*Article*

Nonprofit and Voluntary Sector Quarterly
1–28

DOI: 10.1177/08997640251386741
journals.sagepub.com/home/nvs
Sage

# From Service to Sector: Early-Adulthood Volunteering as a Pathway into Nonprofit and Public Employment

**Tiana Marrese[1] and Femida Handy[2]**

## Abstract

Nonprofit, public, and private employees display theoretically and empirically distinct characteristics. An important branch of this research investigates differences in prosocial behaviors given a sector of employment, but findings often model prosocial habits as the outcome and rely on cross-sectional data. This study adds to extant literature by hypothesizing that early-adulthood volunteering serves as a pathway for emerging-career nonprofit and public employment. We utilize regression and duration analysis on the National Longitudinal Survey of Youth 1997 and find that millennials who display early-adulthood volunteering are significantly more likely to report emerging-career employment in the nonprofit sector. Furthermore, millennials with no work experience in nonprofits before their emerging-career phase demonstrate faster rates of entry into a nonprofit if they reported early-adulthood volunteering. We fail to find similar relationships for public employees. Our conclusions speak to the recruitment and retention of nonprofit employees while also providing possible caveats to understanding other-oriented public employees.

## Keywords

volunteering, nonprofit/public, sector of employment

[1]Rutgers University-Newark, NJ, USA
[2]University of Pennsylvania, Philadelphia, USA

**Corresponding Author:**
Tiana Marrese, School of Public Affairs and Administration, Rutgers University-Newark, 111 Washington St., Newark, NJ 07102, USA.
Email: tiana.marrese@rutgers.edu

## Introduction

Differences between private, nonprofit, and public organizations hold important implications for various labor components including employee productivity, employer objectives, and workforce compensation. These structural and theoretical variations are reflected in the individuals who choose to provide human capital across these labor market segments. For example, employees seek job opportunities that align with their values, motivations, and constraints while also being influenced by external experiences that heighten their propensity for certain opportunities. Of particular interest when considering the workforce across sectors is the presence of employees' prosocial behaviors. These prosocial behaviors are related to firm output, employee satisfaction, and overall societal welfare. The strong relationship found in the literature between sector of employment and behaviors like volunteering and donating suggests an interesting question around the workers who are drawn to specific organizations.

The extant literature finds that public, nonprofit, and private employees display distinct prosocial behaviors (Brewer, 2003). Much of this research concludes that nonprofit workers display the highest level of prosocial behaviors, followed by public (used interchangeably with government) workers, then private employees (Holt, 2020; Houston, 2006; Piatak, 2015; Rotolo & Wilson, 2006). Researchers explain these findings by considering differences in (a) intrinsic worker attributes, such as their public service motivation (PSM), and (b) possible contextual variations, such as the availability of volunteer opportunities. Despite this theoretical scaffolding, empirical conclusions are dominated by cross-sectional data providing only a point-in-time association, and the models often place prosocial behaviors as the dependent variable. This limits the ability to understand time's influence on the relationship and constrains the possibility for recruiters and policymakers to fully capitalize on the connection between prosocial behaviors and subsequent employment sectors.

Given this dearth in extant literature, this paper looks at the relationship between early volunteering and an individual's ensuing sector of employment. We follow a representative cohort of millennials from childhood to mid-forties and ask: what is the relationship between early-adulthood volunteering and the emerging-career sector of employment? In addition to studying the relationship between behaviors during these two life phases, we extend this research to consider one's rate of entry into nonprofit and public work. For this, we limit the analysis to individuals with no early-adulthood paid work experience in the nonprofit (public) sector and ask whether those who report early volunteering demonstrate a faster rate of entry into employment in the respective sectors relative to those with no early volunteering experience. We additionally test other prosocial behaviors such as donating and civic engagement. Taken together, these analyses study the relationship between early prosocial behaviors and subsequent employment in the nonprofit and public sector.

These research questions and analyses address three main groups. First, they enter academic conversations concerned with the relationship between sector of employment and prosocial behaviors. Our research questions contribute to this discourse by incorporating various life phases when considering this relationship. Second, this

research speaks directly to practitioners interested in the recruitment and retention of (un)paid labor. If there is a connection between early-adulthood prosocial behaviors and emerging-career employment, organizations might be able to exploit this relationship, and thus, increase their long-term labor capital. For example, the presence of early-life volunteering may be a way to locate individuals who trend toward and thrive in the nonprofit sector. Alternatively, nonprofit organizations may already be utilizing the connection between volunteering and sector choice. If this is the case, our analyses verify this positive outcome.

Finally, we are interested in contributing to the knowledge of policymakers invested in the size and scope of nonprofit and public sectors of the economy. Our focus on early-adulthood volunteering holds close ties to existing initiatives encouraging (or discouraging) prosocial behaviors such as high school and college community service requirements. Such programs may act as possible levers to change one's propensity or speed of entry into such work and thus change the overall scale of the sector. Alternatively, if prosocial behaviors do not meaningfully precede nonprofit or public employment, the ubiquitous presence of prosocial behaviors in these sectors may suggest that on-the-job experiences cause heightened social awareness and, thus, lead to more volunteering. If this relationship is true, policymakers can attempt to bolster organization outputs by removing barriers to volunteering for employees.

## Literature Review

### *Sector of Employment and Worker Differences*

Public, for-profit, and nonprofit entities hold unique theoretical and practical characteristics that create distinctions between organization types. A long line of literature has attempted to distill the exact dimensions that distinguish these sectors. For example, public administration often considers ownership status (Bozeman & Bretschneider, 1994; Rainey & Bozeman, 2000) and intended use of organization output (Meier & O'Toole, 2011; Smith & Larimer, 2018) when differentiating public entities from their for-profit counterparts. They highlight government entities' underlying bureaucratic accountability in conjunction with a public-purpose output as observable features across various societies. Acknowledging the overlap in public-facing objectives, nonprofit scholars additionally lean on the tax exemption regulations to distinguish characteristics between nonprofits and for-profits (Boris et al., 2021; Witesman & Fernandez, 2013). Piatak (2015), pulling from this literature, states that these dimensions of ownership status, organization output, and tax criteria create clear lines between all sectors. Public and both for-profit and nonprofit sectors are separated by their ownership status, while nonprofits and for-profit sectors diverge in their taxation schemes. And, importantly, these three sectors emphasize and produce differentiated values. These components suggest practical variation in the work environment while also implying theoretical distinctions in the organizations' missions.

Scholars find that the unique theoretical and practical characteristics of each sector are reflected by their employees (Korac et al., 2019; Word & Park, 2015). Workers choose jobs that align with their attitudes, goals, and values (Miller-Stevens et al.,

2015). A fruitful stream of literature investigating sector and worker differences is the study of prosocial behaviors between public, nonprofit, and private counterparts. Prosocial behaviors are conceptualized as generally beneficial actions directed toward others (Dovidio et al., 2017). Earliest works on this topic compare public servants to counterparts and find that employment in the public sector is significantly related to civic participation (Brewer, 2003; Corey & Garand, 2002). Subsequent articles consider nonprofit employees (Rotolo & Wilson, 2006) and a collection of prosocial behaviors including the donation of blood and money (Buurman et al., 2012; Houston, 2006). Recent literature further considers the importance of volunteer organization types (Ertas, 2014; Lee, 2012), the intensive margin of volunteer activities (Holt, 2020), and the differentiation of levels in public employees (Piatak, 2015). The overarching conclusion among these works is that an individual's sector is significantly related to their prosocial behaviors.

### *Prosocial Behaviors' Relationship to Sector Choice*

Much of the existing literature surrounding sectoral differences in prosocial behaviors positions these behaviors as the outcome of one's chosen sector. Theories around this relationship largely fall into two categories. First, some scholars hypothesize that a third, unobservable variable drives sector choice and prosocial behavior. The most common third variable mentioned is PSM. PSM is defined as a multidimensional concept motivating individuals to enter public service including a disposition to be other-oriented (Bozeman & Su, 2015; Perry, 2000; Perry & Wise, 1990; Ritz et al., 2016). This line of research notes PSM as at least partially explaining sectoral differences because PSM is related to sector choice (Ritz et al., 2016) and volunteer behaviors (Holt, 2019; Piatak, 2016; Tsai et al., 2016). This literature can be expanded to include other intrinsic dimensions including risk aversion (Chen & Bozeman, 2012) and altruism (Piatak & Holt, 2020). This sphere of research draws on unobservable worker attributes to explain their propensity for a sector of employment and subsequent prosocial behaviors. The second category of theories centers around contextual reasons that influence sectoral differences. For example, Rotolo and Wilson (2006) refer to rationale choice theory to argue that the context of public work induces employee self-interest in activities such as volunteering that can strengthen or complement their professional objectives. They also hypothesize that the social relations inherent to public work create a higher familiarity with volunteer opportunities. In this body of work, researchers suggest that sectoral contexts induce differences in prosocial behaviors.

There is limited research that considers the opposite direction in the story, in which one's prosocial behavior influences or serves as a signal for the propensity to work in a specific sector. A significant body of related literature explores connections between volunteering, PSM, and career ambitions of high school and college students (Bontenbal et al., 2024; Holt, 2019; Piatak, 2016). A few pieces of work build on this literature by employing longitudinal data, and most find evidence for a relationship between PSM and sector sorting (Holt, 2018; Wright et al., 2017), although this finding is not universal (Kjeldsen & Jacobsen, 2013). This research is further complemented by job

switching patterns between sectors and their relationship to intrinsic worker qualities (AbouAssi et al., 2021). Alternatively, a subset of nonprofit literature considers volunteering as a mechanism for improving future job prospects (Spera et al., 2015). Most of these studies focus on volunteering's ability to lead to general employment, but a few highlight connections to specific sectors. For example, Einolf (2022) found that volunteering provided direct opportunities to step into nonprofit executive roles, while (Norris-Tirrell, Rinella and Pham, 2018) note the importance of program experience in leading to paid positions. Using these pieces as a starting point, we hypothesize that the prosocial behavior of volunteering is significantly related to subsequent employment in nonprofit and public sectors. We take each sector in turn.

## *Volunteering and Subsequent Nonprofit Employment*

Volunteering predominantly occurs in the nonprofit sector, with many nonprofit firms reliant on a volunteer workforce to accomplish key tasks. Individuals often experience benefits when they volunteer such as increased life satisfaction (Jenkinson et al., 2013) and may seek further opportunities with related organizations. Time spent volunteering also increases one's social capital and engenders direct knowledge of such work (Norris-Tirrell et al., 2018). These features increase one's awareness of paid opportunities and the likelihood of being considered for such positions. Beyond contextual factors that can cause a higher propensity for nonprofit employment, one's likelihood of volunteering may serve as a signal for innate preferences that align with comparable employment. This logic follows extant literature around PSM and prosocial habits. Some individuals may have a greater inclination for other-serving behaviors, and this is expressed in their unpaid and paid activities. Research on sectoral employment trends often notes that nonprofit and public workers are older than their private counterparts and this is due to individuals choosing employment in these sectors after they have established their careers or are financially stable (Hirsch et al., 2018). Given this, we expect individuals to express their other-serving behaviors through volunteering early in their lives and subsequently display this preference through paid labor after they start their careers. Taking the contextual influences and innate tendency together, we hypothesize:

> **Hypothesis 1 (H1):** Individuals who demonstrate early-adulthood volunteering are more likely to exhibit emerging-career nonprofit employment compared to those with no early-adulthood volunteering.

Our study introduces a time dimension within our data in addition to considering the dependent variable of sector of employment, given observed volunteer behaviors. This time dimension enables us to hypothesize about one's rate of entry into a sector in conjunction with their propensity to enter the sector. Using the same logic as before, we additionally hypothesize:

**Hypothesis 2 (**H2): Individuals with early-adulthood volunteering and no work experience in the nonprofit sector before their emerging careers will demonstrate a faster rate of entry into nonprofit employment than similar counterparts without early-adulthood volunteering.

### *Volunteering and Subsequent Public Employment*

We hypothesize that volunteering and subsequent public employment is largely derived from one's other-serving tendencies that can be expressed through prosocial behaviors and paid employment in organizations with similar values. It is likely that volunteering is the main avenue to express these public values early in one's life, and this is followed by formal expression in one's career. There may also be external components that feed into the relationship despite volunteering's predominant occurrence in the nonprofit sector. For example, volunteering in one's community could engender greater awareness of societal issues, and individuals may seek to further address these issues through government employment. Alternatively, the inter-sector nature of organizations may provide social capital that facilitates an individual's entry into public work. To the extent that early volunteering occurs in public spheres, we expect the contextual influences to be heightened. With this, we develop the following hypotheses:

**Hypothesis 3 (H3):** Individuals who demonstrate early-adulthood volunteering are more likely to exhibit emerging-career public employment compared to those with no early-adulthood volunteering.

**Hypothesis 4 (**H4): Individuals with early-adulthood volunteering and no work experience in the public sector before their emerging-careers will demonstrate a faster rate of entry into public employment than similar counterparts without early-adulthood volunteering.

## Data and Methods

### *Data*

This study analyzed early-adulthood volunteering as a pathway for emerging-career nonprofit and public sector employment. It utilized data from the National Longitudinal Survey of Youth 1997 (NLSY97), a representative panel of 8,984 individuals residing in the United States and born between 1980 and 1984. The early-adult lives of this age cohort coincide with the turn of the century, and they are often referred to as millennials. The first interview occurred in 1997, and participants were 12 to 17 years old. Surveys occurred annually until 2011 and biennially afterwards. The timeframe for the analysis was from 1997 to 2019. This questionnaire had rich worker-level data with information on education, employment, household characteristics, childhood factors, and individual attitudes. One of the main reasons for utilizing this dataset was the ability to construct week-by-week employment observations across survey involvement. Figure 1 provides a visualization of milestones in NLSY97.

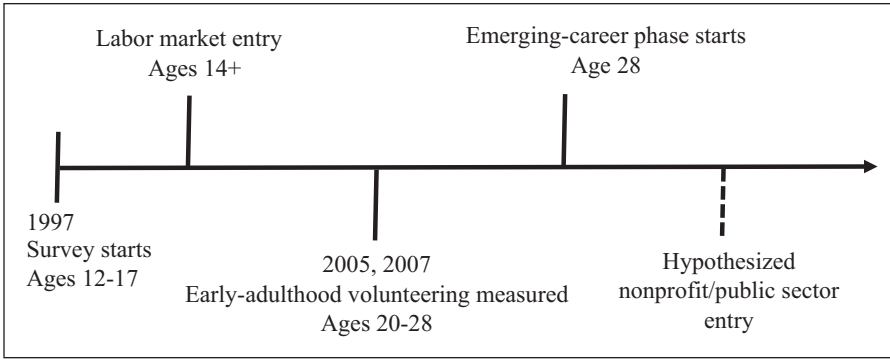


**Figure 1.** Life-Course Features Captured by NLSY97.

Unlike the weekly labor and yearly demographic information, questions on prosocial behaviors were only administered during four discrete waves of the survey, and they captured whether a respondent practiced this behavior within the relevant year. We consider the earliest two waves that include these questions: 2005 and 2007. Although the measurements of prosocial behaviors in NLSY97 were minimal compared to other national surveys, the data's longitudinal feature and rich information along other dimensions motivated its usage.

The main sample was restricted to individuals who entered the labor market at least once before their 28th birthday and responded to at least one wave of the survey after their 28th birthday. For the analysis, the time before one's 28th birthday was conceptualized as early-adulthood in which individuals finalized their formal education and began their career exploration (Chetty et al., 2017). One's 28th birthday was chosen to indicate the start of a respondent's emerging-career phase. This emerging-career phase is defined by career exploration and the "establishment" of one's professional journey towards a work identity (Zacher & Froidevaux, 2021). Sensitivity analyses on this emerging-career cutoff were run, and results remained robust. Observations were also restricted to those with sufficient information on covariates. The final sample contained 5,162 individuals. Although the sample was derived from a nationally representative design, it possessed challenges similar to nonrandom attrition in other longitudinal studies, and the use of multiple waves presented weighting issues. Given these challenges, the main results are presented for the unweighted data, while all conclusions are robust to the inclusion of weights.

## *Dependent Variables*

This analysis examined one's emerging-career employment in the nonprofit or public sector relative to their early-adulthood volunteer behaviors. The main dependent variables were derived from one's sector of employment. Figure 2 displays the sector of employment across early-adulthood and emerging-careers phases for seven

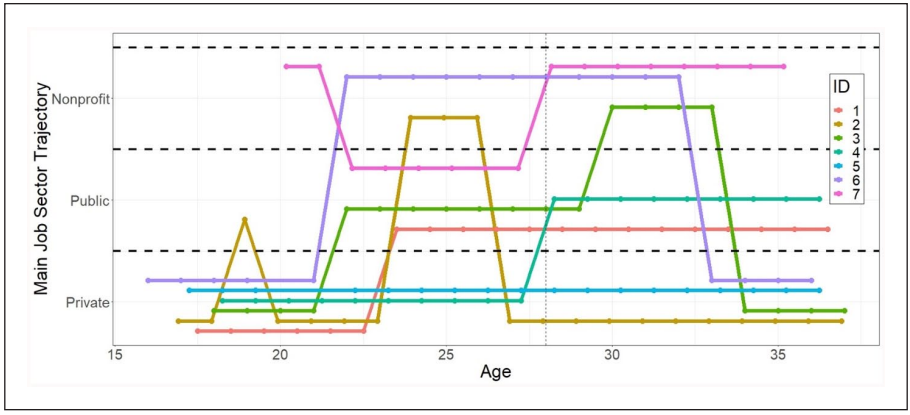


**Figure 2.** Sector Trajectory of an Individual's Main Job for a Random Subset of the Sample.

individuals. Similar to cross-sectional statistics, this figure shows a dominance of the private sector, while movement to other sectors becomes more common as an individual ages. For the main analysis, the first dependent variable was one's emerging-career employment in the nonprofit (public) sector. This was operationalized as a binary variable indicating if an individual reported work experience in a nonprofit (public) organization after their 28th birthday. In addition, rate of entry into a nonprofit (public) sector job was used as a dependent variable for duration analysis. Rate of entry to a job was defined as the number of weeks after an individual's 28th birthday until they reported a nonprofit (public) job.

## *Independent Variables*

The main explanatory variable of interest was a respondent's early-adulthood volunteering. Rounds 9, 11, 15, and 16 of the NLSY97 asked respondents about prosocial behaviors. Questions from rounds 9 (administered October 2005 to July 2006) and 11 (administered October 2007 to July 2008) were used for the volunteer variable since these rounds occurred before all respondents' 28th birthdays (i.e., before the start of their emerging-career). A respondent was marked as performing early-adulthood volunteering if they reported a non-zero frequency of unpaid, non-court ordered volunteer work in either round 9 or round 11. All other respondents were non-volunteers. This presents a lower bound of volunteer behavior since all absent and non-responding individuals were assumed to be non-volunteers.

## *Control Variables*

Four sequential sets of controls were utilized to provide consideration for other influences on the propensity to enter the nonprofit or public sector. The rationale behind the inclusion of these controls drew inspiration from labor economics. The four sets of

controls were: baseline, labor, childhood, and early-adulthood controls. Models with all four sets were denoted as "full models" to indicate their full saturation.

The first set of variables, baseline controls, was 13 covariates measured when an individual turned 28. These involved typical controls present in labor economic models (Hirsch et al., 2018). These were indicators for White (vs. non-White) and female (vs. male), and numeric values for age at first interview, highest grade completed, log of one's average weekly wage, average weekly hours working, and time spent in the labor force before 28. In addition, family commitments and market features were considered. Family commitments were measured by marital status (married, never married, and legally separated or widowed), number of children under the age of 6, and the number of children under the age of 18. Family orientation and constraints are known to influence career decisions (Lee, 2014). Market features that captured labor demand included variables for census region (Northeast, North Central, South, and West), mean statistical area (MSA; not in MSA, in MSA but not central, and in MSA central), and urban/rural living (urban, rural, and unknown). Mean statistical area is a geographic region defined by the U.S. government that includes at least one urbanized area with a population of 50,000 or more. The last baseline variables were binary indicators for whether an individual was employed in the nonprofit or public sector *before* 28.

The second set of controls was built on the baseline with further information about an individual's labor patterns. This included 10- and 9-level factors for a person's most common occupation and industry, respectively. These levels come from the Bureau of Labor Statistics standard classification system. Occupation groupings include executive and management jobs, health care and protective service jobs, and office and administrative support jobs. Industry groupings include manufacturing, wholesale and retail trade, and professional and related services. Industry and occupational categories are known to drive large variation in employment choices across sectors (Leete, 2001). A worker's sector switching behavior was captured by the number of times they moved sectors before they turned 28. This variable controlled for the scenario in which certain people may be prone to general job switching rather than specific decisions to opt into nonprofit or public work.

The third set of controls added the childhood features of mother's education (numeric) and early-household features (childhood census region, urban/rural living, and MSA). These responses were pulled from the first round of interviews. There were two main reasons driving our inclusion of childhood features. First, the temporal nature of the dataset was a large asset to this research, and we wanted to include this information to the fullest of our ability. Our research question and data limitations prevent us from employing panel analysis but we still wanted to include information surrounding different periods of an individual's life. Second, nonprofit literature points to the importance of early life environments in contributing to prosocial behaviors (Knafo & Plomin, 2006). This includes parent features like education and sector of employment (Stritch & Christensen, 2016). The last set of variables drew similar inspiration to include family commitments and market features during the individual's early adulthood. This information was taken from a union of the individual's responses in 2005 and 2007 (average age 22.5) and was comprised of census region, urban/rural, MSA, marital status, and the number of children under 6 and 18 in the household.

## A Cohort of Millennials

Our empirical work centers around millennials, defined as individuals born between 1980 and 1998. There are several characteristics that position this cohort as ideal subjects for this study. These adults are recognized as the first generation to expect meaningful work at all stages in their career trajectory (Ng et al., 2010; Siahaan & Gatari, 2020). They consider a company's mission and ethical practices (Chatzopoulou & de Kiewiet, 2021) and are less critical of the government compared to previous generations (Taylor & Keeter, 2010). They are also more supportive of activist approaches (Acikgoz, 2019) and showcase greater gender equality in terms of career ambitions (Rainer & Rainer, 2011). Given these notable features, we expect this generation to exhibit a relationship between volunteering and sector of employment to a similar or greater extent than their counterparts. And despite being encapsulated in a single generational delineation, this cohort also operates within pervasive structures felt across all age groups. In addition, there is evidence that many of the defining traits seen for millennials are observed in younger work cohorts (Schroth, 2019). Therefore, analyses around this singular cohort also provide insight into large tendencies of the adult population that are subject to similar contexts and succeeding their millennial counterparts.

Table 1 summarizes the sample along selected characteristics. Column 1 presents statistics for the entire sample ($n = 5{,}162$) while columns 2 and 3 subset respondents to emerging-career nonprofit employees ($n = 833$) and emerging-career public employees ($n = 1{,}176$), respectively. Appropriate univariate tests were performed to note statistical differences between subsets and the entire sample. Focusing on the first row, 48% of the full sample reported early-adulthood volunteering while this number increased to 62% and 55% for those with emerging-career nonprofit and public employment. The difference in volunteer behavior by sector compared to the general sample is statistically significant, and the magnitudes are in the same direction as most cross-sectional conclusions: nonprofit employees report the highest rate of volunteering, followed by public servants and then the general worker.

Beyond early-adulthood volunteering, there are several dimensions that differ significantly from those of the general population. The subset of emerging-career nonprofit employees is significantly more female (68% vs. 50%) and educated (15.0 years vs. 13.5). They are also more likely to work in the nonprofit (62% vs. 25%) or public (49% vs. 36%) sector during their early adulthood. Finally, they demonstrate a higher number of job switches (2.46 switches vs. 1.29) before their emerging-career phase. Similar patterns are seen for the third column (individuals who report emerging-career public employment), with the addition of a significantly smaller proportion being White (47% vs. 52%, significant at the 0.01 level). Emerging-career public employees are more female (58% vs. 50%) and more educated (14.5 vs. 13.5). They are more likely, during early adulthood, to work in the nonprofit (30% vs. 25%) and public sector (69% vs. 36%) while also demonstrating a higher number of job switches (2.13 vs. 1.29). The most common industry for the entire sample is the entertainment and food industry, while the nonprofit and public samples have the most common industry of

**Table 1.** Summary of Select Characteristics for Person-Level Samples.

| | Full sample | | Emerging-career nonprofit employment | | Emerging-career public employment | |
|---|---|---|---|---|---|---|
| Variable | *M* or proportion | *SD* | *M* or proportion | *SD* | *M* or proportion | *SD* |
| Early-adulthood volunteering | 0.48 | | 0.62*** | | 0.55*** | |
| Demographics at age 28 | | | | | | |
| White | 0.52 | | 0.54 | | 0.47** | |
| Female | 0.50 | | 0.68*** | | 0.58*** | |
| Highest grade complete | 13.50 | (2.88) | 15.00*** | (2.82) | 14.50*** | (2.99) |
| Log wages | 6.26 | (0.42) | 6.25 | (0.42) | 6.26 | (0.40) |
| Marital status | | | | | | |
| Married | 0.35 | | 0.36 | | 0.37 | |
| Never married | 0.58 | | 0.58 | | 0.56 | |
| Windowed or separated | 0.07 | | 0.07 | | 0.07 | |
| Children under 6 in household | 0.55 | (0.80) | 0.54 | (0.80) | 0.56 | (0.77) |
| Children under 18 in household | 1.01 | (1.27) | 0.95 | (1.21) | 1.02 | (1.22) |
| Region | | | | | | |
| Northeast | 0.16 | | 0.19 | | 0.15 | |
| North Central | 0.21 | | 0.25 | | 0.19 | |
| South | 0.41 | | 0.35 | | 0.43 | |
| West | 0.22 | | 0.20 | | 0.22 | |
| In MSA | | | | | | |
| MSA, central | 0.42 | | 0.46 | | 0.43 | |
| MSA, not central | 0.53 | | 0.51 | | 0.52 | |
| Not in MSA/Unknown | 0.04 | | 0.03 | | 0.04 | |
| Location type | | | | | | |
| Rural | 0.19 | | 0.15 | | 0.18 | |
| Urban | 0.77 | | 0.82 | | 0.78 | |
| Unknown | 0.04 | | 0.03 | | 0.04 | |
| Labor history at age 28 | | | | | | |
| Work in nonprofit sector | 0.25 | | 0.62*** | | 0.30** | |
| Work in public sector | 0.36 | | 0.49*** | | 0.69*** | |
| Average weekly hours | 35.60 | (8.56) | 33.70*** | (7.83) | 34.40** | (7.85) |
| Number of main job sector switches | 1.29 | (1.99) | 2.46*** | (2.69) | 2.13*** | (2.48) |
| Most common industry | Entertainment, food | | Education, health, social services | | Education, health, social services | |
| Most common occupation | Food, cleaning, sales | | Food, cleaning, sales | | Food, cleaning, sales | |
| *N* | 5,162 | | 833 | | 1,176 | |

*Note.* The statistical significance between emerging-career nonprofit (public) employment and entire sample is tested using appropriate proportional tests.
*$p < .05$. **$p < .01$. ***$p < .001$.

education, health, and social services. The most common occupation category for all three samples is the food, cleaning, and sales category. Overall, the summary table suggests that emerging-career nonprofit and public employees have significant variation along multiple dimensions that necessitate their inclusion in the analysis of early-volunteering behavior.

## Empirical Strategy

To understand the relationship between early-adulthood volunteering and emerging-career non-private employment, we first employed linear modeling. The likelihood that one holds a nonprofit (public) job after their 28th birthday was formulated as:

$$\begin{aligned}\Pr(Y_i = 1 \mid X_i) = \beta_1 Vol_i + \left(Base\right)_i + \gamma_1 \left(Labor\right)_i + \gamma_2 \left(Childhood\right)_i \\ + \gamma_3 \left(EarlyAdulthood\right)_i + \varepsilon_i\end{aligned} \tag{1}$$

where *Vol*, the variable of interest, was a binary indicator for whether individual *i* reported volunteering during their early career. (*Base)* represented a vector of base controls (i.e., race and gender) while *(Labor)* included additional labor covariates. (*Childhood)* was a set of controls from the first wave of the survey, and (*EarlyAdult)* was a vector of early-adulthood metrics recorded during the same waves as the volunteer questions. Equation 1 was estimated through linear probability models (LPM) with $\beta_1$ as the parameter of interest. $\beta_1$ can be interpreted as the change in probability of emerging-career nonprofit or public employment given early-adulthood volunteering.

Given a relationship between early-adulthood volunteering and the emerging-career sector of employment, the second analysis investigated a temporal dimension within the data while eliminating the confounder of early-adulthood employment in the relevant sector. We utilized duration modeling and captured the time to entry into the nonprofit (public) sector after one's 28th birthday. To eliminate early-life confounders, we subset our sample to individuals who had not been employed in the nonprofit (public) sector before their emerging-career phase. We estimated a series of Cox proportional hazard models:

$$h\left(t; X\right) = h_0\left(t\right)\exp\left(\boldsymbol{X}'b\right) \tag{2}$$

where the hazard at time t was *h(t; X)*, the baseline hazard at time *t* was $h_0(t)$, and $\boldsymbol{X}'b$ was a matrix of covariates and their respective parameters. Results are presented in hazard ratios, or a measure of differences in frequency of occurrences between groups. In considering the variable for volunteering, a ratio greater than one implies that the rate of entering the nonprofit (public) sector was higher for those who volunteered than their non-volunteering counterparts. This research only considers an individual's first entry into the nonprofit (public) sphere.

## Results

### Linear Probability Modeling

Our first analysis tested the relationship between early-adulthood volunteering and emerging-career employment for the entire sample using LPM. Separate regressions were considered for the discrete outcomes of emerging-career nonprofit employment and emerging-career public employment. In addition, combined models were run to test the equivalence of coefficients between nonprofit and public employment. Four stages of these models were considered, in which each stage introduced increasingly saturated controls (base, labor, childhood, and early-adulthood controls). Figure 3 presents the conditional partial effect of early-adulthood volunteering for each model across increasing controls, while Tables A1 and A2 in the Appendix showcase additional model output.

Before discussing the findings, we note that controls are in expected directions. In the Appendix, Table A1 column 1 shows that the likelihood of emerging-career nonprofit employment significantly increases ($p < .001$) for females (0.062), those with higher education (0.015), and prior nonprofit experience (0.275). These conclusions echo general findings for the demographics of nonprofit employees (Hirsch et al., 2018). Our model also shows that the likelihood is lower ($p < .01$) for those who identify as White, relative to non-White (−0.027). These findings align with our expectations that the nonprofit sector is more diverse than the private sector. Conclusions are consistent across columns. In considering public work after emerging-career inception, column 1 of Table A2 shows that the independent variables of race (−0.051) and education (0.017) are significantly related ($p < .001$) to the outcome of emerging-career public employment and are in the same direction as these controls in Table A1. Finally, early-adulthood employment in the public sector increases one's odds of emerging-career public sector employment (0.293, $p < .001$), and early-adulthood nonprofit employment is marginally significant. Other demographic controls remain insignificant.

Each panel in Figure 3 graphs the coefficients from equation 1 that correspond to the odds that an individual reports emerging-career employment in the nonprofit or public sector given early-adulthood volunteering, holding all else equal. For each panel, there are three key takeaways. Focusing on panel 1, the top dot and line represent the increased likelihood and corresponding 95th percentile that one reports emerging-career nonprofit employment given early-adulthood volunteering. This value is 0.039 in panel 1 and is significantly different than 0 at the 0.001 level. This is the first takeaway of the panel: individuals with early-adulthood volunteering had about a 4% higher likelihood of reporting emerging-career nonprofit employment relative to their non-volunteering counterparts. The second takeaway comes from similar analysis of the bottom dot and line in the first panel. The odds of holding an emerging-career job in the public sector, given early-adulthood volunteering, is about 0.01, and this value is not significantly different than 0. This model fails to find a significant relationship between early-adulthood volunteering and emerging-career employment

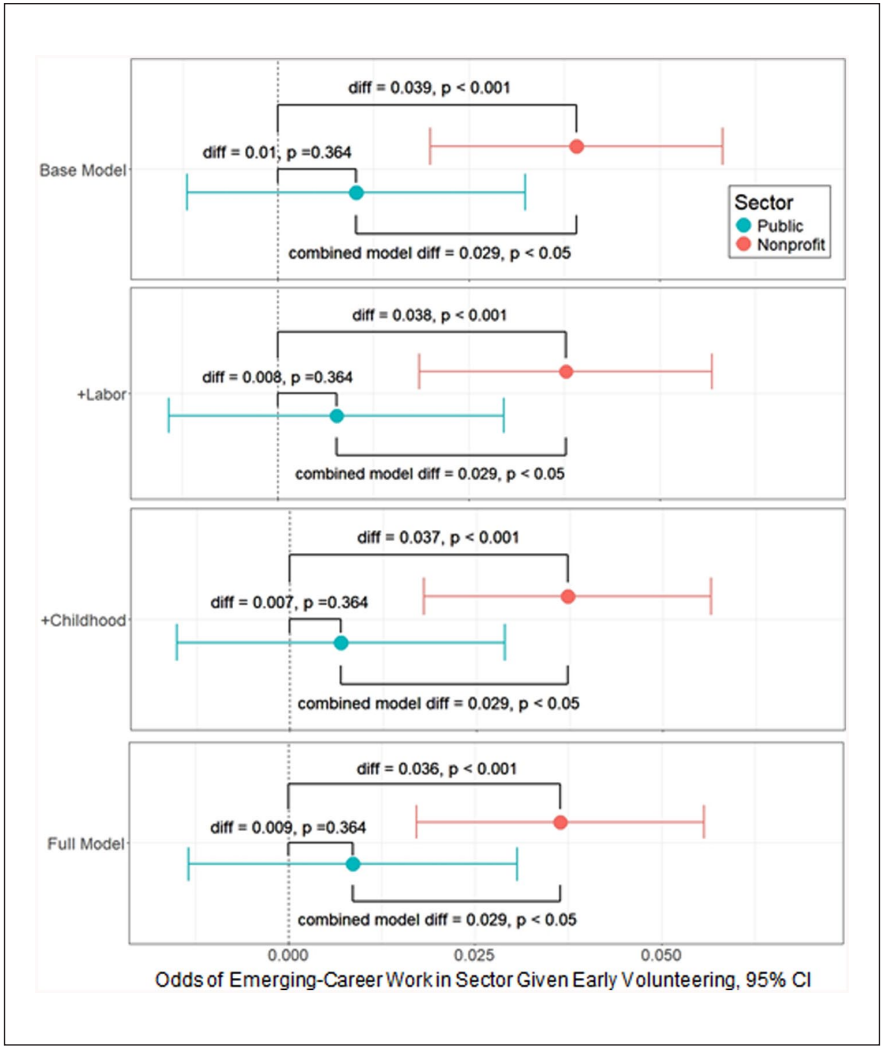


**Figure 3.** Change in Likelihood of Emerging-Career Employment in Each Sector Given Early-Adulthood Volunteering and Combined Model Coefficient Differences.

in the public sector. Finally, the early-adulthood volunteering coefficients between models were tested for equivalence, and results show that these values are significantly different (difference = 0.029) at the 0.05 level. This finding suggests that the effect seen for emerging-career nonprofit employment is significantly different than the effect seen for emerging-career public employment.

Similar findings are echoed as the specificity of the models increases. The second panel corresponds to the model outputs that, in addition to base controls, account for

labor market variables such as their most common industry of employment. The third model introduces childhood controls like mother's education, while the fourth panel corresponds to the most saturated model (denoted as the full model) and accounts for one's early-adulthood covariates such as their early-adulthood rural/urban code. A major finding from all four panels of Figure 3 is the stability of the plotted coefficients, suggesting a strong and consistent relationship in the data. The likelihood of holding a nonprofit job given early-adulthood volunteering ranged from 0.039 to 0.036 ($p < .001$) while the odds of holding a public job ranged from 0.01 to 0.007 (not found to be significantly different than 1). In each panel, the equivalence of coefficients also failed, suggesting that the behavior observed for emerging-career nonprofit employment was significantly different than the behavior of emerging-career public employment. At a high level, these findings suggest that those who report early-adulthood volunteering have about a 4% higher likelihood of emerging-career employment in the nonprofit sector (supporting hypothesis 1), and this result fails to be seen for emerging-career public employment (failing to support hypothesis 3).

Figure 3 visually presents LPM output, or the change in likelihood of reporting emerging-career sector employment given early-adulthood volunteering. We note that another common approach to binary outcomes is logistic regression. We chose LPMs over logistic regression due to the result generalizability and ease of interpretability. In supplemental analyses, we also perform logistic regression and find that the log-odd coefficients are in the same direction and are qualitatively similar. Table 2 showcases the logistic regression models' average marginal effects (AME), or the average predicted change for fitted values across all observations. This is preferable to reporting log-odds due to log-odds' opaque interpretability. Reiterating the previous conclusions, there is a strong and positive relationship between early-adulthood volunteering and emerging-career nonprofit employment, while there is no relationship found between early-adulthood volunteering and emerging-career public sector employment. Numerically, volunteering in one's early career increased the average probability of working in the nonprofit sector by about 4% across all observations. The magnitude of this effect is very similar to the previous analysis, and we note that this is similar to the yearly change in the nonprofit workforce, which increased by 3.9% between 2022 and 2023 (Health of the U.S. Nonprofit Sector, 2023).

## *Duration Analysis*

The next part of the analysis included a time dimension while limiting the influence of early-adulthood paid labor. We implemented duration analysis and considered two subsets of individuals. The first subset included all individuals not employed in the *nonprofit* sector in their early adulthood ($n = 3{,}879$), and the second subset was comprised of similar individuals not employed in the *public* sector ($n = 3{,}300$). For each subset, we analyzed time to entry into the respective sectors during their emerging-career phase. This section asked whether individuals who demonstrated early-adulthood volunteering had significantly different rates of entry into the nonprofit (public) sector than their non-volunteering counterparts.

**Table 2.** Average Marginal Effect From Logistic Regression Models of Early-Adulthood Volunteering on Emerging-Career Sector of Employment.

| | Panel A: Emerging-career employment in nonprofit sector (1) | | Panel B: Emerging-career employment in public sector (2) | |
|---|---|---|---|---|
| | AME | *SE* | AME | *SE* |
| Early-adulthood volunteering | | | | |
| Base model | 0.039*** | 0.010 | 0.010 | 0.011 |
| +Labor | 0.040*** | 0.010 | 0.007 | 0.011 |
| +Childhood | 0.039*** | 0.010 | 0.006 | 0.011 |
| Full model | 0.038*** | 0.010 | 0.008 | 0.011 |

*$p \leq .05$. **$p \leq .01$. ***$p \leq .001$.

Figures 4 and 5 present an initial exploration of this question through the nonparametric approach of Kaplan-Meier cumulative incidence estimates. Cumulative incidence estimates are a group's cumulative probability of reporting an event of interest at a given time. In the context of this study, the cumulative incidence estimates were the cumulative likelihoods of reporting entry into a nonprofit (public) job after one's 28th birthday and these probabilities were calculated separately for individuals who reported and did not report early-adulthood volunteering. Figure 4 shows that at any non-zero value of time, individuals that were volunteers in early-adulthood had a higher average cumulative incident of entering the nonprofit sector. At 400 weeks, there is a 3% difference in likelihood, and this grows to about 6% by week 600. This difference becomes statistically significant at the 95th percentile at about 300 weeks (5 years) after turning 28. The average difference across time is very similar to the AME found in the previous section. A log-rank test found a statistically significant difference between the groups' incidence curves at the 0.001 level.

Figure 5 shows similar plots considering entry into public work. Significant differences in the rate of entry into the public sector were not observed between early-adulthood volunteers and their counterparts. A log-rank test calculated a chi-square value of 0.67 with no significance. Pairwise log-rank tests were also performed between models to analyze the difference in survival curves between nonprofit and public entry. Results confirm that the difference in survival curves for nonprofit entry was significantly different than the difference in survival curves for public entry.

Given these trends, we then utilized Cox proportional models to control for a large set of covariates. The coefficients of Cox models are hazard ratios, also noted as risks, and are analogous to odds ratios in logistic regression. They report the relative probability of an event occurring given a one unit increase in the predictor and assuming the event of interest has not occurred up to the considered time. Table 3 presents the risk estimates for the rate of entry into the nonprofit sector after an individual's 28th birthday with increasing controls, while Table 4 presents similar findings for the rate of entry into the public sector. These subsets were comprised of a unique collection of

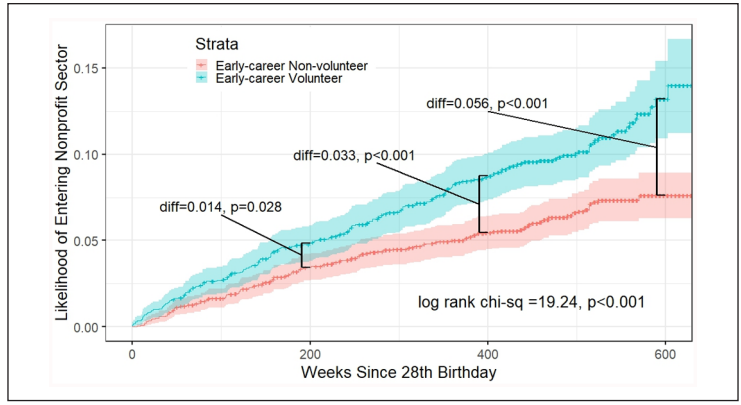


**Figure 4.** Kaplan-Meier Cumulative Incidence Curves of Nonprofit Sector Entry by Reported Volunteer Behavior for All Individuals That Did Not Work in the Nonprofit Sector Before Their 28th Birthday.

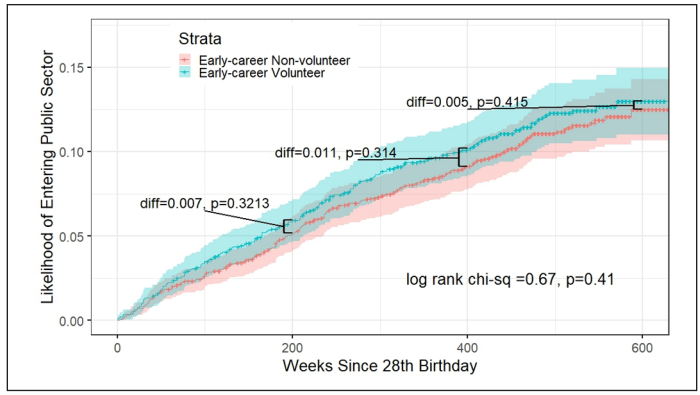


**Figure 5.** Kaplan-Meier Cumulative Incidence Curves of Public Sector Entry by Reported Volunteer Behavior for All Individuals That Did Not Work in the Public Sector Before Their 28th Birthday.

individuals, limiting our ability to statistically compare effect sizes across outcomes. We were most interested in the covariate of early-adulthood volunteering and thus only note that trends seen for the control variables are in the expected directions and similar to the previous regressions.

The main interest is the influence of early-adulthood volunteering on the emerging-career sector of employment. Column 1 of Table 3 includes base controls and corresponds to the outcome of emerging-career nonprofit employment. We observe that early-adulthood volunteering increases one's "risk" of entering the nonprofit sector during their emerging-career phase by about 44% relative to non-volunteers, all else

**Table 3.** Hazard Ratio Estimates of Cox Proportional Hazard Models for One's Rate of Entry into Nonprofit Sector After Their 28th Birthday.

| | Model 2, Dependent variable: weeks until nonprofit entry | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Base (1) | | +Labor (2) | | +Childhood (3) | | +EarlyCareer (4) | |
| | exp(coef) | *SE* | exp(coef) | *SE* | exp(coef) | *SE* | exp(coef) | *SE* |
| Early-adulthood volunteering | 1.440** | (0.116) | 1.443** | (0.117) | 1.423** | (0.118) | 1.421** | (0.118) |
| White | 0.929 | (0.128) | 0.977 | (0.128) | 0.881 | (0.135) | 0.909 | (0.137) |
| Female | 2.163*** | (0.052) | 1.955*** | (0.140) | 1.987*** | (0.140) | 1.998*** | (0.140) |
| Age | 1.036 | (0.023) | 1.033 | (0.052) | 1.036 | (0.052) | 1.037 | (0.054) |
| Highest grade complete | 1.135*** | (0.214) | 1.116*** | (0.025) | 1.092*** | (0.026) | 1.099*** | (0.026) |
| Log wages, age 28 | 0.707 | (0.154) | 0.664* | (0.165) | 0.666* | (0.166) | 0.687* | (0.167) |
| Marital status: married, age 28 | 0.655* | (0.214) | 0.651 | (0.216) | 0.650* | (0.216) | 0.643 | (0.241) |
| Marital status: never married, age 28 | 0.807 | (0.206) | 0.809 | (0.208) | 0.805 | (0.208) | 0.800 | (0.268) |
| Average weekly hours, age 28 | + | | + | | + | | + | |
| Child under 6 in household, age 28 | + | | + | | + | | + | |
| Child under 18 in household, age 28 | + | | + | | + | | + | |
| Census region, age 28 | + | | + | | + | | + | |
| Mean statistical area, age 28 | + | | + | | + | | + | |
| Urban/Rural, age 28 | + | | + | | + | | + | |
| Labor Controls | | | + | | + | | + | |
| Childhood Controls | | | | | + | | + | |
| Early-adulthood Controls | | | | | | | + | |
| *N* | 3,879 | | 3,879 | | 3,879 | | 3,879 | |
| $R^2$ | 0.034 | | 0.039 | | 0.042 | | 0.046 | |
| Max $R^2$ | 0.734 | | 0.734 | | 0.734 | | 0.734 | |
| Log Likelihood | −2,499.7 | | −2,490.2 | | −2,483.3 | | −2,475.3 | |

*$p \leq .05$. **$p \leq .01$. ***$p \leq .001$.
Note: Labor controls include number of sector switches before age 28, most common occupation before age 28, most common industry before age 28. Childhood controls include mother's education level, census region in 1997, MSA in 1997, and urban/rural in 1997. Early-adulthood controls include marital status in 2005, child under 6 in household in 2005, child under 18 in household in 2005, census region in 2005, MSA in 2005, and urban/rural in 2005.

held equal. In the second model, we added labor market controls. Minimal change is observed for the early-adulthood volunteering coefficient (from 1.440 to 1.443). This consistency remains with the inclusion of childhood and early-adulthood controls. With a robust set of controls, we observe a relatively stable coefficient, suggesting individuals who report this behavior have about a 43% higher risk of reporting emerging-career work in the nonprofit sector. This confirms hypothesis 2. Table 4 presents results for the rate of entry into the public sector. Estimates for early-adulthood volunteering showed similar stability (between 1.039 and 1.072) but remained insignificant, failing to provide evidence for hypothesis 4. This finding echoes conclusions from the first analysis.

**Table 4.** Hazard Ratio Estimates of Cox Proportional Hazard Models for One's Rate of Entry into Public Sector After Their 28th Birthday.

| | Model 2, Dependent variable: weeks until public entry | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Base (1) | | +Labor (2) | | +Childhood (3) | | +EarlyCareer (4) | |
| | exp(coef) | *SE* | exp(coef) | *SE* | exp(coef) | *SE* | exp(coef) | *SE* |
| Early-adulthood volunteering | 1.072 | (0.108) | 1.040 | (0.109) | 1.039 | (0.109) | 1.053 | (0.110) |
| White | 0.591*** | (0.116) | 0.591*** | (0.118) | 0.562*** | (0.126) | 0.563 | (0.127) |
| Female | 1.128 | (0.114) | 1.138 | (0.126) | 1.140 | (0.127) | 1.139 | (0.129) |
| Age | 0.853*** | (0.048) | 0.850*** | (0.048) | 0.849*** | (0.049) | 0.852 | (0.050) |
| Highest grade complete | 1.076** | (0.023) | 1.062* | (0.024) | 1.055* | (0.025) | 1.055 | (0.025) |
| Log wages, age 28 | 0.751* | (0.141) | 0.695* | (0.152) | 0.720* | (0.153) | 0.731 | (0.154) |
| Marital status: married, age 28 | 1.778* | (0.260) | 1.732* | (0.261) | 1.707* | (0.261) | 1.710 | (0.279) |
| Marital status: never married, age 28 | 1.538 | (0.255) | 1.527 | (0.256) | 1.477 | (0.256) | 1.381 | (0.296) |
| Average weekly hours, age 28 | | | + | | + | | + | |
| Child under 6 in household, age 28 | + | | + | | + | | + | |
| Child under 18 in household, age 28 | + | | + | | + | | + | |
| Census region, age 28 | + | | + | | + | | + | |
| Mean statistical area, age 28 | + | | + | | + | | + | |
| Urban/Rural, age 28 | + | | + | | + | | + | |
| Labor Controls | | | + | | + | | + | |
| Childhood Controls | | | | | + | | + | |
| Early-adulthood Controls | | | | | | | + | |
| $R^2$ | 0.024 | | 0.029 | | 0.034 | | 0.036 | |
| Max $R^2$ | 0.830 | | 0.830 | | 0.830 | | 0.830 | |
| Log Likelihood | −2,884.9 | | −2,875.3 | | −2,867.8 | | −2,863.9 | |

*$p \leq .05$. **$p \leq .01$. ***$p \leq .001$.
Note: Labor controls include number of sector switches before age 28, most common occupation before age 28, most common industry before age 28. Childhood controls include mother's education level, census region in 1997, MSA in 1997, and urban/rural in 1997. Early-adulthood controls include marital status in 2005, child under 6 in household in 2005, child under 18 in household in 2005, census region in 2005, MSA in 2005, and urban/rural in 2005.

## *Other Prosocial Behaviors*

Up to this point, we focused on volunteering's relationship to sector of employment. NLSY97 also collected data on donation and civic behavior. A person was marked as donating if they said they had "donated money to a political, environmental, or community cause" in the last 12 months. A person was marked as displaying civic participation if they reported a non-zero frequency in attending "a meeting or event for a political, environmental, or community group" in either survey round. The wording used for these two behaviors emphasized political, environmental, or community groups and contained minimal information on activity type. This created a narrower definition than that used for volunteering (where respondents were not supplied with specific types of

**Table 5.** Change in Likelihood of Emerging-Career Employment in Each Sector Given Early-Adulthood Prosocial Behavior.

| | Panel A: Emerging-career employment in nonprofit sector (1) | | Panel B: Emerging-career employment in public sector (2) | |
|---|---|---|---|---|
| | coef | *SE* | coef | *SE* |
| Early-adulthood volunteering | 0.036*** | (0.010) | 0.008 | (0.011) |
| Early-adulthood donating | 0.017 | (0.034) | 0.015 | (0.012) |
| Early-adulthood civic engagement | 0.023* | (0.011) | 0.024 | (0.013) |

*$p \leq .05$. **$p \leq .01$. ***$p \leq .001$.

causes or groups and listed whether it was voluntary). The broader definition of volunteering drove its placement as our focus, but we perform additional analyses on the behaviors of early-adulthood donating and early-adulthood civic engagement.

Table 5 reports the coefficients of interest from six separate LPMs using the full set of controls and the independent variable of volunteering, donating, or civic engagement. Three models consider the outcome of emerging-career nonprofit employment, and three models consider emerging-career public employment. The first row of coefficients matches the relevant coefficients found in Tables A1 and A2, respectively, and they report the findings for early-adulthood volunteering in the emerging-career sector of employment. Rows 2 and 3 present new findings for the other prosocial behaviors. Panel A of the second row reports the coefficient of early-adulthood donating relative to emerging-career employment in the nonprofit sector. Panel B of the second row reports the relationship between early-adulthood donating and emerging-career public employment. For both outcomes, we fail to find a significant relationship to early-adulthood donation behavior. The bottom row considers the prosocial behavior of civic engagement. We see that individuals with early-adulthood civic engagement have about a 2.3% likelihood of working in the nonprofit sector during their emerging-career phase ($p < .05$). We fail to find a similar relationship between this prosocial behavior and emerging-career public employment. These results imply a lack of evidence for a strong relationship between the prosocial behaviors of donating, civic engagement, and employment in the nonprofit or public sectors. Given this dearth, we do not pursue additional duration analyses for these variables.

## Discussion

Those who volunteered early in their adulthood had about a 4% higher likelihood of reporting emerging-career nonprofit employment. For those with no early-adulthood labor experience in the nonprofit sector, early-adulthood volunteers entered

emerging-career work in the nonprofit sector at a rate about 42% faster than their counterparts. We failed to find similar results for public employment. These results hold implications for practitioners and policymakers concerned with the size and scope of the nonprofit sector. For individuals involved in the recruitment and retention of human capital in nonprofits, our research uncovers a bit about the people who provide labor in their organizations. It is possible that early-adulthood volunteering may serve as a signal to locate workers who trend toward and thrive in such work. If further research validates this, practitioners could more easily locate individuals who preference a nonprofit setting by looking for such a signal. Alternatively, our findings may validate current practices that exist in nonprofit employment. We are unable to preclude the possibility that our conclusions are due to nonprofits currently acting on the signal of early volunteering. If this is the case, our research serves to validate that such a relationship exists within the data.

For policymakers, our research speaks to a possible lever in controlling the breadth of the nonprofit sector. We recognize that the connection between early volunteering and subsequent nonprofit employment may be driven by two broad spheres: (a) intrinsic worker attributes or (b) external factors that arise from volunteer exposure. While we do not perform causal analyses to disentangle these mechanisms, we argue that either mechanism can be exploited in policy programs such as mandated high school volunteer requirements. For example, if intrinsic worker attributes drive the association between early-volunteer behaviors and emerging-career nonprofit employment, then the extent to which one fulfills mandated volunteer requirements can act as an efficient signal to locate candidates with the highest propensity to enter nonprofit work. Thus, this policy could serve as a pathway to efficiently allocate workers across job positions. Alternatively, if early volunteering provides contextual exposure to the benefits of nonprofit work or heightens the necessary social capital for formal employment, then policies such as mandated volunteer requirements for high schoolers serve as a lever to control the number of people likely to enter this work. Regardless of the exact mechanism, our research demonstrates the importance of volunteering for nonprofit work, and this key feature can be exploited by policymakers. We call on future research to disentangle the driving mechanisms of this phenomenon.

Throughout the analyses, we failed to find significant results for emerging-career public employment. This is at slight odds with the literature that concludes public workers are more likely to volunteer than their counterparts (Houston, 2006; Lee & Wilkins, 2011; Rotolo & Wilson, 2006) and other literature that finds a relationship between PSM and sorting into the public sector (Holt, 2018). If our conclusions accurately depict a non-existent relationship between early-adulthood prosocial behaviors and emerging-career public employment, the previously mentioned cross-sectional results may indicate a directionality in the relationship that goes from work in the public sector to resulting volunteer work. Rotolo and Wilson (2006) refer to rationale choice theory to argue that the context of public sector work induces employee self-interest in volunteer activities, and this fits with the findings of Piatak (2015), in which local government employees (those closest to community problems) display the

strongest relationship to volunteering. This would also imply that prosocial values, but not prosocial behaviors, matter for public sector employment. Alternatively, our null results would also occur in the scenario that the directionality from volunteering to public work exists but does not become visible until later in one's life or necessitates the consideration of donation and civic engagement outside of political, environmental, or community groups. Our findings call for further investigation of time's influence on the relationship between prosocial behaviors and public employment.

As with all studies, our research has limitations. We pointed to several of these limitations in the previous paragraphs including the inability to draw causal conclusions and the lack of data that extends beyond one's emerging career. We expect the patterns observed in our data to increase in magnitude and significance in one's mid- and late-career since older, more established individuals often accept jobs in nonprofit and government work. We also note that our data are subject to issues seen in longitudinal studies due to participants' survey attrition. This feature limits the ability of the data to serve as nationally representative, but our results are robust to weighted data, and we call for future work to corroborate these findings. Our analysis also only looks at the first instance of entry into nonprofit or public work during one's emerging-career phase. We do not perform sequence analysis or related techniques that account for an individual's lifetime trajectory. Our objective was solely to understand the first time one demonstrates nonprofit or public employment during their emerging careers, but we believe chain analyses to be fruitful for future explorations.

Finally, our measures of prosocial behaviors were limited by survey constraints. We only have records of whether each behavior is practiced during the respective waves. Additional dimensions of these habits including the amount of time, type of organizations, and number of organizations were not provided and thus limit our understanding of the underlying trends. Another limitation relative to prosocial behaviors was the lack of information on different types of volunteering, donations, and civic engagement. Previous literature emphasizes the complexity of these behaviors, and we call on future work to continue to explore this relationship.

## Conclusion

Our research found a strong association between volunteering and nonprofit employment; those who volunteered early in their adulthood had about a 4% higher likelihood of reporting emerging-career nonprofit employment. Our analysis furthered the extant literature on this phenomenon by incorporating longitudinal data and placing one's emerging-career sector as an outcome variable for one's early behaviors. Utilizing duration analysis, we found that for those with no early-adulthood labor experience in the nonprofit sector, early-adulthood volunteers entered emerging-career work in the nonprofit sector at a rate about 42% faster than their counterparts. We performed additional analyses on donating and civic engagement. We failed to see similar relationships for these habits. Our findings conclude that a connection between paid and unpaid labor in nonprofit work exists across various life stages, while we failed to find a similar connection when considering public employment.

## Acknowledgments

The authors would like to acknowledge the community of support they received in developing and carrying out this research. Thank you to Teresa Harrison, Joannie Tremblay-Boire, and Jaclyn Piatak for suggestions and guidance throughout this process. Thank you to Barry Hirsch for some of the earliest support and feedback on this project. Thank you to Peter Frumkin and the inaugural Oxford Social Impact cohort. And thank you to Alex Rees-Jones for his unwavering patience.

## ORCID iDs

Tiana Marrese https://orcid.org/0000-0001-9911-9404
Femida Handy https://orcid.org/0000-0003-3200-8042

## Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

## Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

## Data Availability Statement

The data and codes that produce the findings reported in this article will be made publicly available with assistance from the NVSQ Editorial Team upon acceptance.

## References

AbouAssi, K., McGinnis Johnson, J., & Holt, S. B. (2021). Job mobility among millennials: Do they stay or do they go? *Review of Public Personnel Administration*, *41*(2), 219–249. https://doi.org/10.1177/0734371X19874396

Acikgoz, Y. (2019). Employee recruitment and job search: Towards a multi-level integration. *Human Resource Management Review*, *29*(1), 1–13. https://doi.org/10.1016/j.hrmr.2018.02.009

Bontenbal, I., Calo, F., Montgomery, T., & Baglioni, S. (2024). Rethinking the role of volunteering in the labor market inclusion of migrants. *Nonprofit and Voluntary Sector Quarterly*, *53*(1), 107–126. https://doi.org/10.1177/08997640231162352

Boris, E., McKeever, B., & Leydier, B. (2021). Roles and responsibilities of nonprofit organizations in a democracy. In J. S. Ott, & L. Dicke (Eds.), *The nature of the nonprofit sector* (4th ed., pp. 15–32). Routledge.

Bozeman, B., & Bretschneider, S. (1994). The "publicness puzzle" in organization theory: A test of alternative explanations of differences between public and private organizations. *Journal of Public Administration Research and Theory*, *4*(2), 197–224. https://doi.org/10.1093/oxfordjournals.jpart.a037204

Bozeman, B., & Su, X. (2015). Public service motivation concepts and theory: A critique. *Public Administration Review*, *75*(5), 700–710. https://doi.org/10.1111/puar.12248

Brewer, G. (2003). Building social capital: Civic attitudes and behavior of public servants. *Journal of Public Administration Research and Theory*, *13*(1), 5–26. https://doi.org/10.1093/jpart/mug011

Buurman, M., Delfgaauw, J., Dur, R., & VandenBossche, S. (2012). Public sector employees: Risk averse and altruistic? *Journal of Economic Behavior & Organization*, *83*(3), 279–291. https://doi.org/10.1016/j.jebo.2012.06.003

Chatzopoulou, E., & de Kiewiet, A. (2021). Millennials' evaluation of corporate social responsibility: The wants and needs of the largest and most ethical generation. *Journal of Consumer Behaviour*, *20*(3), 521–534. https://doi.org/10.1002/cb.1882

Chen, C.-A., & Bozeman, B. (2012). Organizational risk aversion: Comparing the public and non-profit sectors. *Public Management Review*, *14*(3), 377–402. https://doi.org/10.1080/14719037.2011.637406

Chetty, R., Friedman, J., Saez, E., Turner, N., & Yagan, D. (2017). *Mobility report cards: The role of colleges in intergenerational mobility*. National Bureau of Economic Research.

Corey, E., & Garand, J. (2002). Are government employees more likely to vote? An analysis of turnout in the 1996 U.S. National Election. *Public Choice*, *111*(3), 259–283. https://doi.org/10.1023/A:1015290806607

Dovidio, J., Piliavin, J., Schroeder, D., & Penner, L. (2017). *The social psychology of prosocial behavior*. Psychology Press. https://doi.org/10.4324/9781315085241

Einolf, C. J. (2022). The career paths of executive directors: Founders, fillers, planners and risers. *Nonprofit Management and Leadership*, *33*(2), 229–248. https://doi.org/10.1002/nml.21512

Ertas, N. (2014). Public service motivation theory and voluntary organizations: Do government employees volunteer more? *Nonprofit and Voluntary Sector Quarterly*, *43*(2), 254–271. https://doi.org/10.1177/0899764012459254

Health of the U.S. Nonprofit Sector. (2023). [Annual Review]. Independent Sector. https://independentsector.org/wp-content/uploads/2023/11/2023-Health-of-the-U.S.-Nonprofit-Sector-Annual-Review.pdf

Hirsch, B., Macpherson, D., & Preston, A. (2018). Nonprofit wages: Theory and evidence. In B. A. Seaman & D. R. Young (Eds.), *Handbook of research on nonprofit economics and management* (pp. 146–179). Edward Elgar.

Holt, S. (2018). For those who care: The effect of public service motivation on sector selection. *Public Administration Review*, *78*(3), 457–471. https://doi.org/10.1111/puar.12906

Holt, S. (2019). The influence of high schools on developing public service motivation. *International Public Management Journal*, *22*(1), 127–175. https://doi.org/10.1080/10967494.2018.1470120

Holt, S. (2020). Giving time: Examining sector differences in volunteering intensity. *Journal of Public Administration Research and Theory*, *30*(1), 22–40. https://doi.org/10.1093/jopart/muz007

Houston, D. (2006). "Walking the walk" of public service motivation: Public employees and charitable gifts of time, blood, and money. *Journal of Public Administration Research and Theory*, *16*(1), 67–86. https://doi.org/10.1093/jopart/mui028

Jenkinson, C. E., Dickens, A. P., Jones, K., Thompson-Coon, J., Taylor, R. S., Rogers, M., Bambra, C. L., Lang, I., & Richards, S. H. (2013). Is volunteering a public health intervention? A systematic review and meta-analysis of the health and survival of volunteers. *BMC Public Health*, *13*(1), 773. https://doi.org/10.1186/1471-2458-13-773

Kjeldsen, A. M., & Jacobsen, C. B. (2013). Public service motivation and employment sector: Attraction or socialization? *Journal of Public Administration Research and Theory*, *23*(4), 899–926. https://doi.org/10.1093/jopart/mus039

Knafo, A., & Plomin, R. (2006). Parental discipline and affection and children's prosocial behavior: Genetic and environmental links. *Journal of Personality and Social Psychology*, *90*(1), 147–164. https://doi.org/10.1037/0022-3514.90.1.147

Korac, S., Saliterer, I., & Weigand, B. (2019). Factors affecting the preference for public sector employment at the pre-entry level: A systematic review. *International Public Management Journal*, *22*(5), 797–840. https://doi.org/10.1080/10967494.2018.1430086

Lee, Y. (2012). Behavioral implications of public service motivation: Volunteering by public and nonprofit employees. *The American Review of Public Administration*, *42*(1), 104–121. https://doi.org/10.1177/0275074011398120

Lee, Y. (2014). The feminine sector: Explaining the overrepresentation of women in the nonprofit sector in the USA. *International Journal of Social Economics*, *41*(7), 556–572.

Lee, Y., & Wilkins, V. (2011). More similarities or more differences? Comparing public and nonprofit managers' job motivations. *Public Administration Review*, *71*(1), 45–56. https://doi.org/10.1111/j.1540-6210.2010.02305.x

Leete, L. (2001). Whither the nonprofit wage differential? Estimates from the 1990 Census. *Journal of Labor Economics*, *19*(1), 136–170.

Meier, K., & O'Toole, L.,Jr. (2011). Comparing public and private management: Theoretical expectations. *Journal of Public Administration Research and Theory*, *21*(suppl_3), i283–i299. https://doi.org/10.1093/jopart/mur027

Miller-Stevens, K., Taylor, J. A., & Morris, J. C. (2015). Are we really on the same page? An empirical examination of value congruence between public sector and nonprofit sector managers. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, *26*(6), 2424–2446. https://doi.org/10.1007/s11266-014-9514-6

Ng, E., Schweitzer, L., & Lyons, S. (2010). New generation, great expectations: A field study of the millennial generation. *Journal of Business and Psychology*, *25*(2), 281–292. https://doi.org/10.1007/s10869-010-9159-4

Norris-Tirrell, D., Rinella, J., & Pham, X. (2018). Examining the career trajectories of nonprofit executive leaders. *Nonprofit and Voluntary Sector Quarterly*, *47*(1), 146–164. https://doi.org/10.1177/0899764017722023

Perry, J. L. (2000). Bringing society in: Toward a theory of public-service motivation. *Journal of Public Administration Research and Theory*, *10*(2), 471–488. https://doi.org/10.1093/oxfordjournals.jpart.a024277

Perry, J. L., & Wise, L. R. (1990). The motivational bases of public service. *Public Administration Review*, *50*, 367–373.

Piatak, J. (2015). Altruism by job sector: Can public sector employees lead the way in rebuilding social capital? *Journal of Public Administration Research and Theory*, *25*(3), 877–900. https://doi.org/10.1093/jopart/muu013

Piatak, J. (2016). Public service motivation, prosocial behaviours, and career ambitions. *International Journal of Manpower*, *37*(5), 804–821. https://doi.org/10.1108/IJM-12-2014-0248

Piatak, J., & Holt, S. (2020). Prosocial behaviors: A matter of altruism or public service motivation? *Journal of Public Administration Research and Theory*, *30*(3), 504–518. https://doi.org/10.1093/jopart/muz041

Rainer, T., & Rainer, J. (2011). *The millennials*. B&H Publishing Group.

Rainey, H. G., & Bozeman, B. (2000). Comparing public and private organizations: Empirical research and the power of the a priori. *Journal of Public Administration Research and Theory*, *10*(2), 447–470. https://doi.org/10.1093/oxfordjournals.jpart.a024276

Ritz, A., Brewer, G., & Neumann, O. (2016). Public service motivation: A systematic literature review and outlook. *Public Administration Review*, *76*(3), 414–426. https://doi.org/10.1111/puar.12505

Rotolo, T., & Wilson, J. (2006). Employment sector and volunteering: The contribution of nonprofit and public sector workers to the volunteer labor force. *The Sociological Quarterly*, *47*(1), 21–40. https://doi.org/10.1111/j.1533-8525.2006.00036.x

Schroth, H. (2019). Are you ready for Gen Z in the workplace? *California Management Review*, *61*(3), 5–18. https://doi.org/10.1177/0008125619841006

Siahaan, F. L., & Gatari, E. (2020). Searching for meaning: The mediating role of work engagement in the relationship between meaningful work and turnover intention of millennials. *Psikohumaniora: Jurnal Penelitian Psikologi*, *5*(1), Article 1. https://doi.org/10.21580/pjpp.v5i1.4305

Smith, K. B., & Larimer, C. (2018). *The public policy theory primer* (3rd ed.). Routledge. https://doi.org/10.4324/9780429494352

Spera, C., Ghertner, R., Nerino, A., & DiTommaso, A. (2015). Out of work? Volunteers have higher odds of getting back to work. *Nonprofit and Voluntary Sector Quarterly*, *44*(5), 886–907. https://doi.org/10.1177/0899764015605928

Stritch, J. M., & Christensen, R. K. (2016). Raising the next generation of public servants? Parental influence on volunteering behavior and public service career aspirations. *International Journal of Manpower*, *37*(5), 840–858. https://doi.org/10.1108/IJM-12-2014-0249

Taylor, P., & Keeter, S. (2010). *Millennials: Confident. Connected. Open to change*. Pew Research Center. https://www.pewresearch.org/social-trends/2010/02/24/millennials-confident-connected-open-to-change/

Tsai, C.-C., Stritch, J. M., & Christensen, R. K. (2016). Eco-helping and eco-civic engagement in the public workplace. *Public Performance & Management Review*, *40*(2), 336–360. https://doi.org/10.1080/15309576.2016.1216001

Witesman, E., & Fernandez, S. (2013). Government contracts with private organizations: Are there differences between nonprofits and for-profits? *Nonprofit and Voluntary Sector Quarterly*, *42*(4), 689–715. https://doi.org/10.1177/0899764012442592

Word, J., & Park, S. M. (2015). The new public service? Empirical research on job choice motivation in the nonprofit sector. *Personnel Review*, *44*(1), 91–118. https://doi.org/10.1108/PR-07-2012-0120

Wright, B. E., Hassan, S., & Christensen, R. K. (2017). Job choice and performance: Revisiting core assumptions about public service motivation. *International Public Management Journal*, *20*(1), 108–131. https://doi.org/10.1080/10967494.2015.1088493

Zacher, H., & Froidevaux, A. (2021). Life stage, lifespan, and life course perspectives on vocational behavior and development: A theoretical framework, review, and research agenda. *Journal of Vocational Behavior*, *126*, 103476. https://doi.org/10.1016/j.jvb.2020.103476

## Author Biographies

**Tiana Marrese** research focuses on volunteerism and nonprofit wages at the macro level. The core of her work is interested in understanding how and why communities engage in prosocial behavior, and this behavior's relation to the market.

**Femida Handy** is professor of social policy at the School of Social Policy and Practice at the University of Pennsylvania. Her research and teaching focus on the economics of the nonprofit sector, volunteering, philanthropy, nonprofit management, environmental issues, entrepreneurship, and microfinance.

# Appendix

**Table A1.** Likelihood of Emerging-Career Nonprofit Employment From Linear Probability Models.

| | Equation 1, Dependent variable: emerging-career nonprofit employment | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Base (1) | | | +Labor (2) | | | +Childhood (3) | | | Full (4) | | |
| | COEF | | *SE* | COEF | | *SE* | COEF | | *SE* | COEF | | *SE* |
| Early-adulthood volunteering | 0.0391 | *** | (0.010) | 0.0377 | *** | (0.010) | 0.0372 | *** | (0.010) | 0.0364 | *** | (0.010) |
| White | −0.0271 | ** | (0.010) | −0.0243 | * | (0.010) | −0.0263 | * | (0.011) | −0.0259 | * | (0.011) |
| Female | 0.0618 | *** | (0.010) | 0.0427 | *** | (0.011) | 0.0432 | *** | (0.011) | 0.0433 | *** | (0.011) |
| Age | 0.0101 | * | (0.004) | 0.0100 | * | (0.004) | 0.0100 | * | (0.004) | 0.0098 | * | (0.004) |
| Highest grade complete | 0.0150 | *** | (0.002) | 0.0132 | *** | (0.002) | 0.0124 | *** | (0.002) | 0.0125 | *** | (0.002) |
| Log wages, age 28 | −0.0302 | * | (0.012) | −0.0345 | ** | (0.013) | −0.0340 | ** | (0.013) | −0.0333 | ** | (0.013) |
| Marital status: married, age 28 | −0.0342 | | (0.020) | −0.0359 | | (0.020) | −0.0360 | | (0.020) | −0.0385 | | (0.022) |
| Marital status: never married, age 28 | −0.0321 | | (0.019) | −0.0327 | | (0.019) | −0.0343 | | (0.019) | −0.0332 | | (0.024) |
| Work in public before 28 | 0.0163 | | (0.010) | −0.0084 | | (0.013) | −0.0085 | | (0.013) | −0.0069 | | (0.013) |
| Work in nonprofit before 28 | 0.2746 | *** | (0.011) | 0.2443 | *** | (0.014) | 0.2432 | *** | (0.014) | 0.2433 | *** | (0.014) |
| Average hours worked | Yes | | | Yes | | | Yes | | | Yes | | |
| Total weeks in labor force | Yes | | | Yes | | | Yes | | | Yes | | |
| Child under 6 in house, age 28 | Yes | | | Yes | | | Yes | | | Yes | | |
| Child under 8 in house, age 28 | Yes | | | Yes | | | Yes | | | Yes | | |
| Census region, age 28 | Yes | | | Yes | | | Yes | | | Yes | | |
| Mean statistical area, age 28 | Yes | | | Yes | | | Yes | | | Yes | | |
| Urban/rural, age 28 | Yes | | | Yes | | | Yes | | | Yes | | |
| Labor Controls | | | | Yes | | | Yes | | | Yes | | |
| Childhood Controls | | | | | | | Yes | | | Yes | | |
| Early-adulthood Controls | | | | | | | | | | Yes | | |
| Adjusted *R* | 0.1711 | | | 0.181 | | | 0.189 | | | 0.181 | | |
| Observations | 5,162 | | | 5,162 | | | 5,162 | | | 5,162 | | |

*$p \leq .05$. **$p \leq .01$. ***$p \leq .001$.

**Table A2.** Likelihood of Emerging-Career Public Employment From Linear Probability Models.

| | Equation 1, Dependent variable: emerging-career public employment | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Base (1) | | | +Labor (2) | | | +Childhood (3) | | | Full (4) | | |
| | COEF | | *SE* | COEF | | *SE* | COEF | | *SE* | COEF | | *SE* |
| Early-adulthood volunteering | 0.0103 | | (0.011) | 0.0077 | | (0.011) | 0.0068 | | (0.011) | 0.0086 | | (0.011) |
| White | −0.0507 | *** | (0.012) | −0.0469 | *** | (0.012) | −0.0536 | *** | (0.013) | −0.0516 | *** | (0.013) |
| Female | 0.0137 | | (0.012) | 0.0062 | | (0.013) | 0.0063 | | (0.013) | 0.0031 | | (0.013) |
| Age | −0.0014 | | (0.005) | −0.0021 | | (0.005) | −0.0021 | | (0.005) | −0.0020 | | (0.005) |
| Highest grade complete | 0.0174 | *** | (0.002) | 0.0144 | *** | (0.002) | 0.0141 | *** | (0.002) | 0.0143 | *** | (0.002) |
| Log wages, age 28 | −0.0159 | | (0.014) | −0.0192 | | (0.015) | −0.0159 | | (0.015) | −0.0172 | | (0.015) |
| Marital status: married, age 28 | −0.0126 | | (0.023) | −0.0161 | | (0.023) | −0.0170 | | (0.023) | −0.0141 | | (0.025) |
| Marital status: never married, age 28 | −0.0148 | | (0.022) | −0.0167 | | (0.022) | −0.0184 | | (0.022) | −0.0276 | | (0.027) |
| Work in public before 28 | 0.2927 | *** | (0.012) | 0.2503 | *** | (0.014) | 0.2491 | *** | (0.014) | 0.2498 | *** | (0.015) |
| Work in nonprofit before 28 | −0.0120 | | (0.013) | −0.0330 | * | (0.015) | −0.0357 | * | (0.015) | −0.0348 | * | (0.015) |
| Average hours worked | yes | | | yes | | | yes | | | yes | | |
| Total weeks in labor force | yes | | | yes | | | yes | | | yes | | |
| Child under 6 in house, age 28 | yes | | | yes | | | yes | | | yes | | |
| Child under 8 in house, age 28 | yes | | | yes | | | yes | | | yes | | |
| Census region, age 28 | yes | | | yes | | | yes | | | yes | | |
| Mean statistical area, age 28 | yes | | | yes | | | yes | | | yes | | |
| Urban/Rural, age 28 | yes | | | yes | | | yes | | | yes | | |
| Labor Controls | | | | yes | | | yes | | | yes | | |
| Childhood Controls | | | | | | | yes | | | yes | | |
| Early-adulthood Controls | | | | | | | | | | yes | | |
| Adjusted *R* | 0.1502 | | | 0.1742 | | | 0.1755 | | | 0.1767 | | |
| Observations | 5,162 | | | 5,162 | | | 5,162 | | | 5,162 | | |

*$p \leq .05$. **$p \leq .01$. ***$p \leq .001$.