural changes, as the data was collected during a relatively long time period of twelve years; 1993 to 2005. The measurement of the control variables is described in Appendix A.

Data

4.1 This study uses the secondary data analysis of the data from the British Household Panel Survey (BHPS), a multi-purpose annual panel survey. In 1991, the wave one sample consisted of approximately 5,500 households and 10,300 individuals from Great Britain. The sample is a stratified clustered design drawn from the Postcode Address File, and all residents present at those addresses at the first wave of the survey were selected as panel members. These same individuals are re-interviewed each successive year.

Sample

4.2 The sample employed in the current study consists of 39,717 pooled person-wave observations from seven waves every second year of the British Household Panel Survey for the period from 1993 to 2005. The pooled sample includes employed and self-employed individuals aged 16 and over from Great Britain who reported that they had done paid work the previous week or had not worked the previous week but did have a job. Each year there was roughly the same number of such cases in the sample. Cases were pooled only for every other year because activity in voluntary associations was only measured bi-annually in the BHPS. No weights are applied, as they are not available for a pooled sample.

Measurements

Changes between part and full-time work

4.3 Changes in working hours in the main job were derived from summing three variables in the BHPS: the number of expected working hours per week, the number of overtime hours worked per week, and the number of hours usually worked per week. Individuals working 30 hours per week or more were classified as full-timers, 29 hours per week or less were classed as part-time (as in other hours-based definitions (e.g. Burchell, Fagan, O'Brien, & Smith, 2007), and as defined by the Office for National Statistics (2009).

4.4 Four different transitions between full-time and part-time working modes between time t-1 and time t were modelled:

- Category '0' = 'Full-time in both waves': individuals who worked full-time in both waves;

- Category '1' = 'Full-time to part-time': individuals who changed from full-time at time t-1 to part-time at time t;
- Category '2' = 'Part-time to full-time': individuals who changed from part-time to full-time;
- Category '3' = 'Part-time in both waves': individuals who worked part-time in both waves.

The reference category was category '0' = 'Full-time in both waves'.

Changes in activity in voluntary associations

5.1 In the BHPS, activity in any voluntary organisations and groups was measured by the questions: 'Do you join in the activities of any of these organisations on a regular basis...?' and offering a list of voluntary groups (political party, trade union, environmental group, parents association, tenants or residents group, religious group, voluntary service group, community group, social group, sports club, the Women's Institute, women's group, professionals' organisation, other organisation, pensioners' organisations, the Scout and Guides, and other voluntary groups). The answers were coded as a dichotomous variable: 'yes' or 'no'. Employing these variables and the typology of voluntary associations (Babchuk & Edwards, 1965), eight outcome variables were created for the current study¹.

5.2 Two change variables were created for activity in associations in general and for each of type of voluntary association. First: 'Starting activity in ...', where individuals who were not active in any or a particular type of voluntary association at time t-1 and had not started activity at time t were coded as '0'; individuals who were not active at time t-1 but who reported activity at time t were coded as '1' 'Started activity in...'. Individuals who were active at time t-1 had missing values on this variable.

5.3 The second variable was: 'Stopping activity in...', where individuals who were active in any or particular type of voluntary association at time t-1 and had not stopped their activity at time t were coded as '0' 'Remained active in...'. Individuals who were active at time t-1 but did not report activity at time t were coded as '1' 'Stopped activity in...'. Individuals who were not active at time t-1 had missing values on this variable.

5.4 Whilst starting and stopping activity were mutually exclusive, i.e. an individual who was active at time t-1 could not be inactive at time t-1; individuals could simultaneously be active in one type of voluntary association, but not in another. For example, an individual who was not active at time t-1 in an instrumental association could be active in an expressive or instrumental-expressive association².

Missing values and attrition

5.5 No variables in the data set exceeded the generally acceptable level of 5% of missing values for a large data set (Tabachnick & Fidell, 2007). 1859 cases (4.7 %) had missing values for more than five variables. These individuals came from households with a significantly lower income per person ($M = £10,974$; $SD = £7,604$) than individuals without missing values ($M = £12,237$; $SD = £9,857$), $t(38885) = 4.3$, $p < 0.001$. This relatively small group of individuals was excluded from the analysis because they all had missing values for the outcome variables and imputation methods for dichotomous variables are very complex, and do not always yield reliable results (Twisk, 2003).

5.6 In this study approximately 20.6 % of respondents ($n = 2,182$) participated in all seven waves. The attrition, both permanent and temporary, probably did not introduce any statistically significant bias as there were no significant differences in yearly income per person in the household, in the occupation between individuals permanently absent from the sample, those participating in each wave, and individuals periodically absent.

Data analysis methods

5.7 For bivariate analysis the chi-square test and t test were used. For multivariate analysis this study used the population-averaged model of generalised estimating equations (GEE) analysis. The purpose of these methods is to analyse the longitudinal relationships between the outcome variable and a set of predictor variables (Twisk, 2003; Zeger, Liang, & Albert, 1988). GEE analysis has been widely used in biology, epidemiology and medicine, but social scientists have only recently realised its potential (for example see the discussion of advantages of GEE over GLM by Ballinger, 2004; Kuchibhatla & Fillenbaum, 2003; Rabe-Hesketh & Skrondal, 2005; Zorn, 2001). This paper reports the GEE results obtained using an autoregressive lag-1 correlation structure; however, a sensitivity test suggested that the results obtained from other correlation structures applicable to panel data were very similar.

Results

Sample description

6.1 The average age of the individuals in the sample was 38.6 years (SD 12.7) and approximately half of them (48.2%, $n = 19,148$) were women. Of the respondents, 40.9% ($n = 16,255$) had a responsibility for childcare at time t. Most of the individuals (85.2%, $n = 23,545$) were employees in two consecutive waves. The average income per person in the household was £11,296 (SD=£9,623) at time t-1 and on average this income increased by £1,417 (SD=£8,960) between time t-1 and time t. 30.6% ($n = 8,321$) of the participants experienced changes in their occupation between time t-1 and time t.

Descriptive analysis

Who is active? The profile of volunteers

6.2 Before analysing the effects of part- and full-time work on activity in voluntary associations, this study examined the profile of the volunteers. In general, individuals who reported activity were most likely to be older men on a higher income, with a university degree and in a professional occupation. In comparison, women, younger people, individuals on a lower income per person in a household, without educational qualifications, and working in elementary occupations were less likely to report activity in voluntary associations. These patterns, with few exceptions, applied to activity in all types of associations

Gender

6.3 Men (51.3%) were more likely than women (46.6%) to report activity in voluntary associations in general, as well as in expressive (43.8% and 38.9% respectively) and instrumental-expressive associations (10.7% and 8%). The exception was instrumental associations where women (5.8%) were more likely to report activity than men (10.7%).

Age

6.4 Individuals who were active in voluntary associations in general and in different types of them, except for expressive groups, were slightly older than people who were not volunteering. The average age of those who were active in at least one association was 43 years ($SD=13.1$), while individuals who were not active were on average aged 38 ($SD=12.6$). The average age of those volunteering for instrumental ($M=43$ years, $SD=13.1$) and instrumental-associations ($M=42$, $SD=11.1$) was very similar, and they were also slightly older than people not active in instrumental and instrumental-expressive associations ($M=38$, $SD=12.2$). The exception was expressive associations where there were no age differences between individuals active in them and those not active.

Income

6.5 In general, people who were active in voluntary associations had on average a higher income than those who were not volunteering. This was true for activity in associations in general, and also for activity in each type of association. Thus those who were active in voluntary associations in general, had a slightly higher yearly income per person in the household ($M=£12,895$, $SD=10,632$) than those who were not involved ($M=£11,605$, $SD=9,004$). Similarly the average income per person in the household for people who reported activity in instrumental associations was £14,094 ($SD=10,807$), £12,769 ($SD=10,602$) for individuals active in expressive associations and £15,531 ($SD=14,501$) for people active in instrumental-expressive associations. This is in contrast to a lower income per person for individuals who were not active in instrumental ($M=12,134$, $SD=9,792$), expressive ($M=11,849$, $SD=9,288$) or instrumental-expressive associations ($M=11,897$, $SD=9,178$).

Education

6.6 The highest activity rates were among people who had a university degree, but the lowest were among individuals who had no educational qualifications. Thus more than a half (60.9%) of people with a university degree reported activity in at least one voluntary association, 10.3% of them were active in an instrumental, 49.3% in an expressive and 18.9% in an instrumental-expressive association. In comparison, only 38.5% of those with no educational qualifications were volunteering for at least one association, just 3% for an instrumental, 32.2% for an expressive and 5.7% for an instrumental-expressive association.

Occupation

6.7 Professionals were the most likely to be active in voluntary associations in general and in all types of these associations. Professionals had the highest rates of activity in voluntary associations in general (63.7%). The lowest rates for activity in general were for people working in elementary occupations (39.4%). Similarly professionals had the highest levels of volunteering for instrumental (63.7%), expressive (52.9%) and instrumental-expressive associations (19.2%). In contrast, a much smaller proportion of individuals working in elementary associations were active in any instrumental (3.1%), expressive (33.5%), or instrumental-expressive associations (5%). While people in elementary occupations had the lowest rates of activity in instrumental and expressive associations, skilled agricultural workers and service, shop and market workers were the least likely to be active in instrumental-expressive associations, 4.3% and 4.8% respectively.

Transitions between full and part-time work

6.8 As expected, continuous full-time work between two waves was predominant and part and full-time working arrangements remained relatively stable between time t-1 and time t. Approximately three quarters (73.8%, $n=20,117$) of the respondents reported working full-time in both waves, 64.3% of which were men. 15.6% ($n=2,242$) of the participants, 88.2% of whom were women, reported working part-time in both waves. Transitions between part and full-time work and vice versa were comparably rare: only 5.9% ($n=1,602$) and 4.7% ($n=1,285$) of individuals, respectively, reported such transitions.

Changes in activity

6.9 A relative stability was also observed in activity in voluntary associations, as can be seen in the first row in Table 1. Individuals who were active in any association had a tendency to remain active from wave to wave, while those who were not involved usually remained uninvolved. Thus of 13,210 individuals who did not report activity in any voluntary association at time t-1, only 28.3% ($n=2,872$), started activity in the

following wave. Similarly, approximately the same proportion (30.3% or 4,348 respondents) of 14,347 individuals who were active at time t-1 stopped their activity at time t.

Table 1. Changes in activity in voluntary associations and full and part-time work

	Any association		Instrumental		Expressive		Instrumental-expressive	
	Started activity (% of non-active at time t-1)	Stopped activity (% of active at time t-1)	Started activity (% of non-active at time t-1)	Stopped activity (% of active at time t-1)	Started activity (% of non-active at time t-1)	Stopped activity (% of active at time t-1)	Started activity (% of non-active at time t-1)	Stopped activity (% of active at time t-1)
Average	28.3	30.3	3.0	57.8	22.4	33.0	6.6	57.1
Full-time in both waves (n=20,117)	27.3	29.5	2.8	58.0	22.4	33.3	7.0	55.8
Full-time to part-time (n=1,285)	28.4	32.1	3.8	64.1	22.5	35.0	6.2	66.1
Part-time to full-time (n=1,602)	26.0	33.9	4.4	59.1	20.6	35.7	5.1	66.7
Part-time in both waves (n=4,342)	27.0	26.9	3.3	55.0	23.3	30.0	5.4	59.3
χ^2 (df3)	1.1	15.7***	16.7***	2.5	2.6	10.4***	54.1***	12.1***
***... p<=0.01								

6.10 However, when different types of voluntary associations were considered, the extent of changes in activity varied noticeably, mainly because a much higher number of individuals were likely to be involved in expressive than instrumental and instrumental-expressive associations. Thus, approximately 22.4% (n=3,309) of individuals not active in any expressive association at time t-1, started activity in an expressive association in the following wave; the involvement rates were considerably lower for starting activity in instrumental (3% or 748) and instrumental-expressive associations (6.6% or 1,555). Similarly, more than half the individuals active in instrumental and instrumental-expressive associations stopped their activity in the following wave (n=809 and n=1,457, respectively) compared to just one third (n=3,657) of those active in expressive associations.

Transitions between full-time and part-time work and changes in activity

6.11 Table 1 suggests that some changes in part and full-time working arrangements were associated with starting or stopping activity in voluntary associations. As can be seen in Table1, part/full-time work and changes to those working patterns had a significant bivariate relationship with stopping activity in voluntary associations in general, but not to starting. Table 1 also indicates that the relationships between part and full-time working arrangements and changes in activity in associations varied for different types of associations. Changes in full/part-time work arrangements were significantly associated with starting and stopping activity in instrumental-expressive associations. Continuous full-time work seemed to have the most positive relationship to employees' involvement in instrumental-expressive associations, as individuals working full-time in both waves had the highest rates of starting and the lowest rates of stopping their involvement.

6.12 For instrumental and expressive associations, the relationship between part/full-time work and changes in activity in these associations depended on whether an individual was already active or not. Thus, as can be seen in Table 1, for instrumental associations, changes between full/part-time work or vice versa were more conducive to starting activity in instrumental associations than continuous full/part-time work.

6.13 For expressive associations, part/full-time work and changes to those arrangements was significantly associated with remaining active, but not starting activity. In general, individuals who experienced stability in their working time arrangements, in other words individuals who remained in either full or part-time work in both waves, had significantly lower rates of stopping activity in expressive associations.

Multivariate results

Part-time work sustains activity of individuals who are already involved

7.1 As can be seen in Table 2, changes between full and part-time work remained significantly related to starting and stopping activity even if other variables in the model were controlled. In general, the results from this study indicated that part-time work for at least three years was important for sustaining activity in voluntary associations in general for individuals who were already active. As the regression coefficient -

0.28 in Table 2 suggests, individuals who were already active in a voluntary association were approximately 1.2 to 1.5 times less likely to stop their activity if they worked part-time in both waves compared to them working full-time in both waves.

Table 2. GEE estimates

	Any		Instrumental				Expressive				Instrumental-expressive					
	Started		Stopped		Started		Stopped		Started		Stopped		Started		Stopped	
	n=12,577	n=12,382	n= 24,081	n=1,328	n=14,442	n=10,782	n=22,962	n= 2,034								
	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
Age	-0.01	0.01	-0.02	0.01***	0.02	0.00***	-0.02	0.01***	-0.01	0.01**	-0.01	0.01***	0.02	0.01***	-0.02	0.01***
Sex	-0.08	0.05	0.23	0.05***	0.11	0.09	-0.12	0.16	-0.1	0.05**	0.26	0.05***	-0.2	0.07***	0.19	0.12
Ch. in health status	0.01	0.01**	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00**	0.01	0.01**	0.01	0.01	0.01	0.01
Ch. in occupation	0.08	0.04	0.07	0.04	-0.03	0.09	0.09	0.12	0.1	0.04**	0.06	0.04	-0.19	0.07***	0.18	0.11
Became self-employed	0.1	0.13	0.07	0.13	0.35	0.23	-0.35	0.3	-0.09	0.13	0.18	0.13	0.1	0.18	-0.27	0.31
Became employee	-0.12	0.15	0.16	0.14	0.2	0.25	-0.02	0.33	-0.14	0.15	-0.04	0.15	-0.15	0.23	0.08	0.39
Self-employed in both waves	0.06	0.08	0.01	0.08	0.28	0.13	-0.2	0.21	-0.08	0.08	-0.05	0.08	-0.08	0.1	-0.01	0.17
Lag income	0.01	0.01***	0.01	0.01***	0.01	0.01***	-0.01	0.01***	0.01	0.01***	-0.01	0.01***	0.01	0.01***	-0.01	0.01***
Ch. in income	0.01	0.01***	0.01	0.01***	0.01	0.01***	-0.01	0.01***	0.01	0.01***	-0.01	0.01***	0.01	0.01***	-0.01	0.01***
Childcare responsibilities (yes)	0.33	0.05***	-0.04	0.05	-0.11	0.1	-0.05	0.16	0.35	0.05***	-0.05	0.05	0.29	0.07***	0.02	0.12
Full to part-time	0.03	0.09	-0.01	0.09	0.24	0.16	0.2	0.22	0.01	0.09	-0.06	0.1	-0.29	0.15**	0.52	0.26**
Part-to full-time	-0.06	0.09	-0.06	0.08	0.56	0.14***	-0.37	0.22*	-0.1	0.09	-0.11	0.08	-0.25	0.14*	0.34	0.26
Part-time in both waves	0.07	0.07	-0.28	0.06***	0.09	0.12	-0.05	0.18	0.14	0.07***	-0.30	0.07***	-0.50	0.11***	-0.18	0.18
Changed job	-0.06	0.05	0.03	0.04	0.11	0.09	0.12	0.13	-0.03	0.05	0.02	0.05	-0.08	0.07	0.23	0.12***
Wave	-0.05	0.01***	0.11	0.01***	-0.12	0.02***	0.25	0.03***	-0.05	0.01***	0.1	0.01***	-0.07	0.02***	0.11	0.03***
Constant	-0.84	0.11***	-0.36	0.10***	-4.21	0.20***	0.98	0.33***	-0.98	0.10***	-0.33	0.11***	-3.38	0.15***	0.9	0.27***

*** denotes significance at p ≤ .01
 ** 0.05 ≤ p < 0.1
 * 0.10 ≤ p < 0.05

7.2 However, the effects of part and full-time work can be varied for different types of voluntary associations: part-time work from wave to wave was positive for activity in expressive associations; continuous full-time was conducive to involvement in instrumental-expressive associations, but transitions from part to full-time were positively associated with involvement in instrumental associations.

Part-time work is positively related to activity in expressive associations

7.3 The results suggest that continuous part-time work increases the likelihood of starting and reduces the probability of stopping activity in expressive voluntary associations. As the regression coefficients 0.14 and -0.3 in Table 2 indicate, individuals working part-time in both waves were approximately 1.2 times more likely to start activity and 1.3 times less likely to stop it in expressive associations compared with working full-time in both waves. To conclude, changes from full-time to part-time work might not induce immediate changes in one's activity in expressive associations but continuous part-time work could facilitate starting activity in them or remaining active.

Part-time work can be detrimental for activity in instrumental-expressive associations

7.4 On the contrary, part-time work could be detrimental for activity in instrumental-expressive voluntary associations, such as trade unions and professionals' associations. As the negative regression coefficients in Table 2 suggest, all the individuals who had working arrangements other than continuous full-time work were less likely to join these associations than if they worked full-time in both waves. The size of the effect varied from 1.3 to 1.6. As Table 2 indicates, part-time work in both waves had the largest effect. Individuals who worked part-time in both waves were 1.6 times less likely to start activity in any instrumental-expressive associations than if they worked full-time in both waves. In addition, individuals who left full-time work to go part-time were also approximately 1.7 times more likely to stop their activity in instrumental-expressive associations than if they continued working full-time.

Starting full-time work can be positive for activity in instrumental associations

7.5 Taking up a full-time job after working part-time was positive for starting activity and remaining active in instrumental voluntary associations. As the regression coefficients 0.56 and -0.37 in Table 2 suggests, individuals changing from part to full-time work were approximately 1.8 times more likely to start and 1.4 times less likely to stop their activity in any instrumental association, compared to working full-time in both waves.

Discussion, conclusions and limitations

8.1 Both the rational choice and sociological viewpoints lead naturally to the prediction that part-time work is more conducive to employed individuals' involvement in voluntary associations than full-time work because part-time work not only offers socialisation at the workplace, but also more time off work. This paper tested these predictions by analysing longitudinal data. By running such analysis on the BHPS this paper found that support for these predictions is actually mixed and that the theories need revising to account for this.

8.2 This study confirms that part-time work is indeed positive for activity in voluntary associations in general, as people working part-time are less likely to stop their voluntary activities. In this respect, this

study agrees with the findings from previous studies (Kamerāde & Burchell, 2004; T. Rotolo & J. Wilson, 2007; Taniguchi, 2006) which demonstrated that part-time work is associated with a higher likelihood of being active in (or volunteering for) voluntary associations.

8.3 However, the findings from this study also indicate that part-time work can have a different impact on activity in different types of voluntary associations. The results suggest that the predictions of economic and sociological theories - namely, that part-time work is beneficial for activity in voluntary associations - are accurate only in relation to activity in expressive voluntary associations: associations that are intended to provide relatively immediate benefits for their members. But more time away from work does not translate into activities in associations designed for the benefit of wider society (or for other individuals not themselves involved in these associations).

8.4 The current study found that part-time work could be positive for employees' activity in expressive voluntary associations (such as religious groups, social clubs, sports clubs, Scouts and Guides, parents' associations, tenants' and residents groups, the Women's Institute, and women's groups). The results indicate that individuals continuously working part-time for at least two years are more likely to start and less likely to stop activity in expressive voluntary associations compared to when they continuously worked full-time. These findings are in line with the predictions from the rational choice theory that individuals working part-time are more likely to get involved in voluntary activities as they have more time free from paid work than individuals working full-time. Indeed, according to the findings from this study, individuals working part-time use this time to get involved with, or continue their involvement in, religious groups, sports clubs and other associations that provide relatively immediate benefits for themselves.

8.5 The findings also suggest that a transition from full-time to part-time work does not immediately translate into starting activity in expressive voluntary associations. A possible explanation might be that it takes time for individuals to adjust to their new working conditions and time schedules. Also it might be that by engaging in expressive associations individuals working part-time compensate for the reduction in social contacts that might come with changing from full to part-time work. Individuals who have been working part-time for a longer period might also be using activity in voluntary associations to increase their employability, as volunteering can help to acquire skills, experience and social networks necessary for securing full-time work (Beggs & Hurlbert, 1997; Gay, 1998; Janey, Tuckwiller, & Lonquist, 1991; Wilson & Musick, 1999; Wilson & Musick, 2003).

8.6 Part-time work provides more time for activities that benefit individuals themselves, but, in contrary to the rational choice theory, less time spent at work does not, immediately at least, increase activities for voluntary associations that benefit other individuals or society. The results from this study imply that part-time work has a negative impact on activities in instrumental-expressive (trade unions and professionals' associations) and instrumental associations (political, environmental and voluntary service groups).

8.7 The finding that part-time work is negatively associated with activity in trade unions and professional associations is not surprising. However, the usual structural explanation that part-time work is concentrated in occupations and industries with low unionisation rates seems to be unlikely, as this study controlled for the changes in job and occupation. An alternative explanation might be that contrary to activities in most expressive voluntary associations, activities in trade unions and professionals' associations take place almost exclusively at the workplace, often during the working day. However, part-timers are not always at work during the whole working day or week and often work outside the 'normal' working hours of the organisation (Frieze, 1987). Therefore they might be less likely to be involved in the activities of a trade union or professionals' association. Secondly, although the attitude of trade unions to part-timers is changing (Heery & Conley, 2007), traditionally they have been reluctant to recruit part-time employees or to advocate their interests (Delsen, 1990). The findings from this study suggest that trade unions might not only be reluctant to recruit part-timers but also to retain members moving to part-time work. Moreover, for various reasons employees working part-time might themselves be reluctant to continue their activity in trade unions or professional associations or to join these associations in the first place. The cost of membership of trade unions and professional associations might be quite expensive given their reduced income. Another factor might be that individuals working part-time might feel that unions and professional associations do not represent their interests sufficiently.

8.8 Contrary to the rational choice theory, this study found that a transition from part-time to full-time work is positively related to activity in instrumental associations, such as political, environmental and voluntary service groups. These findings imply that time spent at work is not the most important factor affecting activity in voluntary associations not intended for the immediate benefits of their members.

8.9 It seems that regular exposure to social networks in full-time work is a much more important factor for activity in instrumental associations. Full-time employees might be more likely to get involved in corporate volunteering schemes or employers might be more likely to provide support for the voluntary activities of full-timers rather than their part-time counterparts, as demonstrated by Bowles and MacPhail (2008). Another possible explanation might be that instrumental associations themselves find full-timers more attractive than individuals working part-time.

8.10 To conclude, the evidence from this study suggests that the arguments of the rational choice and sociological theories in regard to the relationships between full and part-time work and employees' involvement in voluntary associations need to be revised. This study found that when it comes to activity in voluntary associations, where immediate benefits for members are not the top priority, the availability of free time outside work is not the most crucial factor. For activity in instrumental and instrumental-expressive associations, factors such as a regular presence at work and opportunities for networking seem to be more important than time. Therefore, the theories on the effects of part-time work on employees' involvement in voluntary associations should take into account that these effects can vary by the type of association. A limitation of this study is that it assumes that part-time work affects changes in activity in voluntary associations rather than vice versa. This assumption is based on several observations which indicate that for employed individuals, work is the central activity and that other activities, including activity in voluntary groups, are subordinated.

8.11 Firstly, employed individuals spend much more time at work than they do involved in voluntary

groups. For example, in the UK, adults spend on average only four minutes a day volunteering, compared to three hours, twenty five minutes in employment (Ruston, 2003). Secondly, paid work in employment is usually valued higher than unpaid work (Hustinx, 2007); therefore, it is more likely to be given priority. For example, surveyed individuals say that they would like to volunteer but cannot because of work constraints (Nichols & King, 1998). Thirdly, as Breer and Locke (1961) (quoted in Staines, 1980) and Meissner (1971) have argued, in general, employees have more control over their out-of-work life than over their employment conditions. An individual can more easily choose, change or abandon his or her leisure activities, including involvement in voluntary groups, than choose, change or abandon their job. Moreover, employment conditions are largely set by the employer, and the employee usually doesn't have sufficient control over them to adjust them to his or her lifestyle. Therefore, it is more plausible to attribute changes in relationships between employment experiences and activity in voluntary groups to the effect of employment experiences on involvement in voluntary groups, rather than vice versa. Although it is possible that there are employees for whom involvement in voluntary groups is the most significant activity in their life and who adjust their work to their participation activities, it is very likely they are in the minority. Therefore, whilst this study does not provide all the proof needed to establish causality, it presents an important link of evidence in a chain of causal reasoning.

8.12 The second limitation of this study is that it has used a relatively unsophisticated measurement of activity in voluntary associations by simply distinguishing between activity and non-activity. A more refined measurement, for example, the number of hours spend on activity in an association (as in T. Rotolo & J. Wilson, 2007; Taniguchi, 2006) would have provided much more information about changes in employees' voluntary activities. However, such measurements were not available in the BHPS. An alternative might have been to use time-use surveys. For example the UK Time Use Survey measures the amount of time individuals spend at work and in other activities, including voluntary work for voluntary organisations. However, the UK Time Use Survey is a cross-sectional study and it does not distinguish between volunteering for different types of voluntary organisations, for example, trade unions and voluntary service organisations. Therefore it was not suitable for the current study.

8.13 Thirdly, if separate models for men and women were estimated, this study would have been better able to depict gender differences (if any): however, due to the small number of cases in the subgroups of activity in associations, it was not possible. As the models included gender as a control variable, this study can conclude that the effects of part and full-time work on activity in associations are significant even when the gender of the employee is taken into account.

8.14 Whilst it is clear from the above conclusions that changes in an individual's working patterns do have measurable consequences for their involvement in voluntary associations, this study has employed data only from Great Britain. The experience of individuals working part-time in different countries varies greatly (Anxo et al., 2007), as does activity in voluntary associations, and therefore so could the effect of work on their activities outside work. For this reason, the author would suggest that further studies which focus on cross-national comparisons of relationships between changes in part and full-time work and changes in employees' activity in voluntary associations will need to be undertaken. However, there is a dearth of longitudinal datasets recording both employment and involvement in different types of voluntary associations.

Appendix A. Measurements of control variables in the model

Variable	Measurement
Age	The age on 1 December of the year of the interview
Changes in health status	The relative changes in an individual's self-reported health between time t-1 and t on a scale from -100 to 100%.
Changes in occupation	0 'No changes in occupation between two waves' 1 'Changes in occupation' between time t-1 and t'.
Changes in employment status	0 'Employee in both waves' 1 'Became self-employed at time t' 2 'Became employee at time t' 3 'Self-employed in both waves'.
Changes in the yearly income per person in the household ¹	The difference in absolute values in the (unequalised) yearly income per person in the household between subsequent measures. The initial level of income per person in the household at time t-1 (i.e. 'Lagged income') is also included in the model to avoid the regression to the mean problem.
Childcare responsibilities	0 'No children or childcare responsibilities at time t' 1 'Responsible for childcare at time t'.
Changes in job	0 'No' if did not change job 1 'Yes' if changed job between time t-1 and time t
Year	The year of the interview

Notes

¹ A preliminary analysis revealed that due to insufficient numbers of cases it was impossible to estimate the models where the outcome variable was changes in each of an initial sixteen types of associations.

² For analytical purposes it would have been better to select only those 261 individuals who were not active in any instrumental or any other type of association. It would allow comparisons between individuals who did start activity in any instrumental association at time t and those who remained inactive. However, with such a small sample size the statistical power of the large models employed in this study would have been low and therefore the results would be prone to Type II error. The same problem arose with in/activity in other types of associations.

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