Effects of Perception of Childhood Social Status on Charitable Giving

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Abstract

Donating money to charity has been shown to be positively impacted by household resources through objective socioeconomic indicators such as education, income, and wealth. This study adds to previous literature by examining the subjective measures of status, such as perception of childhood social status and its effects on giving. Using household and individual level PSID data from 2015 and a two-stage model, I show that perceived childhood social status in addition to objective socioeconomic status are significant factors for both the decision to give and dollar amount donated. Implications for the importance of including perception of status in future research are explored.

1 Introduction

Charitable giving allows individuals to make an impact on the lives of those in need. Current estimates are that United States charitable organizations received $390 billion in donations in 2016. This was about 2.1% of the national GDP and increased 2.7% in current dollars from 2015 (Giving USA, 2017). Charities, non-profits, and other philanthropic organizations use these resources to benefit those in need. What motivates a person to decide to give to these organizations? Behavioral economics research has demonstrated that the traditional economic self-interest hypothesis does not adequately describe human decision-making. Rather than maximizing one's own interest, individual decisions are often motivated by several other factors. For example, altruism, the desire to increase another person's wellbeing, and fairness are unmeasurable influences that sometimes play a significant role in the utility a person derives from giving.

Donating money to charity has been shown to be positively impacted by human and social capital. A person's socioeconomic status, despite other circumstances, will inevitably play a role in the decision to give. This paper seeks to understand whether charitable giving is affected by an individual's subjective social status, in other words, the way they perceive their status relative to others. Using 2015 data from the Panel Study of Income Dynamics (PSID), I will use household characteristics and perception of status to measure their effects on the decision to engage in altruistic behavior.

2 Literature Review

Prior literature is brimming with studies done on the determinants of why people give, but there is less known about the effect of the perception of one's status. A well-known literature review by Bekkers and Weeping (2011) identifies many key motivators for why a person gives to charitable organizations. The eight factors that influence charitable giving include awareness of need,

solicitation, costs and benefits, altruism, reputation, psychological benefits, values, and efficacy (Bekkers and Weeping, 2011). Within these general umbrella terms, personal characteristics and demographics also play a role. It has been found in various studies that an individual's education and level of income are significantly positively correlated with giving (Casale and Baumann, 2015; Neumayr and Handy, 2017; Einolf, 2011, Brown and Ferris, 2007). These aspects of socioeconomic status have routinely been connected to charitable giving; however, another, less explored component of socioeconomic status is subjective status, which is an individual's perception of his or her status relative to others. This study examines the relationship between subjective social status and giving to determine if one's perception of status affects the decision to engage in altruistic behaviors such as giving to charity.

Subjective social status

Literature in psychology has identified the importance of subjective social status as a mechanism for psychological outcomes including physical and mental health. Subjective social status differs from socioeconomic status in that it does not rely solely on objective measures of status, such as annual income or level of education. Instead, an individual's subjective perception of their place within the hierarchy of society makes an impact on how they interact with the world around them (Kraus and Stephens, 2012). The measure most often associated with subjective status is the MacArthur Scale of Subjective Social Status (SSS). This scale is self-reporting tool used in psychology studies to measure an individual's subjective perception. It has been found that one's sense of their status significantly impacts health outcomes such as obesity, especially in youth (Goodman et al, 2012). Subjective social status is a broader approach to socioeconomic class because it incorporates an individual's past experiences as well, and translates into the external position of empathizing with others in need (Castro et al, 2010). This study will focus specifically on

past experiences through the individual's perception of their parents' household wealth while growing up. Therefore, the main mechanism of subjective social status will be through opinions about childhood. In this paper, I make the case that subjective perception plays a role in an individual's perception of others in need. Specifically, those who have experienced poverty or grew up low-income, and therefore currently have a lower subjective status, are more likely to understand and identify with the needs of others through altruism.

3 Methodology

Sample

The data for this research come from the Panel Study of Income Dynamics (PSID) from University of Michigan, which has collected national survey data since 1968. The survey has information at both the household and individual level on demographics, socioeconomic variables, household income, and philanthropic behavior. This study uses data specifically from the year 2015, because it is the most recent data readily available. The total sample has 9,048 respondents and Table 1 demonstrates demographic characteristics for the sample. The average household age of both head of household and spouse (if they have one) is 45. Of the head of households, 49% are married and 35% have a child under 14 living in their household. In terms of donating, 30% of the sample decided to donate to charity. The average donation amount was $228 annually.

Regression Model

The present study makes use of the model set forth by Neumayr and Handy (2017) in their paper measuring which determinants matter most in a donor's choice of which cause to support. They examine both "human resources" and "subjective dispositions" as independent variables. Human resources are defined as level of education and income, while subjective dispositions are

internal factors that influence the decision to give such as attitudes and beliefs, like religiosity or empathy, which is often measured using a self-report scale. For the purposes of this paper, I focused solely on the human resources aspect as a motivator and measured its impact on giving. This paper includes human capital variables such as household income and education, and additionally I include the variables *parents were poor* or *parents were well-off* as a proxy for subjective social status. Although this binary proxy is noisy, it allows for the analysis to include the effect of a person's perception of their childhood socioeconomic status.

I decided to use Heckman's two-stage regression model as the regression technique, based on research that demonstrated the benefits to using this strategy over the Tobit model, which is traditionally used in studies done of charitable giving (Neumayr and Handy, 2017; Forbes and Zampelli, 2011). This provides a more accurate framework for the factors that play a role in giving, since it analyzes the decision to give and the decision of how much to give as two separate decisions. Heckman's two-step model first uses a probit model to analyze the decision to give. I then calculated the Inverse Mills Ratio from those results and used it in the second stage OLS regression. This is because external factors such as education and income play a role in both an individual's first decision on whether or not to give, and then those same factors influence how much they decide to give. Using a least squares estimator would be biased and, instead, treating the two decisions separately removes selection bias and predicates the second decision conditional on the first. The regression specification for this study is as follows:

$$d_i^* = Z_i'\alpha + v_i \, , \, v_i \sim N(0,1) \qquad d_i = \begin{cases} 1 \text{ if } d_i^* > 0 \\ 0 \text{ if } d_i^* \leq 0 \end{cases}$$

Where d_i^* is the decision to donate and Z' is the set of predictor variables and controls that have an effect on the probability that the household decides to donate. Consequently, there may be

some overlap between the factors that determine the amount donated, represented in X' in the second equation:

$$y_i^* = X'_i\beta + \varepsilon_i \, , \, \varepsilon_i \sim N\left(0, \sigma^2\right) \qquad y_i = \begin{cases} y_i^* \text{ if } d_i = 1 \\ 0 \quad \text{if } d_i = 0 \end{cases}$$

Where y_i^* is the decision on the donation level, or the amount donated. Again, X' includes factors that have an effect on this decision, and these factors may also play a role in the first decision. The results y_i^* are conditional on the first decision $d_i = 1$ to donate. The households that did decide to donate in the first stage are assumed to donate an amount greater than zero in the second stage.

Predictor Variables and Covariates

The predictor variables for this study are consistent with previous literature. Education and income are the standard measures of human capital, and, additionally, I included variables referred to as "parents poor" and "parents well off" as two more predictor variables. Within the PSID, respondents were asked the question, "Were your parents poor when you were growing up, pretty well off, or what?" For the purposes of this study, this reflects the head of household's perception of whether their parents were "well-off" or "poor" growing up. The respondents who viewed their parents as neither well-off or poor selected "average" and this data was dropped from the regression analysis. This survey question introduces the element of subjective social status into the regression model. It is important to note that although most of the data used in this study is household level data, I am focusing on the individual head of household's perception of status due to the fact that the data do not give information on household perceptions. Of those who responded to this question, an average 30% of the total sample population reported their parents were poor growing up, while the mean of the binary variable indicating those who reported their parents were well off

was 26%. I split education into two indicator variables, whether the head of household received a college degree or did not receive a college degree. Consistent with previous literature, income is represented as the natural log of total household annual income of both head of household and/or their spouse if they have one (Casale and Baumann, 2015; Neumayr and Handy, 2017; Einolf, 2011, Brown and Ferris, 2007). Table 1 shows the summary statistics of the predictor variables.

The standard controls in prior research done on giving include demographics such as age, gender, and marital status (Casale and Baumann, 2015; Neumayr and Handy, 2017; Einolf, 2011, Brown and Ferris, 2007). These factors all play a role in a person's decision to give. The dummy variable for marital status is equal to one when the head of household is married or cohabitating with their partner, as opposed to those who are single, divorced or widowed. I also included a dummy variable for if the household has a child under 14, since it has been found that having a young child in the house increases solicitations for giving through the social networks from schools and/or youth organizations (Andreoni and Payne, 2003; Wang and Graddy, 2008). Finally, religious affiliation often plays a role in giving to religious causes and organizations, so I also included religiosity as a control.

The dependent variables are also based on previous literature. For the purposes of this study, all donations are monetary. Most studies on giving use the total amount donated as the dependent variable (Einolf, 2011; Neumayr and Handy, 2017, Brown and Ferris, 2007). I used first the decision yes or no if the household donated and then calculated an intensity measurement of the donation by using log of the total amount donated by household (Neumayr and Handy, 2017). Of all respondents to the survey, about 30% made the decision to donate to some form of charity. The causes included in the total donation figure include arts/cultural/ethnic organizations, education organizations, organizations for the needy, and health organizations. Table 2 displays the summary statistics of the dependent variables.

4 Results

Results on Subjective Status, Income, and Education

As previously mentioned, the binary variable of subjective status is noisy. Although the variable is not a perfect indicator of subjective social status, the correlations between parents well off/parents poor and independent variables are listed in Table 3. For those who viewed their parents as poor during childhood, there is a negative relationship between income and receiving a college degree. For those who viewed their parents as well off during childhood, there is a positive relationship between income and receiving college degree. These results indicate a foundational relationship between subjective and objective socioeconomic status variables.

Results on Decision to Give to Charity

The coefficients of the two-stage Heckman model reflect results consistent with previous literature, as the standard determinants of charitable giving are confirmed in the data. Table 4 demonstrates the effects of the independent and control variables on the probability of giving. A positive coefficient indicates an increase in the probability to donate. Panel 1 and 2 display results indicating that all standard controls, education, and income have a positive effect on the probability of a person giving. Age, gender, and the presence of children under 14 all have significant effects on the probability a household decides to give. Having received a college degree and higher income levels both increase the likelihood of deciding to give to charity, significant at the 1% level. Panels 3 and 4 introduce the element of subjectivity. Results in panel 3 indicate that perceiving your parents' household as poor during childhood significantly decreases the likelihood of giving to charity by 7%. These findings are reinforced when controlling for education and income in panel 5. The likelihood of giving raises to about 4%, yet is still highly significant.

Results on Decision of How Much to Give

Table 5 displays the results of the second stage of the two-step model which used an OLS regression. Conditional on the first decision, these results indicate the variables' effect on the log of amount given. Panels 1 and 2 reinforce the determinants of amount donated, including age, marital status, and religiosity. As expected, education and income are significantly positively correlated with the amount a household donates. That is, as education and income increase, so does the amount they decide to give to charity. Panel 3 demonstrates the results for individuals who perceived their parents as poor. This perception had a negative effect on the amount donated to charity, significant at the 10% level. With the addition of controls in panel 5, indicating your parents were poor during childhood decreases the log of amount donated by 0.42, which translates into a 34% decrease in giving. The results indicate a negative relationship between perception of childhood socioeconomic status and amount given to charity. Conversely, panel 4 represents results for heads of household who believed their parents to be well off during childhood. These individuals gave significantly more to charity. Perceiving your parents as well off during childhood is associated with an increase of 0.127 in log of amount donated, resulting in a percent change of 13% increase in amount donated. Conditional on deciding to give to charity, Table 5 shows that perception of childhood socioeconomic status has a significant effect on the amount head of households decided to give. The directionality of these results provides an interesting starting point for including perception of status in the discussion on charitable giving.

5 Discussion

This study reflects results that are for the most part consistent with previous findings on socioeconomic status and charitable giving. The standard controls, such as age, gender, and religion, are shown to be influential on both the initial decision to give and the second decision of how much

to give. The new element to these results is regarding perception of childhood status and its effect on these two separate decisions. The question of socioeconomic status and charitable giving has been thoroughly researched and analyzed for decades. Still, many studies present mixed findings; some find that the rich are more charitable while others suggest the poor. For example, Andreoni et al (2017) conduct a robust natural experiment in Dutch cities and find households with higher income levels were twice as likely to behave less selfishly. On the other hand, Piff et al (2010) report results in which low-income individuals were found to be more attuned to others' suffering by responding with higher prosocial behavior.

These contradictions in the literature reinforce the idea that the relationship between status and giving is complex and nuanced. There may be some situations in which higher income households give, such as during charity galas or to an alma mater, and other situations where they do not. In this study, of those who initially decided to give, those who perceived their families as well off during their childhood were more generous in the amount donated. One possible explanation for this is that they simply have more to resources to be able to give, so when they do give, it is more substantial. This study examined college education and income as indicators for a person's objective status, both of which are typically associated with higher disposable income. A follow up study exploring more in depth the relationship between one's subjective social status to their objective status can provide interesting implications as to the strength of this causal channel. Another explanation could be that their parents who were well-off during their childhood years modeled charitable giving and, consequently, it has become a part of their own personal financial plan, particularly with the help of tax incentives.

While the decisions of those who perceived their parents as well off leads to more research questions, even more interesting is the results of those who perceived their parents as poor. Anderoni's paper seems to suggest that this may point to the underlying question of motivation.

That is, if the motivation to give charitably is for equality, then those who were previously poor during childhood may still perceive others as more well-off then they are and focus inward rather than outward in helping others in need. In other words, whereas the rich give to others in order to balance out this inequality, the poor may not. This line of thinking leads to further interesting research questions, such as the relationship between perception of self relative to others, particularly with regards to wealth. Further, these findings may simply indicate a difference in preferences amongst those who perceive their families as rich or poor. Deciding to give to charity or the amount to donate may be the mechanism by which those who perceive their parents as well off interact with those in need, whereas as those who perceived their parents as poor may have a different set of preferences, such as giving time through volunteering or personally partnering. This distinction in preferences can even extend to the various causes within charitable giving: arts and culture organizations may attract one type of donor more than another (Neumayr and Handy, 2017). Additionally, altruistic behavior can be generalized to represent much more than donating charity, which may be where the rich and the poor differ.

6 Conclusion

Previous literature on charitable giving has found that an individual's observable characteristics and status influence the determinants of giving. It has been well documented that education, income, and religiosity are significantly positively correlated with giving. However, there are fewer studies on the concept of social subjective status and its role in altruistic behavior. The findings of this study reinforce the previously known relationship between socioeconomic determinants and charitable giving, and also adds to the literature by demonstrating that a person's perception of their childhood does impact their decision in giving. The mechanisms by which this association exists reflect areas for future research, specifically the means through which the

perception of personal socioeconomic status influences external interaction with members of lower status or those in need. A further extension of this study would make use of the traditional measure of subjective social status, the MacArthur Scale of Subjective Social Status, and relate it to charitable giving outcomes.

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Appendix

Table 1 Descriptive statistics on independent variables

Independent variables	Mean	SD	Min	Max
Household age	45.158	16.312	17	102
Gender (female = 1)	0.329	0.470	0	1
Marital status (married/cohabitating = 1)	0.499	0.500	0	1
Presence of children	0.355	0.478	0	1
Own home	0.497	0.500	0	1
Received college degree	0.329	0.469	0	1
Did not receive college degree	0.216	0.412	0	1
Religious affiliation (yes = 1)	0.796	0.402	0	1
Household income	51,859	88,231	0	5,250,000
Ln of income (n = 6,517)	10.539	1.199	2.708	15.473
Parents were poor growing up	0.309	0.462	0	1
Parents were well off growing up	0.260	0.438	0	1

N = 9,048

Table 2 Descriptive statistics on dependent variables

Dependent variables	Mean	SD	Min	Max
Donated to charity (yes = 1)	0.301	0.458	0	1
Total amount donated	228.763	1315.412	0	56,000
Ln of amount donated (n = 2,916)	5.566	1.404	0	10.933

N = 7,822

Table 3 Subjective social status and objective indicators: Correlations

Variables	
	Parents poor
Parents poor	-
Income	-0.05
Received college degree	-0.098
	Parents well off
Parents well off	-
Income	0.005
Received college degree	0.034

Table 4 Decision to give to charity

Variables	(1) College degree	(2) Log household income	(3) Parents poor	(4) Parents well off	(5) Parents poor with controls	(6) Parents well off with controls
Age	0.00345*** (0.000365)	0.00501*** (0.000494)	0.00300*** (0.000367)	0.00257*** (0.000369)	0.00553*** (0.000503)	0.00520*** (0.000508)
Gender (Female = 1)	0.0436*** (0.0165)	0.0724*** (0.0196)	0.0464*** (0.0163)	0.0465*** (0.0163)	0.0639*** (0.0197)	0.0635*** (0.0197)
Married (married/cohabitating = 1)	0.126*** (0.0155)	0.0563*** (0.0183)	0.134*** (0.0153)	0.133*** (0.0153)	0.0737*** (0.0183)	0.0730*** (0.0183)
Religious affiliation	-0.00124 (0.0127)	0.00130 (0.0139)	-0.00128 (0.0126)	0.00191 (0.0126)	-0.00102 (0.0140)	0.00102 (0.0140)
Presence of children	-0.0216* (0.0118)	-0.0357*** (0.0126)	-0.0381*** (0.0116)	-0.0392*** (0.0116)	-0.0216* (0.0127)	-0.0229* (0.0127)
Own home	0.156*** (0.0113)	0.136*** (0.0130)	0.197*** (0.0110)	0.200*** (0.0109)	0.113*** (0.0132)	0.114*** (0.0132)
Received college degree	0.245*** (0.0110)				0.192*** (0.0123)	0.196*** (0.0123)
Log income		0.0897*** (0.00559)			0.0655*** (0.00575)	0.0659*** (0.00575)
Parents poor			-0.0727*** (0.0103)		-0.0464*** (0.0121)	
Parents well off				0.00679 (0.0118)		-0.00463 (0.0129)
Observations	9,048	7,318	9,048	9,048	7,318	7,318

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 5 Decision of amount to donate (log of amount donated)

Variables	(1)	(2)	(3)	(4)	(5)	(6)
Age	0.0267***	0.0742***	0.0269**	0.0200	0.0661***	0.0480***
	(0.00702)	(0.0113)	(0.0131)	(0.0136)	(0.00932)	(0.0158)
Gender (Female = 1)	-0.0409	0.721***	-0.00523	-0.0826	0.470***	0.438
	(0.136)	(0.198)	(0.235)	(0.278)	(0.154)	(0.323)
Married (married/cohabitating = 1)	0.722***	0.606***	0.891	0.658	0.664***	1.474*
	(0.274)	(0.168)	(0.602)	(0.725)	(0.165)	(0.844)
Religious affiliation	-0.204***	-0.168**	-0.206***	-0.188***	-0.201***	-0.171**
	(0.0680)	(0.0720)	(0.0697)	(0.0706)	(0.0709)	(0.0724)
Presence of children	-0.0829	-0.317***	-0.211	-0.158	-0.117	-0.339
	(0.0766)	(0.0998)	(0.171)	(0.208)	(0.0743)	(0.239)
Own home	1.011***	1.648***	1.522*	1.176	1.073***	2.312*
	(0.335)	(0.322)	(0.904)	(1.112)	(0.210)	(1.284)
Received college degree	1.614***				1.951***	0.431***
	(0.461)				(0.307)	(0.0568)
Log income		1.292***			0.812***	0.268***
		(0.205)			(0.113)	(0.0269)
Parents poor			-0.549*		-0.426***	
			(0.327)		(0.0976)	
Parents well off				0.157**		0.127*
				(0.0730)		(0.0762)
Constant	0.258	-18.80***	0.192	1.602	-12.44***	-7.765
Observations	2,727	2,256	2,727	2,727	2,256	2,256
R-squared	0.106	0.122	0.064	0.063	0.145	0.137

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1