The Nature of Giving Time to Your Child's School

Laura Gee

University of California San Diego (UCSD)

Department of Economics

9500 Gilman Dr., La Jolla, CA 92093

Email: l1gee@ucsd.edu

Phone: (917)-774-4464

How do households view contributions of time (via volunteering/fundraising) to their children's schools? Time contributions produce a public good (improved school quality for all students) and private benefits (e.g. better class placement). If private benefits increase with number of own children at a school and households value private benefits, then the level of contribution should be affected by the number of own children enrolled at a single school.

Using a nationally representative sample of over 2,500 multi-child households, I find that time contributions have a statistically significant relationship with number of own children enrolled in the same school. For example, households with multiple children at the same school have a 13 percentage points higher propensity to volunteer at the school than households with a single child in each school. This result implies that private benefits have a strong influence on the parents' decision to contribute time to their children's schools.

The Nature of Giving Time to Your Child's School

Introduction

Households contribute time (via volunteering or fundraising) to their children's schools, but what motivates these actions? Time contributions to the school have both public and private benefits. The public benefit of time contribution is an increase in overall school quality that benefits all the enrolled students. The private benefits may be that parents enjoy spending time with their child, want to act as a role model, gain influence over the direction of school resources, or avoid the guilt of refusing to give their time. Private benefits are not necessarily selfish or egoistic, they are simply benefits that accrue to an individual household rather than to the whole school. When considering why households choose to give their limited time to their children's schools it is important to know their motivations. There are many factors that will affect a household's choice to contribute time to the school, including but not limited to: feelings of efficacy, social norms, school outreach, the saliency of the school and whether the school has been chosen or is simply the default. Although these are all interesting and important determinants, the focus of this paper is to test whether households care about the private benefits of their time contribution. One way to test this hypothesis is to compare households with multiple children in a single school to households with each child in a different school. I assume that parents gain a private benefit of time contribution for each of their own children at a school. Raising the number of own children at a school should raise the marginal private benefits from an hour of time contribution. Using this simplified framework I can test if changes in the number of own children at the school (holding all else constant) has a statistically significant relationship with time contribution.

Using a nationally representative sample of over 2,500 multi-child households, I find that time contributions move in parallel with the number of children from a single family enrolled in the same school. I control for child, household and school level observable variables, but I am unable to control for unobservable variables (e.g. the salience of the school to the household). I find that households with two children enrolled in the same school have a higher propensity to contribute time than households with a single child in each school. Households with two children in the same school have a propensity to volunteer at the school that is 13 percentage points higher, a propensity to volunteer in the classroom that is 8 percentage points higher, a propensity to fundraise that is 10 percentage points higher, and on average spend 6 more hours per year in these activities than do households with a single child in each school. This finding implies that households view time contribution to their child's school as producing a private benefit, and that they take account of this private benefit when making time contribution decisions.

School Contribution: Private and Public Benefits

A simple model of how parents choose the amount of time they give to their children's schools might assume that parents are maximizing household utility subject to a time budget constraint (they make similar decisions about monetary contributions, but that is not the topic of this paper). Each individual household benefits from the total time given by other parents to the school in activities such as chaperoning field trips, fundraising for a new theater, or coaching the softball team. Suppose at a particular school the provision of all these services takes a total of 100 hours of parental contribution. If the parents cared only about the final public goods being provided, then they would be happy if other families gave all the 100 hours

to the school, and they personally gave zero hours. Traditional models of public goods predict that a household with these types of preferences will give an inefficiently low amount of time to the school, and that there will be under-provision of the public goods. However, empirically we do not observe high levels of free riding behavior by households in the school, nor for public goods in general. Specifically, in the data discussed in this paper, 48% of the households volunteered at their child's school, 25% volunteered in their child's classroom, 65% engaged in fundraising, and on average households spent 13.6 hours per year in these activities.

An alternative to the aforementioned traditional public goods model is a model that assumes the household receives a private benefit from the act of giving time to the school. There are many possible private benefits to giving time to a child's school. The private benefit may be a "warm glow" of increasing school quality overall or on a per student basis (Andreoni, 1990, 2007). Alternatively, it may be that the parents enjoy acting as a role model for their child by being socially responsible and philanthropic (Mustillo & Lynch, 2004).[1] Also it could be that the household is able to build relationships at the school in order to obtain preferential treatment, and/or avoid the stigma of not giving time. Under any of these interpretations, the time contribution is motivated by preferences over these private benefits as well as preferences over the public benefit of improved school quality. There is a rich literature about incorporating these types of impure motivations for giving into the public goods model (Kotchen, 2006; Duncan, 2004; Cornes & Sandler, 1994). In these models, a consumer chooses to allocate time/money between a private good, which benefits only the consumer, and a public good, which gives the consumer some private return while also providing a benefit to the whole community.

It is simple to see how time contribution to the school is a likely candidate for this type

of model. Each household chooses between time spent doing other activities (sleeping, paid work, watching television) and time spent contributing to its children's schools (via volunteering or fundraising). Time contributed to the school benefits the individual family by enhancing their child's school experience, or by providing role model effects, warm glow, guilt avoidance, or the ability to better allocate school resources to its children. The time contribution also produces a positive externality that improves school quality for all the students. The household contributes the number of hours to the school where the marginal benefit of an hour given to the school is equal to the marginal benefit of an hour spent doing something else. The household will choose to contribute at the point where the marginal cost of an hour spent at the school is equal to the marginal benefit, and where the number of hours contributed is below the total hours available (e.g. 24 hours in a day or 8,750 hours in a year). If the marginal benefit of time spent at the school rises, then the household will adjust its choice of hours.

Consider a mother who has two children in different schools. When she volunteers at each school, she enhances the quality of each school, and gets some extra private benefits. Now consider a father who also has two children, but his children are enrolled in the same school. When he volunteers at the single school, he still gets the benefit that each child's school is improved in quality and the additional private benefits from spending time at his children's single school. It seems likely that the time the father spends volunteering at a single school (where he has two children enrolled) has a higher marginal return than the time spent by the mother with children in two different schools. If households with two children in the same school get a higher return on contribution to the public good, then these households will behave differently than other households and may be more likely to contribute to the school.[2] If the

household is considering the private benefits, then the contribution choice should be affected by number of own children at the school.

Method

Data

The data come from the 2003 National Household Education Survey (NHES) of Parent and Family Involvement (PFI). The NHES PFI is a phone-based survey that was conducted in 1996, 2003, and 2007. The 2003 data are used because the sampling procedure in that wave has multiple child level observations within a household. The survey asks an adult household member questions about the school age children in the household. If there is a single school age child, then that child is a single observation. If there are many school age children, two of those children are chosen randomly to represent two observations. This means that at most there are two observations per household.

The hypothesis is that households with multiple children in multiple schools will be less likely to contribute time than a household with multiple children in a single school. Single child households are excluded from the analysis because households with an only child are likely to be very different than households with multiple children and because single child families automatically must enroll only one child in a school. To test the hypothesis, I compare households with two or more children enrolled in the same school to households with two or more children in multiple schools.[3] In 2003 there were 12,426 school-age child observations representing 8,467 households in the original data set. I restrict the sample to households that have two parents with two or more non-homeschooled children. The final data set includes 5,750 child level observations over 2,875 households.[4]

Dependent Variables

The dependent variables of interest are [1] whether a household member has volunteered at the child's school (Volunteer), [2] whether a household member has volunteered in the child's classroom (Classroom), [3] whether a household member has engaged in fundraising for the school (Fundraise), and [4] the number of hours spent volunteering or fundraising by the household per year per school (Hours).[5] The first three independent variables are dummy variables, taking the value 1 if the household said they did participate in the activity and zero if they did not. A household is only asked if they volunteered in the classroom (Classroom) if they answered in the affirmative to volunteering at the school (Volunteer). The fourth dependent variable is the number of hours that the household reported contributing to the specific school (Hours), so it can take any non-negative value.[6]

Independent Variables

The independent variables were chosen because they have been found in previous studies to be important predictors of charitable giving (time or money). Previous studies have found statistically significant relationships between contribution and many of the variables that were available from the data, these include: race, age, education, employment status, household income, number of children, whether a person lives in a metropolitan area (Freeman, 1997), immigrant status (Osili & Xie, 2009), religiosity (Brown & Ferris, 2007), school enrollment, school racial make-up, school level of free-lunch, school level of English proficiency, and school grade level (Brunner & Sonstelie, 2003). In addition to these variables, 10 other variables that seemed intuitively related to reporting contribution to the school were also added to the model. These extra variables were: child's age, child's sex, whether the school is religious or year-round, census region, if the interview was conducted in English, and if it was

conducted with the child's mother.[7] The independent variable of greatest interest is whether two children attend the same school. If the household gets a higher return to contributing time through having multiple children in the school, then this will lead to an increase in the propensity to contribute time. In a regression with the contribution variable as the dependent variable, one will expect the coefficient on the having two children at the same school to be positive and significant.

A limitation of the NHES PFI is that each household in the sample has a maximum of two child level observations, even when there are three or more school age children in the home. The sampling procedure for households with three or more children was to randomly select two of the children for the study. The random nature of this selection method should ensure that the final results still hold in spite of missing data for some children in the household. If there is any effect, it should bias the regression coefficients toward zero.[8]

The child level characteristics are age, sex, race (White/Black/Asian/Hispanic), language, and birth place. The school level characteristics are grade level (elementary/middle/high school), religious/non-religious, year-round, private/public, and enrollment (as estimated by the respondent). The household level characteristics include the language and family role of the respondent to the interview, religiosity (as proxied by attendance at a religious event in the past month), whether the child has received free or reduced price lunch, number of siblings, household income, mother's and father's age, education (completed high school/college), and employment status (part-time/full-time/not working). Geographic characteristics are the census region, poverty level (by whether more than 5% of households with children in the area are below the poverty line), and whether the

household is located in an urban/suburban/rural area.

Data Analysis

To test how strongly households are influenced by the private benefits of time

contribution, I use an ordinary least squares (OLS) regression model with robust standard

errors clustered at the household level (since there are two child level observations per

household). I am interested in the average reaction (instead of, for example, the elasticity of

time substitution), so I use the simple linear regression model instead of a Probit or a Tobit.

Three of the dependent variables take either a zero or a one for a value (whether the household

volunteers, volunteers in classroom, or fundraises), and so these would be candidates for a

Probit model. Additionally, the hours reported is censored at zero, so it may appear that a

Tobit would be the best choice of model. However, I am interested in the average probability

and magnitude of contribution and so I ignore the special nature of the variables by running a

simple linear regression instead of a Probit or a Tobit. The analysis of the linear regression

model is less complex, and so those results are presented here. The marginal effects results

using Probit and Tobit models are generally of the same sign and significance (with similar

magnitudes) for most of the independent variables.[9]

Results

Determinants of Contribution

Table 1 reports results from the linear regression model; for brevity only selected

results are reported (the full table is in the Supplemental Appendix). To test whether

contribution to the school is affected by the influence of private benefits, I analyze the

coefficient on number of own children enrolled at the school ("2 children who attend same

school"). In the sample the average propensity to volunteer was 48%, to volunteer in the classroom was 25%, to fundraise was 65% and on average households spent 13.6 hours per year per school in these activities. Having two children enrolled at the same school has a significant positive effect on all four measures of contribution; raising the propensity to volunteer by 13 percentage points, volunteer in the classroom by 8 percentage points, fundraise by 10 percentage points, and raising the average hours spent in these activities by 6 hours. If private benefits are rising in number of own children at a single school, then this result implies that the household cares about the private benefit from contribution.

[TABLE 1 HERE]

Generally, the results from the analysis of the NHES PFI are in line with previous studies of contribution. In agreement with other studies, contribution (of time and/or money) is positively related to the education level of the mother and the father (Brunner & Sonstelie, 2003; Freeman, 1997; Andreoni et al., 2003), negatively related to full-time employment by the mother (except for fundraising[10]) (Rotolo & Wilson, 2007; Muller, 1995), positively related to religiosity (Brown & Ferris, 2007), and positively related to being a US citizen (Osili & Xie, 2009).

There are some points where the NHES PFI data do not agree with these previous studies. In this data I find that households do not adjust the propensity to contribute in response to changes in enrollment ("estimated number of students enrolled is 300 to 599", "...600 to 999", or "...over 1000"). This is interesting because it may imply that the household does not consider the total public benefit of its time, when making choices about time contribution. If one believes that the public benefit is dependent on total enrollment, then one

would expect there to be a statistically significant relationship between the contribution variables and the school enrollment. One reason we do not observe this result may be measurement error in this data set. The NHES PFI reports enrollment as estimated by the respondent, which could be a very noisy measure of actual enrollment. It is possible that there is too much noise in the measurement of this variable to get a statistically significant relationship. This finding of non-significance of enrollment is in contrast to what Brunner & Sonstelie (2003) found when looking at monetary contributions to California public schools. Using data from nonprofit contributions (which are only reported if these contributions are above twenty-five thousand dollars) to schools from organizations like the PTA, Brunner and Sonstelie found that monetary contributions were higher for schools with higher enrollments. Although the authors believe these monetary contributions come primarily from parents, the contributions may also come from local businesses or foundations. The inability to distinguish what exact portion of this giving comes from families with students at the school may be the reason for the divergence between their results and the ones found here. The censoring of contributions below twenty-five thousand dollars may also explain the difference.

Another point of disagreement is that while numerous previous studies have found a positive and significant relationship between income and time/money contribution (Brunner & Sonstelie, 2003; Feldman, forthcoming; Freeman, 1997; Andreoni et al., 2003; Hoover-Dempsey et al., 1987); I find no such relationship.[11] Finally, another common theme in previous studies is the finding that contributions rise in the number of children in the household; again I find no such relationship (the coefficient on "Total Number of Siblings" is insignificant for all dependent variables).[12]

Although in general the results from the NHES PFI match previous studies of

contribution, the important new distinction to draw is that giving time to the school depends on number of own students enrolled. This implies that when choosing how to allocate time, the household considers the private benefit from the act of giving time to the school.

Private Benefits

The crux of the argument of this paper is that households receive some private benefit from contributing time to the school. These benefits can range from the happiness a parent might get from being a good role model, to avoiding guilt for not volunteering. The NHES PFI data do not have measures of most of these benefits. However, one example of such a benefit is getting better class or course placement for the children enrolled, and information on this is included in the NHES PFI data. To test if such a benefit likely exists I look at whether parents who have given time to the school believe they have a say in their child's placement. Overall 68% of the survey respondents report feeling they have a say in their child's placement. Using whether the household believes they have a say as the dependent variable and one of the contribution variables as a new additional independent variable, I run four new models to see if contribution predicts feelings of having a say in placement. Families that contributed via volunteering generally (Model 1) and in the classroom (Model 2), as well as those who engaged in fundraising (Model 3) have a higher propensity to feel they have a say in their child's placement. Interestingly hours (Model 4) does not seem to correspond to a feeling of having a say in child's placement. When predicting if a family feels they have a say in class placement, the magnitude of time contributed (as measured in hours) does not seem to matter, but rather whether there is any contribution to the school at all (as measured by a yes/no response to whether the household has volunteered, volunteered in classroom, or fundraised).[13] Below is a table reporting only the coefficients on the contribution variables predicting whether the

household feels they have a say in placement, the full table with all independent variables is available in the Supplemental Appendix.

[TABLE 2 HERE]

The Importance of Being Asked

The act of being asked may increase the propensity to contribute, because a family may feel guilt about refusing such a request or because they may have been unaware of the opportunity to contribute before the invitation. Freeman (1997) found that being asked to volunteer increased the probability of volunteering by almost 50 percentage points, and experimental studies confirm the finding that being asked increases giving (Andreoni & Rao, 2007). The exclusion of whether a family has been asked to give time may affect our interpretation of the results.

Beyond the simple fact that being asked to volunteer may increase the propensity to volunteer for all households, it is likely that families with two children in the same school may be more likely to be asked to volunteer by the school. It may be that a household with multiple children in the same school find that school more salient because they are contacted by that school more often than if they had only one student enrolled. If this is the case, then the more active behavior of the school may be driving the results instead of the preferences of the households with multiple children in the same school. After, including whether the household has been informed by the school about volunteering opportunities in the model, I find it has a positive and statistically significant (at the .1% level) coefficient for all 4 measures of contributions (17 percentage points for volunteering, 5 percentage points for classroom, 21 percentage points for fundraising and 4 more hours on average). However, the level of

significance and magnitude of the coefficients on "2 children attend same school" is almost exactly the same for all four measures of contribution. Around 90% of the households report being made aware of opportunities to volunteer, and the variable is quite clearly endogenous so I have chosen to report the results without its inclusion in the model. Results with whether the household has been made aware of volunteer opportunities are reported in the Supplemental Appendix.

Conclusion

In the current economic environment schools continue to attempt to keep school quality high despite budget cuts. Increased contribution from parents of time is a possible way to keep school resources high when government based resources may be scarce.[14] To encourage parental contribution, it is useful to know how households view the decision about contributing time to the school. Using a national sample of 2,875 households with two or more children, I find that having two children enrolled in the same school significantly increases the propensity to volunteer (in general and in the classroom), to fundraise, and the hours contributed to the school. The find that number of own children enrolled corresponds to propensity to contribute implies that the contribution decision is affected by some private benefits and that those benefits increase when there are two or more children in the same school.

In line with previous studies, school time contribution is associated with higher parental education, lower female workforce participation, and high levels of religiosity. In contrast with previous work I find that enrollment, household income and number of children (in general not at a single school) are not statistically associated with more school

contribution. Parental time contribution to the school should be seen as an activity which gives both a public and private benefit to the household where private benefits depend positively upon the number of own children enrolled in the school. When households make decisions about time giving, they appear to be strongly influenced by the private benefits of this time contribution.

Supplemental Appendix

Full Contribution (Table 1) Results

[TABLE 3 HERE]

Full Private Benefits (Table 2) Results

[TABLE 4 HERE]

Exactly Two Children Results

[TABLE 5 HERE]

Probit and Tobit Results

[TABLE 6 HERE]

Removing Free Lunch Indicator and Adding Finer Income Gradations

[TABLE 7 HERE]

Include If Household Made Aware of Volunteer Opportunities

[TABLE 8 HERE]

Notes

---

[1] The National PTA suggests that a way to help one's child succeed is to "Be a role model; be active in community service yourself or together with your child," which would include giving time to a child's school. (http://www.pta.org/100Ways brochure-en.pdf)

[2] This model of behavior does not take account of the idea that a household with two children in the same school may simply think more about that school, than a household with a single child in a school. This issue of the salience of the school may be driving increased contribution at the school rather than an actual higher private benefit from having two children at the school. This salience may come from being asked to volunteer more often by the school. I attempt to address this particular type of salience in the section titled "The Importance of Being Asked". It is also possible that the salience comes from something other than being asked, and I am unable to include these other measures of salience in this analysis.

[3] In some cases parents may not enroll two children in the same school because of age differences, for example one child is in kindergarten and the other is in high school. In other cases the family may elect to send children who could be in the same school to different schools, for example one student enrolls in an arts school and the other in a technical school.

[4] 4,508 child level observations were dropped because there was only a single observation within the household. 64 households were dropped because one or more of their children were not currently enrolled in school, even though they were of school age. 162 households were dropped because one or more of their children were home schooled. 1,725 households were dropped because they did not have both a mother and a father at home (of these 65 households were dropped because the type of parents were coded differently across surveys in the same household). 2,310 households were dropped because they did not have 2 parents and siblings (of these 41 households were dropped because the family makeup differed across surveys in the same household).

[5] The specific questions are "Since the beginning of this school year, have you (or (CHILD)'s (mother/stepmother/foster mother/father/stepfather/foster father/grandmother/grandfather/aunt/uncle/cousin) (or (the) other adult(s) in your household))

d. Acted as a volunteer at the school or served on a committee?

e. Served as a volunteer in (CHILD'S) classroom?

f. Participated in fundraising for the school?"

and

"Since the beginning of this school year, how many hours have you or (CHILD)'s (mother/stepmother/foster mother/father/stepfather/foster father/grandmother/grandfather/aunt/uncle/cousin) (or (the) other adult(s) in your household)) participated in (volunteering) (and) (fundraising) at (CHILD)'s school?"

[6] The reported hours range from 0 to 600. Only 19 households report spending more than 200 hours per year volunteering/fundraising at their child's school. Running the same analysis excluding those households reporting over 200 hours of contribution does not have a strong effect on the results.

[7] The child's age and sex seem relevant because a parent may adjust their volunteering choice if they feel a child is more vulnerable in the classroom due to their age or sex. A school that is year round may have more volunteering opportunities. A school that is religious may have a stronger school emphasis on volunteering. If the interview was not conducted in English there is a higher chance that the questions may have been misunderstood, so I want to control for this possibility. It seems likely that the mother of the child would have the best records of volunteering activity at the child's school, and so I control for when other people may have responded with less accuracy than the mother. The census region was added because different portions of the country may have different feelings about volunteering activity.

[8] Restricting the sample to only those households with exactly two children (2,858 child level observations or 1,429 household observations) does not change the significance or magnitude of the majority of the results. Households with two children enrolled in the same school have a 13 percentage points higher propensity to volunteer (same as in the larger sample), 10 percentage points higher propensity for volunteering in classroom (vs. 8 percentage points in the full sample), 9 percentage points higher propensity for fundraising (vs. 10 percentage points in the larger sample) and spend 6 more hours in these activities on average (same as in the full sample). The full regression results are included in the Supplemental Appendix.

[9] The probability marginal effects coefficient for the effect of having two children in the same school is 0.16 (vs. 0.13 in OLS model), 0.08 for classroom volunteering (the same as the OLS model), 0.12 for fundraising (vs. 0.10 in OLS model), and the coefficient on hours is 10 (vs. 6 in the OLS model). The reason the number of hours is so different, is that the OLS model takes account of all the reporting of 0 hours of volunteering, while the Tobit specifically corrects for censoring at 0 and thus has a much higher coefficient on hours. In the Probit and the Tobit the coefficients on the contribution variables are still significant at the .1% level. These results are included in the Supplemental Appendix.

[10] Interestingly, households with a fulltime employed mother actually have a propensity to contribute via fundraising which is 6 percentage points higher than those with non-fulltime working mothers. The rise in fundraising is puzzling, but there are two possible explanations. The definition of fundraising may be an issue because the survey does not specify if fundraising takes the form of time contribution (e.g. sitting outside the grocery store selling cookies) or money (e.g. buying raffle tickets from the school). The interpretation of the term "fundraising" may cause confusion in the respondents. Another possible explanation is that households with working mothers may have more social connections they can exploit for fundraising (e.g. selling raffle tickets to co-workers), but that having a full time employed mother puts too much of a time constraint on other volunteering activities.

[11] I do find a negative relationship between child receipt of free or reduced price lunch and volunteering. Households that received free/reduced price lunch were 6 percentage points less likely to volunteer, and 10 percentage points less likely to volunteer in the classroom on average. One may believe that receipt of free/reduced price lunch catches all the effect of having a lower income household, but removing the lunch indicator and adding finer gradations of income still gives no significant relationship between income and contribution (results in Supplemental Appendix).

[12] Initially I thought that these studies might be catching the effect of households having a higher propensity to volunteer when they have multiple children enrolled in the same school. To check I ran the model excluding whether the household has two children in the same school, but the coefficient on total number of siblings is still insignificant for three of the four contribution measures. The coefficient on number of siblings for propensity to volunteer becomes significant at the 5% level, but is negative. This sample of two parent, multiple child households with school age children, may not act in the same manner as households in general. Also since this sample looks specifically at multi-child households it does not catch the gains from moving from zero to one child, or from one to two children.

[13] Running the model on only those households that report positive amounts of hours contributed, there is still no significant coefficient on number of hours.

[14] Previous studies looking at test scores have found no strong positive effect of equalized funding (Downes, 1992), nor of parental volunteering (Houtenville & Conway, 2008), but student test scores are not the only measure of school quality. I am not currently aware of any studies that have used other measures of school quality to predict the effects of parental volunteering.

References

Andreoni, J. (1990). Impure altruism and donations to public goods: A theory of warm-glow giving. *The Economic Journal, 100(401)*, 464–477.

Andreoni, J. (2007). Giving gifts to groups: How altruism depends on the number of recipients. *Journal of Public Economics, 91(9)*, 1731 - 1749. (Celebrating the 20th Anniversary of Bergstrom, Blume, and Varian's "On the Private Provision of Public Goods")

Andreoni, J., Brown, E., & Rischall, I. (2003). Charitable Giving by Married Couples: Who Decides and Why Does it Matter? *Journal of Human Resources, XXXVIII(1),* 111-133.

Andreoni, J., & Rao, J. (2007). The power of asking: How communication affects selfishness, empathy, and altruism. working paper.

Brown, E., & Ferris, J. M. (2007). Social Capital and Philanthropy: An Analysis of the Impact of Social Capital on Individual Giving and Volunteering. *Nonprofit and Voluntary Sector Quarterly, 36(1), 85-99.*

Brunner, E., & Sonstelie, J. (2003). School finance reform and voluntary fiscal federalism. *Journal of Public Economics, 87(9-10)*, 2157 - 2185.

Cornes, R., & Sandler, T. (1994). The comparative static properties of the impure public good model. *Journal of Public Economics, 54(3)*, 403 - 421.

Downes, T. (1992). Evaluating the impact of school finance reform on the provision of public education: The California Case. *National Tax Journal, 45*, 405-419.

Duncan, B. (2004). A theory of impact philanthropy. *Journal of Public Economics, 88(9-10)*, 2159 - 2180.

Feldman, N. (forthcoming). Time is money: Choosing between charitable activities. *American Economic Journal: Economic Policy*.

Freeman, R. B. (1997). Working for nothing: The supply of volunteer labor. *Journal of Labor Economics, 15(1)*, S140–S166.

Hoover-Dempsey, K. V., Bassler, O. C., & Brissie, J. S. (1987). Parent involvement: Contributions of teacher efficacy, school socioeconomic status, and other school characteristics. *American Educational Research Journal, 24(3)*, 417-435.

Houtenville, A. J., & Conway, K. S. (2008). Parental effort, school resources, and student achievement. Journal of Human Resources, 43(2), 437 - 453.

Kotchen, M. (2006). Green markets and private provision of public goods. *Journal of Political Economy, 114(4)*, 816-834.

Muller, C. (1995). Maternal employment, parent involvement, and mathematics achievement among adolescents. *Journal of Marriage and the Family, 57(1),* 85–100.

Mustillo, J. W., Sarah, & Lynch, S. M. (2004). Legacy volunteering: A test of two theories of intergenerational transmission. *Journal of Marriage and Family, 66(2),* 530 - 541.

Osili, U. O., & Xie, J. (2009). Do immigrants and their children free ride more than natives? *American Economic Review: Papers and Proceedings, 99(2)*, 28-34.

Rotolo, T., & Wilson, J. (2007). The Effects of Children and Employment Status on the Volunteer Work of American Women. *Nonprofit and Voluntary Sector Quarterly, 36(3)*, 487-503.

Laura Gee is a PhD student at the University of California San Diego (UCSD). Her current

research uses both empirical and experimental methods to explore the provision of public goods.

Table 1: Dependent Variables Measures of Time Contribution (standard errors), abridged results

Independent Variable	Volunteer	Classroom	Fundraise	Hours Per School
2 children who attend same school	0.13***	0.08***	0.10***	6.34***
	(0.02)	(0.01)	(0.02)	(1.27)
Child born in the US or US territory	0.06*	0.00	0.07*	-0.23
	(0.03)	(0.02)	(0.03)	(1.70)
Child is in elementary school	0.10**	0.18***	0.11***	8.47**
	(0.03)	(0.03)	(0.03)	(2.86)
Child is in middle school	-0.02	0.02	0.05*	1.25
	(0.02)	(0.02)	(0.02)	(1.54)
Child is in public school	-0.12**	0.01	0.02	-0.42
	(0.04)	(0.04)	(0.04)	(3.22)
Child is in school with religious affiliation	0.03	0.05	0.16***	2.86
	(0.04)	(0.04)	(0.05)	(3.40)
Estimated number of students enrolled is 300 to 599	0.02	0.01	0.03	-1.14
	(0.02)	(0.02)	(0.02)	(1.68)
Estimated number of students enrolled is 600 to 999	0.00	-0.02	0.02	1.68
	(0.02)	(0.02)	(0.02)	(1.94)
Estimated number of students enrolled is over 1000	-0.03	-0.04	0.00	-0.93
	(0.03)	(0.02)	(0.03)	(1.97)
Mother has completed high school	0.07*	0.06**	0.02	3.14*
	(0.03)	(0.02)	(0.03)	(1.41)
Mother has completed college	0.06**	0.02	0.04*	0.81
	(0.02)	(0.02)	(0.02)	(1.37)
Mother Employed 35+ hours per week	-0.11***	-0.12***	0.06**	-7.73***
	(0.02)	(0.01)	(0.02)	(1.43)
Mother Employed part time	-0.00	-0.03	0.04	-2.89
	(0.02)	(0.02)	(0.02)	(1.91)
Father has completed high school	0.10***	0.02	0.03	2.31
	(0.03)	(0.02)	(0.03)	(1.50)
Father has completed college	0.08***	0.06***	0.01	2.71*
	(0.02)	(0.02)	(0.02)	(1.35)
Father Employed 35+ hours per week	0.03	0.01	0.07*	1.96
	(0.03)	(0.02)	(0.03)	(1.15)
Father Employed part time	-0.01	-0.01	-0.01	0.50
	(0.05)	(0.04)	(0.05)	(2.22)
Parent and child have attended a religious event in past month	0.09***	0.05***	0.04**	2.30*
	(0.01)	(0.01)	(0.01)	(1.11)
Child has received free or reduced price lunch	-0.06**	-0.10***	-0.02	-0.77
	(0.02)	(0.02)	(0.03)	(1.81)
Total number of siblings	-0.01	-0.01	-0.01	-0.21
	(0.01)	(0.01)	(0.01)	(0.79)
Household income between 5,000 and 20,000	-0.01	-0.07	-0.04	0.54
	(0.10)	(0.10)	(0.10)	(3.52)
Household income between 20,001 and 50,000	-0.00	-0.08	0.02	2.89
	(0.10)	(0.10)	(0.10)	(3.59)
Household income between 50,001 and 100,000	0.03	-0.09	0.07	3.24
	(0.10)	(0.10)	(0.10)	(3.72)
Household income above 100,000	0.08	-0.06	0.06	6.83
R-squared	0.23	0.26	0.16	0.07
Child Level Observations	5750.00	5750.00	5750.00	5750.00

legend: * p < 0.05; ** p < 0.01; *** p < 0.001

Note: Results for selected child, parental, school and geographic level independent variables excluded from table.

Table 2: Dependent Variable Does Household Feel They Have Say in Class Placement (standard errors), abridged results

Independent Variable	Model 1	Model 2	Model 3	Model 4
Household has volunteered at school	0.05**			
	(0.02)			
Household has volunteered in classroom		0.04*		
		(0.02)		
Household has engaged in fundraising			0.05***	
			(0.02)	
Hours volunteered by household per school				0.00
				(0.00)
R-squared	0.04	0.04	0.04	0.04
Child Level Observations	5750.00	5750.00	5750.00	5750.00

legend: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Note: Results for child, parental, school and geographic level independent variables excluded from table.

Table 3: Dependent Variables Measures of Time Contribution (standard errors), full results

Description	Volunteer	Classroom	Fundraise	Hours
2 children who attend same school	0.13***	0.08***	0.10***	6.34***
	(0.02)	(0.01)	(0.02)	(1.27)
Child's age in 2002	-0.01***	-0.02***	-0.00	0.14
	(0.00)	(0.00)	(0.00)	(0.30)
Child is female	-0.00	0.01	0.03*	-1.86*
	(0.01)	(0.01)	(0.01)	(0.89)
Child is Black	-0.07*	-0.04	-0.03	-0.76
	(0.03)	(0.02)	(0.03)	(1.88)
Child is Asian	-0.19***	-0.14***	-0.02	-9.09***
	(0.04)	(0.03)	(0.04)	(1.68)
Child is Hispanic (non-white)	-0.04	-0.03	-0.07*	-2.94*
	(0.03)	(0.02)	(0.03)	(1.26)
Child's primary language is English	0.00	0.03	0.08	4.39***
	(0.04)	(0.03)	(0.04)	(1.24)
Child born in the US or US territory	0.06*	0.00	0.07*	-0.23
	(0.03)	(0.02)	(0.03)	(1.70)
Child is in elementary school	0.10**	0.18***	0.11***	8.47**
	(0.03)	(0.03)	(0.03)	(2.86)
Child is in middle school	-0.02	0.02	0.05*	1.25
	(0.02)	(0.02)	(0.02)	(1.54)
Child is in public school	-0.12**	0.01	0.02	-0.42
	(0.04)	(0.04)	(0.04)	(3.22)
Child is in school with religious affiliation	0.03	0.05	0.16***	2.86
	(0.04)	(0.04)	(0.05)	(3.40)
Estimated number of students enrolled is 300 to 599	0.02	0.01	0.03	-1.14
	(0.02)	(0.02)	(0.02)	(1.68)
Estimated number of students enrolled is 600 to 999	0.00	-0.02	0.02	1.68
	(0.02)	(0.02)	(0.02)	(1.94)
Estimated number of students enrolled is over 1000	-0.03	-0.04	0.00	-0.93
	(0.03)	(0.02)	(0.03)	(1.97)
Child is in year-round school	0.08**	0.05*	-0.01	2.36
	(0.03)	(0.03)	(0.03)	(2.86)
Interview conducted in English	0.07	0.08**	0.13**	0.77
	(0.04)	(0.03)	(0.05)	(1.57)
Respondent was mother	0.02	-0.01	0.08***	2.51**
	(0.02)	(0.02)	(0.02)	(0.93)
Mother's age	0.00	0.00	-0.00	0.15
	(0.00)	(0.00)	(0.00)	(0.15)
Mother has completed high school	0.07*	0.06**	0.02	3.14*
	(0.03)	(0.02)	(0.03)	(1.41)
Mother has completed college	0.06**	0.02	0.04*	0.81
	(0.02)	(0.02)	(0.02)	(1.37)
Mother Employed 35+ hours per week	-0.11***	-0.12***	0.06**	-7.73***
	(0.02)	(0.01)	(0.02)	(1.43)
Mother Employed part time	-0.00	-0.03	0.04	-2.89
	(0.02)	(0.02)	(0.02)	(1.91)
Father's age	0.00	0.00	0.00	-0.01
	(0.00)	(0.00)	(0.00)	(0.11)
Father has completed high school	0.10***	0.02	0.03	2.31
	(0.03)	(0.02)	(0.03)	(1.50)
Father has completed college	0.08***	0.06***	0.01	2.71*
	(0.02)	(0.02)	(0.02)	(1.35)
Father Employed 35+ hours per week	0.03	0.01	0.07*	1.96
	(0.03)	(0.02)	(0.03)	(1.15)
Father Employed part time	-0.01	-0.01	-0.01	0.50
	(0.05)	(0.04)	(0.05)	(2.22)
Parent and child have attended a religious event in past month	0.09***	0.05***	0.04**	2.30*
	(0.01)	(0.01)	(0.01)	(1.11)

legend: * p < 0.05; ** p < 0.01; *** p < 0.001 Table Continued on Next Page...

Table 3 – Continued

Description	Volunteer	Classroom	Fundraise	Hours
Child has received free or reduced price lunch	-0.06**	-0.10***	-0.02	-0.77
	(0.02)	(0.02)	(0.03)	(1.81)
Total number of siblings	-0.01	-0.01	-0.01	-0.21
	(0.01)	(0.01)	(0.01)	(0.79)
Household income between 5,000 and 20,000	-0.01	-0.07	-0.04	0.54
	(0.10)	(0.10)	(0.10)	(3.52)
Household income between 20,001 and 50,000	-0.00	-0.08	0.02	2.89
	(0.10)	(0.10)	(0.10)	(3.59)
Household income between 50,001 and 100,000	0.03	-0.09	0.07	3.24
	(0.10)	(0.10)	(0.10)	(3.72)
Household income above 100,000	0.08	-0.06	0.06	6.83
	(0.11)	(0.10)	(0.10)	(4.03)
Household in Northeast census region	-0.05*	-0.03	-0.01	-1.48
	(0.02)	(0.02)	(0.02)	(1.60)
Household in South census region	0.01	0.02	0.05*	3.68*
	(0.02)	(0.02)	(0.02)	(1.65)
Household in West census region	-0.01	0.07***	0.00	4.22**
	(0.02)	(0.02)	(0.02)	(1.63)
More than 5 percent of families with children in zip code are below poverty line	-0.01	0.01	0.00	0.15
	(0.02)	(0.01)	(0.02)	(1.65)
Household in urban area	0.00	0.04*	-0.04	3.38**
	(0.02)	(0.02)	(0.02)	(1.28)
Household in rural area	0.02	-0.00	-0.03	4.04*
	(0.03)	(0.02)	(0.03)	(1.80)
Constant	0.10	0.13	0.04	-18.71
	(0.15)	(0.13)	(0.15)	(9.63)
R-squared	0.23	0.26	0.16	0.07
Child Level Observations	5750.00	5750.00	5750.00	5750.00

Table 4: Household Has A Say in Student's Placement (standard errors)

Variable	Model 1	Model 2	Model 3	Model 4
Household has volunteered at school	0.05**			
	(0.02)			
Household has volunteered in classroom		0.04*		
		(0.02)		
Household has fundraised for school			0.05***	
			(0.02)	
Hours volunteered by household at school				0.00
				(0.00)
2 children who attend same school	-0.03	-0.02	-0.03	-0.02
	(0.02)	(0.02)	(0.02)	(0.02)
Child's age in 2002	0.00	0.00	0.00	0.00
	(0.00)	(0.00)	(0.00)	(0.00)
Child is female	-0.00	-0.00	-0.00	-0.00
	(0.01)	(0.01)	(0.01)	(0.01)
Child is Black	-0.03	-0.03	-0.03	-0.03
	(0.03)	(0.03)	(0.03)	(0.03)
Child is Asian	-0.20***	-0.21***	-0.21***	-0.21***
	(0.04)	(0.04)	(0.04)	(0.05)
Child is Hispanic (non-white)	-0.06*	-0.06*	-0.06	-0.06*
	(0.03)	(0.03)	(0.03)	(0.03)
Child's primary language is English	0.05	0.05	0.04	0.05
	(0.04)	(0.04)	(0.04)	(0.04)
Child born in the US or US territory	0.00	0.01	0.00	0.01
	(0.03)	(0.03)	(0.03)	(0.03)
Child is in elementary school	-0.10**	-0.10**	-0.10**	-0.10**
	(0.03)	(0.03)	(0.03)	(0.03)
Child is in middle school	-0.07***	-0.07***	-0.08***	-0.07***
	(0.02)	(0.02)	(0.02)	(0.02)
Child is in public school	0.08	0.07	0.07	0.07
	(0.05)	(0.05)	(0.05)	(0.05)
Child is in school with religious affiliation	0.05	0.05	0.04	0.05
	(0.05)	(0.05)	(0.05)	(0.05)
Estimated number of students enrolled is 300 to 599	0.06**	0.07**	0.06**	0.07**
	(0.02)	(0.02)	(0.02)	(0.02)
Estimated number of students enrolled is 600 to 999	0.07**	0.07**	0.07**	0.07**
	(0.02)	(0.02)	(0.02)	(0.02)
Estimated number of students enrolled is over 1000	0.06*	0.06*	0.06*	0.06*
	(0.03)	(0.03)	(0.03)	(0.03)
Child is in year-round school	-0.01	-0.01	-0.01	-0.01
	(0.03)	(0.03)	(0.03)	(0.03)
Interview conducted in English	-0.21***	-0.21***	-0.22***	-0.21***
	(0.04)	(0.04)	(0.04)	(0.04)
Respondent was mother	0.03	0.03	0.02	0.03
	(0.02)	(0.02)	(0.02)	(0.02)
Mother's age	-0.00	-0.00	-0.00	-0.00
	(0.00)	(0.00)	(0.00)	(0.00)
Mother has completed high school	-0.06	-0.05	-0.05	-0.05
	(0.03)	(0.03)	(0.03)	(0.03)
Mother has completed college	0.01	0.01	0.01	0.01
	(0.02)	(0.02)	(0.02)	(0.02)
Mother Employed 35+ hours per week	0.02	0.02	0.01	0.01
	(0.02)	(0.02)	(0.02)	(0.02)
Mother Employed part time	0.02	0.02	0.02	0.02
	(0.02)	(0.02)	(0.02)	(0.02)
Father's age	-0.00	-0.00	-0.00	-0.00
	(0.00)	(0.00)	(0.00)	(0.00)
Father has completed high school	-0.00	0.00	0.00	0.00
	(0.03)	(0.03)	(0.03)	(0.03)
Father has completed college	0.00	0.00	0.00	0.00
	(0.02)	(0.02)	(0.02)	(0.02)

legend: * p < 0.05; ** p < 0.01; *** p < 0.001 Continued on Next Page...

Table 4 – Continued

Variable	Model 1	Model 2	Model 3	Model 4
Father Employed 35+ hours per week	0.06*	0.07*	0.06*	0.07*
	(0.03)	(0.03)	(0.03)	(0.03)
Father Employed part time	0.11*	0.11*	0.11*	0.11*
	(0.05)	(0.05)	(0.05)	(0.05)
Parent and child have attended a religious event in past month	0.04**	0.04**	0.04**	0.05**
	(0.01)	(0.01)	(0.01)	(0.01)
Child has received free or reduced price lunch	-0.01	-0.01	-0.01	-0.01
	(0.02)	(0.02)	(0.02)	(0.02)
Total number of siblings	0.01	0.01	0.01	0.01
	(0.01)	(0.01)	(0.01)	(0.01)
Household income between 5,000 and 20,000	0.27**	0.27**	0.27**	0.27**
	(0.09)	(0.09)	(0.09)	(0.09)
Household income between 20,001 and 50,000	0.26**	0.27**	0.26**	0.26**
	(0.08)	(0.09)	(0.09)	(0.09)
Household income between 50,001 and 100,000	0.27**	0.27**	0.26**	0.27**
	(0.09)	(0.09)	(0.09)	(0.09)
Household income above 100,000	0.27**	0.27**	0.27**	0.27**
	(0.09)	(0.09)	(0.09)	(0.09)
Household in Northeast census region	-0.00	-0.01	-0.01	-0.01
	(0.02)	(0.02)	(0.02)	(0.02)
Household in South census region	-0.01	-0.01	-0.01	-0.01
	(0.02)	(0.02)	(0.02)	(0.02)
Household in West census region	0.02	0.01	0.02	0.01
	(0.02)	(0.02)	(0.02)	(0.02)
More than 5 percent of families with children in zip code are below poverty line	0.01	0.01	0.01	0.01
	(0.02)	(0.02)	(0.02)	(0.02)
Household in urban area	0.01	0.01	0.01	0.01
	(0.02)	(0.02)	(0.02)	(0.02)
Household in rural area	0.01	0.01	0.01	0.01
	(0.03)	(0.03)	(0.03)	(0.03)
Constant	0.52***	0.52***	0.52***	0.53***
	(0.14)	(0.15)	(0.14)	(0.15)
R-squared	0.04	0.04	0.04	0.04
Child Level Observations	5750.00	5750.00	5750.00	5750.00

Table 5: Households With Only Two Children (standard errors)

Variable	Volunteer	Classroom	Fundraise	Hours
2 children who attend same school	0.13***	0.10***	0.09***	6.02***
	(0.02)	(0.02)	(0.02)	(1.77)
Child's age in 2002	-0.01*	-0.02***	-0.01*	0.72
	(0.01)	(0.01)	(0.01)	(0.41)
Child is female	0.00	0.01	0.03*	-1.17
	(0.02)	(0.01)	(0.02)	(1.21)
Child is Black	-0.05	-0.04	-0.08	1.81
	(0.04)	(0.03)	(0.05)	(2.92)
Child is Asian	-0.16**	-0.16***	-0.09	-8.66***
	(0.06)	(0.04)	(0.06)	(2.42)
Child is Hispanic (non-white)	-0.00	-0.04	-0.07	-2.49
	(0.05)	(0.04)	(0.04)	(1.65)
Child's primary language is English	-0.01	0.04	0.08	4.17*
	(0.06)	(0.05)	(0.06)	(2.03)
Child born in the US or US territory	0.11*	0.03	0.11*	4.87**
	(0.05)	(0.03)	(0.05)	(1.53)
Child is in elementary school	0.10*	0.19***	0.07	15.21**
	(0.05)	(0.04)	(0.05)	(4.63)
Child is in middle school	-0.01	0.03	0.05	2.77
	(0.03)	(0.02)	(0.03)	(2.26)
Child is in public school	-0.12*	0.03	-0.02	-0.24
	(0.05)	(0.05)	(0.05)	(4.70)
Child is in school with religious affiliation	0.04	0.04	0.09	1.78
	(0.06)	(0.05)	(0.06)	(5.02)
Estimated number of students enrolled is 300 to 599	0.00	-0.02	0.04	-1.79
	(0.03)	(0.03)	(0.03)	(2.25)
Estimated number of students enrolled is 600 to 999	-0.02	-0.03	0.02	-0.30
	(0.03)	(0.03)	(0.03)	(2.48)
Estimated number of students enrolled is over 1000	-0.04	-0.08**	0.01	-0.03
	(0.04)	(0.03)	(0.04)	(3.05)
Child is in year-round school	0.09	0.07	-0.03	-4.55*
	(0.05)	(0.04)	(0.05)	(1.78)
Interview conducted in English	0.04	0.11*	0.19*	-2.56
	(0.07)	(0.06)	(0.08)	(2.74)
Respondent was mother	0.02	-0.02	0.08**	3.03*
	(0.03)	(0.02)	(0.03)	(1.38)
Mother's age	0.00	-0.00	-0.00	0.15
	(0.00)	(0.00)	(0.00)	(0.15)
Mother has completed high school	0.12*	0.10*	0.04	1.90
	(0.06)	(0.04)	(0.06)	(2.47)
Mother has completed college	0.04	0.01	0.05	-0.78
	(0.03)	(0.02)	(0.02)	(1.79)
Mother Employed 35+ hours per week	-0.19***	-0.18***	0.05*	-12.45***
	(0.03)	(0.02)	(0.03)	(2.02)
Mother Employed part time	-0.06	-0.08**	0.04	-4.48
	(0.03)	(0.02)	(0.03)	(3.06)
Father's age	0.00	0.00	0.00	0.08
	(0.00)	(0.00)	(0.00)	(0.16)
Father has completed high school	0.10*	0.03	0.05	4.02*
	(0.05)	(0.03)	(0.05)	(1.59)
Father has completed college	0.06*	0.04	0.05*	4.43*
	(0.03)	(0.02)	(0.03)	(1.79)
Father Employed 35+ hours per week	0.10*	0.06	0.04	1.96
	(0.05)	(0.04)	(0.05)	(1.78)
Father Employed part time	0.14*	0.07	-0.06	-0.35
	(0.07)	(0.06)	(0.07)	(3.10)
Parent and child have attended a religious event in past month	0.11***	0.07***	0.05**	3.99**
	(0.02)	(0.02)	(0.02)	(1.51)
Child has received free or reduced price lunch	-0.11**	-0.13***	-0.00	-1.48

legend: * p < 0.05; ** p < 0.01; *** p < 0.001 Continued on Next Page...

9

Table 5 – Continued

Variable	Volunteer	Classroom	Fundraise	Hours
	(0.04)	(0.03)	(0.04)	(1.79)
Total number of siblings	0.00	0.00	0.00	0.00
	.	.	.	.
Household income between 5,000 and 20,000	-0.17	-0.25	0.13	-6.36
	(0.13)	(0.13)	(0.16)	(6.76)
Household income between 20,001 and 50,000	-0.12	-0.22	0.18	-4.74
	(0.13)	(0.13)	(0.15)	(6.85)
Household income between 50,001 and 100,000	-0.09	-0.25	0.23	-2.53
	(0.13)	(0.13)	(0.16)	(6.94)
Household income above 100,000	-0.02	-0.22	0.22	5.62
	(0.13)	(0.13)	(0.16)	(7.42)
Household in Northeast census region	-0.05	-0.05	-0.03	-2.35
	(0.03)	(0.03)	(0.03)	(2.17)
Household in South census region	0.05	0.02	0.05	3.12
	(0.03)	(0.02)	(0.03)	(2.41)
Household in West census region	0.02	0.08**	0.02	3.47
	(0.03)	(0.03)	(0.03)	(2.31)
More than 5 percent of families with children in zip code are below poverty line	-0.01	0.01	0.02	0.97
	(0.02)	(0.02)	(0.02)	(1.89)
Household in urban area	0.00	0.03	-0.02	2.92
	(0.04)	(0.03)	(0.03)	(1.70)
Household in rural area	-0.02	-0.02	-0.01	3.67
	(0.04)	(0.03)	(0.04)	(2.21)
Constant	0.15	0.20	-0.18	-26.19
	(0.21)	(0.19)	(0.23)	(15.46)
R-squared	0.23	0.29	0.15	0.11
Child Level Observations	2858.00	2858.00	2858.00	2858.00

Table 6: Probit and Tobit Models, Probability Marginal Effects (standard errors)

Variable	Volunteer	Classroom	Fundraise	Hours
2 children who attend same school (d)	0.16***	0.08***	0.12***	10.23***
	(0.02)	(0.01)	(0.02)	(1.67)
Child's age in 2002	-0.02**	-0.02***	-0.01	-0.08
	(0.00)	(0.00)	(0.00)	(0.36)
Child is female (d)	-0.01	0.02	0.03*	-1.63
	(0.01)	(0.01)	(0.01)	(1.11)
Child is Black (d)	-0.07	-0.04	-0.03	-2.16
	(0.04)	(0.03)	(0.03)	(2.58)
Child is Asian (d)	-0.21***	-0.10***	-0.03	-11.70***
	(0.04)	(0.02)	(0.05)	(2.80)
Child is Hispanic (non-white) (d)	-0.05	-0.03	-0.07*	-6.04**
	(0.04)	(0.03)	(0.03)	(2.28)
Child's primary language is English (d)	-0.00	0.03	0.07	7.94**
	(0.05)	(0.03)	(0.04)	(2.71)
Child born in the US or US territory (d)	0.09*	0.04	0.07	1.46
	(0.04)	(0.03)	(0.04)	(3.00)
Child is in elementary school (d)	0.12**	0.23***	0.12**	14.87***
	(0.04)	(0.03)	(0.04)	(3.68)
Child is in middle school (d)	-0.02	0.11***	0.05*	4.32*
	(0.03)	(0.03)	(0.02)	(2.09)
Child is in public school (d)	-0.13**	0.00	0.02	-0.45
	(0.05)	(0.03)	(0.05)	(3.81)
Child is in school with religious affiliation (d)	0.06	0.04	0.18***	5.72
	(0.06)	(0.04)	(0.04)	(3.97)
Estimated number of students enrolled is 300 to 599 (d)	0.02	0.00	0.03	-1.16
	(0.03)	(0.02)	(0.02)	(2.04)
Estimated number of students enrolled is 600 to 999 (d)	-0.00	-0.02	0.02	2.23
	(0.03)	(0.02)	(0.03)	(2.33)
Estimated number of students enrolled is over 1000 (d)	-0.04	-0.05*	0.00	-1.17
	(0.03)	(0.02)	(0.03)	(2.50)
Child is in year-round school (d)	0.11**	0.07*	0.00	4.03
	(0.04)	(0.03)	(0.03)	(3.89)
Interview conducted in English (d)	0.10	0.09**	0.15**	6.81
	(0.05)	(0.03)	(0.05)	(3.52)
Respondent was mother (d)	0.03	-0.01	0.10***	4.66**
	(0.02)	(0.02)	(0.02)	(1.43)
Mother's age	0.00	0.00	-0.00	0.11
	(0.00)	(0.00)	(0.00)	(0.20)
Mother has completed high school (d)	0.11**	0.09***	0.02	6.88*
	(0.04)	(0.02)	(0.04)	(2.77)
Mother has completed college (d)	0.06**	0.02	0.04*	1.74
	(0.02)	(0.02)	(0.02)	(1.64)
Mother Employed 35+ hours per week (d)	-0.14***	-0.12***	0.06**	-7.55***
	(0.02)	(0.01)	(0.02)	(1.76)
Mother Employed part time (d)	-0.01	-0.03*	0.04	-2.33
	(0.03)	(0.02)	(0.02)	(2.28)
Father's age	0.00	0.00	0.00	0.04
	(0.00)	(0.00)	(0.00)	(0.15)
Father has completed high school (d)	0.14***	0.04	0.03	6.54*
	(0.04)	(0.03)	(0.03)	(2.80)
Father has completed college (d)	0.09***	0.05**	0.02	4.14*
	(0.02)	(0.02)	(0.02)	(1.63)
Father Employed 35+ hours per week (d)	0.03	0.01	0.07	3.46
	(0.04)	(0.03)	(0.04)	(2.17)
Father Employed part time (d)	-0.02	-0.01	-0.01	-0.49
	(0.06)	(0.04)	(0.05)	(3.65)
Parent and child have attended a religious event in past month (d)	0.11***	0.06***	0.05**	4. 21**
	(0.02)	(0.01)	(0.02)	(1.40)

legend: (d) denotes dummy variable, * p < 0.05; ** p < 0.01; *** p < 0.001 Continued on Next Page...

Table 6 – Continued

Variable	Volunteer	Classroom	Fundraise	Hours
Child has received free or reduced price lunch (d)	-0.06*	-0.09***	-0.02	-0.42
	(0.03)	(0.02)	(0.03)	(2.65)
Total number of siblings	-0.02	-0.01	-0.01	-0.67
	(0.01)	(0.01)	(0.01)	(0.98)
Parents own home (d)	0.03	0.02	0.03	3.14
	(0.03)	(0.02)	(0.03)	(2.01)
Household has received foodstamps or welfare (d)	-0.02	-0.01	-0.02	-3.55
	(0.05)	(0.03)	(0.04)	(3.13)
Household income between 5,000 and 20,000 (d)	-0.03	-0.08	-0.03	-3.45
	(0.13)	(0.07)	(0.10)	(6.47)
Household income between 20,001 and 50,000 (d)	-0.02	-0.11	0.01	0.36
	(0.13)	(0.08)	(0.09)	(6.24)
Household income between 50,001 and 100,000 (d)	0.01	-0.13	0.07	1.80
	(0.13)	(0.09)	(0.10)	(6.37)
Household income above 100,000 (d)	0.07	-0.09	0.06	6.30
	(0.13)	(0.08)	(0.09)	(6.61)
Household in Northeast census region (d)	-0.07*	-0.02	-0.02	-2.13
	(0.03)	(0.02)	(0.03)	(2.04)
Household in South census region (d)	0.02	0.03	0.06*	5.49**
	(0.03)	(0.02)	(0.02)	(2.11)
Household in West census region (d)	-0.01	0.07***	0.00	4.43*
	(0.03)	(0.02)	(0.02)	(2.09)
More than 5 percent of families with children in zip code are below poverty line (d)	-0.01	0.02	0.00	0.28
	(0.02)	(0.01)	(0.02)	(1.95)
Household in urban area (d)	0.00	0.05*	-0.05	2.45
	(0.03)	(0.02)	(0.03)	(1.73)
Household in rural area (d)	0.02	0.00	-0.04	3.49
	(0.04)	(0.03)	(0.03)	(2.26)
Child Level Observations	5750.00	5750.00	5750.00	5750.00

Table 7: All Income Bins, Remove Free Lunch Variables (standard errors)

Variable	Volunteer	Classroom	Fundraise	Hours
2 children who attend same school	0.13***	0.09***	0.10***	6.38***
	(0.02)	(0.01)	(0.02)	(1.26)
Child's age in 2002	-0.01***	-0.02***	-0.00	0.14
	(0.00)	(0.00)	(0.00)	(0.30)
Child is female	-0.00	0.01	0.03*	-1.83*
	(0.01)	(0.01)	(0.01)	(0.88)
Child is Black	-0.08*	-0.06*	-0.03	-0.84
	(0.03)	(0.02)	(0.03)	(1.84)
Child is Asian	-0.20***	-0.15***	-0.02	-9.02***
	(0.04)	(0.03)	(0.04)	(1.68)
Child is Hispanic (non-white)	-0.04	-0.04	-0.07*	-2.99*
	(0.03)	(0.02)	(0.03)	(1.30)
Child's primary language is English	0.00	0.04	0.07	4.41***
	(0.04)	(0.03)	(0.04)	(1.28)
Child born in the US or US territory	0.07*	0.00	0.07*	-0.22
	(0.03)	(0.02)	(0.03)	(1.68)
Child is in elementary school	0.10**	0.17***	0.11**	8.50**
	(0.03)	(0.03)	(0.03)	(2.87)
Child is in middle school	-0.02	0.02	0.05*	1.26
	(0.02)	(0.02)	(0.02)	(1.54)
Child is in public school	-0.12**	0.01	0.02	-0.20
	(0.04)	(0.04)	(0.04)	(3.22)
Child is in school with religious affiliation	0.03	0.05	0.15***	3.00
	(0.04)	(0.04)	(0.05)	(3.40)
Estimated number of students enrolled is 300 to 599	0.01	0.00	0.03	-1.25
	(0.02)	(0.02)	(0.02)	(1.69)
Estimated number of students enrolled is 600 to 999	-0.00	-0.02	0.01	1.62
	(0.02)	(0.02)	(0.02)	(1.95)
Estimated number of students enrolled is over 1000	-0.03	-0.04*	-0.00	-0.98
	(0.03)	(0.02)	(0.03)	(1.99)
Child is in year-round school	0.08**	0.05*	-0.01	2.51
	(0.03)	(0.03)	(0.03)	(2.87)
Interview conducted in English	0.08*	0.09**	0.14**	0.46
	(0.04)	(0.03)	(0.05)	(1.53)
Respondent was mother	0.02	-0.01	0.08***	2.36*
	(0.02)	(0.02)	(0.02)	(0.92)
Mother's age	0.00*	0.00	-0.00	0.15
	(0.00)	(0.00)	(0.00)	(0.16)
Mother has completed high school	0.07*	0.06**	0.02	3.19*
	(0.03)	(0.02)	(0.03)	(1.43)
Mother has completed college	0.05**	0.02	0.04*	0.83
	(0.02)	(0.02)	(0.02)	(1.39)
Mother Employed 35+ hours per week	-0.12***	-0.12***	0.06**	-7.85***
	(0.02)	(0.01)	(0.02)	(1.44)
Mother Employed part time	-0.01	-0.03*	0.03	-2.98
	(0.02)	(0.02)	(0.02)	(1.93)
Father's age	0.00	0.00	0.00	0.01
	(0.00)	(0.00)	(0.00)	(0.11)
Father has completed high school	0.10***	0.03	0.04	2.05
	(0.03)	(0.02)	(0.03)	(1.44)
Father has completed college	0.08***	0.06***	0.02	2.75*
	(0.02)	(0.02)	(0.02)	(1.35)
Father Employed 35+ hours per week	0.03	0.02	0.07*	1.77
	(0.03)	(0.02)	(0.03)	(1.16)
Father Employed part time	-0.01	-0.01	-0.01	0.58
	(0.05)	(0.04)	(0.05)	(2.27)
Parent and child have attended a religious event in past month	0.09***	0.05***	0.04**	2.28*
	(0.01)	(0.01)	(0.01)	(1.13)
Total number of siblings	-0.02	-0.01*	-0.01	-0.25

legend: * p < 0.05; ** p < 0.01; *** p < 0.001 Continued on Next Page...

Table 7 – Continued

Variable	Volunteer	Classroom	Fundraise	Hours
	(0.01)	(0.01)	(0.01)	(0.81)
Household income between 5,001 and 10,000	-0.02	-0.12	-0.11	3.28
	(0.11)	(0.10)	(0.11)	(4.62)
Household income between 10,001 and 15,000	-0.02	-0.10	0.00	0.23
	(0.11)	(0.10)	(0.10)	(3.77)
Household income between 15,001 and 20,000	-0.02	-0.05	-0.05	-0.67
	(0.11)	(0.10)	(0.10)	(3.55)
Household income between 20,001 and 25,000	-0.03	-0.10	0.01	0.23
	(0.11)	(0.10)	(0.10)	(3.65)
Household income between 25,001 and 30,000	0.02	-0.07	-0.01	1.22
	(0.11)	(0.10)	(0.10)	(3.78)
Household income between 30,001 and 35,000	-0.01	-0.06	0.03	9.14
	(0.11)	(0.10)	(0.10)	(6.29)
Household income between 35,001 and 40,000	0.04	-0.02	0.05	3.26
	(0.11)	(0.10)	(0.10)	(3.95)
Household income between 40,001 and 45,000	0.04	-0.02	0.01	2.41
	(0.11)	(0.10)	(0.10)	(3.91)
Household income between 45,001 and 50,000	-0.00	-0.07	0.03	3.26
	(0.11)	(0.10)	(0.10)	(4.01)
Household income between 50,001 and 60,000	0.03	-0.05	0.07	2.65
	(0.11)	(0.10)	(0.10)	(3.78)
Household income between 60,001 and 75,000	0.08	-0.01	0.09	5.24
	(0.11)	(0.10)	(0.10)	(4.08)
Household income between 75,001 and 100,000	0.06	-0.06	0.08	3.87
	(0.11)	(0.10)	(0.10)	(3.82)
Household income above 100,000	0.11	-0.02	0.08	7.55
	(0.11)	(0.10)	(0.10)	(4.03)
Household in Northeast census region	-0.06*	-0.03	-0.02	-1.45
	(0.02)	(0.02)	(0.02)	(1.61)
Household in South census region	0.01	0.02	0.05*	3.65*
	(0.02)	(0.02)	(0.02)	(1.66)
Household in West census region	-0.01	0.06***	-0.00	4.17**
	(0.02)	(0.02)	(0.02)	(1.61)
More than 5 percent of families with children in zip code are below poverty line	-0.01	0.00	-0.00	0.14
	(0.02)	(0.01)	(0.02)	(1.56)
Household in urban area	-0.00	0.04	-0.04	3.25*
	(0.02)	(0.02)	(0.02)	(1.26)
Household in rural area	0.02	-0.01	-0.03	3.89*
	(0.03)	(0.02)	(0.03)	(1.79)
Constant	0.04	0.05	0.02	-19.32*
	(0.15)	(0.13)	(0.15)	(9.61)
R-squared	0.23	0.26	0.16	0.07
Child Level Observations	5750.00	5750.00	5750.00	5750.00

Table 8: Includes Whether Parents Made Aware of Opportunity to Volunteer
(standard errors)

Variable	Volunteer	Classroom	Fundraise	Hours
2 children who attend same school	0.13***	0.08***	0.10***	6.32***
	(0.02)	(0.01)	(0.02)	(1.27)
Child's age in 2002	-0.01**	-0.02***	-0.00	0.16
	(0.00)	(0.00)	(0.00)	(0.30)
Child is female	-0.00	0.01	0.03*	-1.88*
	(0.01)	(0.01)	(0.01)	(0.89)
Child is Black	-0.07*	-0.04	-0.03	-0.72
	(0.03)	(0.02)	(0.03)	(1.88)
Child is Asian	-0.19***	-0.14***	-0.02	-9.06***
	(0.04)	(0.03)	(0.04)	(1.68)
Child is Hispanic (non-white)	-0.04	-0.03	-0.07*	-3.00*
	(0.03)	(0.02)	(0.03)	(1.26)
Child's primary language is English	-0.01	0.03	0.06	4.17***
	(0.04)	(0.03)	(0.04)	(1.24)
Child born in the US or US territory	0.06*	0.00	0.07*	-0.28
	(0.03)	(0.02)	(0.03)	(1.70)
Child is in elementary school	0.09**	0.17***	0.10**	8.20**
	(0.03)	(0.03)	(0.03)	(2.86)
Child is in middle school	-0.02	0.02	0.05*	1.16
	(0.02)	(0.02)	(0.02)	(1.54)
Child is in public school	-0.12**	0.01	0.02	-0.41
	(0.04)	(0.04)	(0.04)	(3.22)
Child is in school with religious affiliation	0.03	0.05	0.15***	2.75
	(0.04)	(0.04)	(0.04)	(3.40)
Estimated number of students enrolled is 300 to 599	0.02	0.01	0.03	-1.17
	(0.02)	(0.02)	(0.02)	(1.68)
Estimated number of students enrolled is 600 to 999	0.00	-0.02	0.02	1.68
	(0.02)	(0.02)	(0.02)	(1.94)
Estimated number of students enrolled is over 1000	-0.03	-0.04	0.00	-0.94
	(0.03)	(0.02)	(0.02)	(1.97)
Child is in year-round school	0.08**	0.05*	-0.01	2.29
	(0.03)	(0.03)	(0.03)	(2.86)
Child's school informed parents of volunteering opportunities	0.17***	0.05***	0.21***	3.93***
	(0.02)	(0.01)	(0.03)	(1.03)
Interview conducted in English	0.06	0.08**	0.13**	0.63
	(0.04)	(0.03)	(0.04)	(1.56)
Respondent was mother	0.02	-0.01	0.09***	2.56**
	(0.02)	(0.02)	(0.02)	(0.93)
Mother's age	0.00	0.00	-0.00	0.14
	(0.00)	(0.00)	(0.00)	(0.15)
Mother has completed high school	0.07*	0.06**	0.02	3.11*
	(0.03)	(0.02)	(0.03)	(1.41)
Mother has completed college	0.06**	0.02	0.04*	0.82
	(0.02)	(0.02)	(0.02)	(1.37)
Mother Employed 35+ hours per week	-0.11***	-0.12***	0.06***	-7.73***
	(0.02)	(0.01)	(0.02)	(1.42)
Mother Employed part time	-0.00	-0.03	0.04	-2.88
	(0.02)	(0.02)	(0.02)	(1.90)
Father's age	0.00	0.00	0.00	-0.01
	(0.00)	(0.00)	(0.00)	(0.11)
Father has completed high school	0.10***	0.02	0.03	2.27
	(0.03)	(0.02)	(0.03)	(1.49)
Father has completed college	0.08***	0.06***	0.01	2.63
	(0.02)	(0.02)	(0.02)	(1.36)
Father Employed 35+ hours per week	0.02	0.01	0.06	1.83
	(0.03)	(0.02)	(0.03)	(1.14)
Father Employed part time	-0.02	-0.01	-0.01	0.44
	(0.05)	(0.04)	(0.05)	(2.22)

legend: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table 8 – Continued

Variable	Volunteer	Classroom	Fundraise	Hours
Parent and child have attended a religious event in past month	0.09***	0.05***	0.04**	2.26*
	(0.01)	(0.01)	(0.01)	(1.11)
Child has received free or reduced price lunch	-0.06*	-0.10***	-0.02	-0.69
	(0.02)	(0.02)	(0.02)	(1.82)
Total number of siblings	-0.01	-0.01	-0.01	-0.17
	(0.01)	(0.01)	(0.01)	(0.79)
Household income between 5,000 and 20,000	-0.03	-0.08	-0.06	0.24
	(0.10)	(0.10)	(0.09)	(3.48)
Household income between 20,001 and 50,000	-0.01	-0.08	0.00	2.60
	(0.10)	(0.10)	(0.09)	(3.54)
Household income between 50,001 and 100,000	0.02	-0.09	0.05	2.93
	(0.10)	(0.10)	(0.09)	(3.67)
Household income above 100,000	0.07	-0.06	0.05	6.52
	(0.11)	(0.10)	(0.10)	(3.99)
Household in Northeast census region	-0.05*	-0.03	-0.01	-1.38
	(0.02)	(0.02)	(0.02)	(1.60)
Household in South census region	0.01	0.02	0.05**	3.70*
	(0.02)	(0.02)	(0.02)	(1.65)
Household in West census region	-0.01	0.07***	0.00	4.24**
	(0.02)	(0.02)	(0.02)	(1.62)
More than 5 percent of families with children in zip code are below poverty line	-0.01	0.01	0.00	0.21
	(0.02)	(0.01)	(0.02)	(1.65)
Household in urban area	0.00	0.04*	-0.04	3.36**
	(0.02)	(0.02)	(0.02)	(1.27)
Household in rural area	0.02	-0.00	-0.03	4.04*
	(0.03)	(0.02)	(0.03)	(1.80)
Constant	-0.02	0.09	-0.11	-21.40*
	(0.15)	(0.14)	(0.15)	(9.68)
R-squared	0.23	0.26	0.17	0.07
Child Level Observations	5750.00	5750.00	5750.00	5750.00