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Does extensivity form part of the altruistic personality? An empirical test of Oliner and Oliner's theory

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ABSTRACT

This paper tests Samuel and Pearl Oliner's theory that extensivity is a cause of prosocial behaviors, using data from the 1995 and 2005 waves of the Midlife in the United States (MIDUS) survey. Principal components analysis of a set of 19 questions about moral obligations supports the Oliners' contention that some individuals have a constricted moral sense, meaning that they feel stronger obligations to help family members and friends than strangers, while others have an extensive moral sense and feel obligated to help both close and distant others. Tobit regression demonstrates that people with extensive moral obligations are more likely than people with constricted obligations to engage in volunteer work and charitable giving. These results provide independent support for the Oliners' theory, and encourage further research on extensivity.

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1. Introduction

Altruism is a topic of great interest in the human sciences, including evolutionary biology (Boyd, 1990; Sober and Wilson, 1998), economics (Andreoni, 1990; Ray, 1998), political science (Mansbridge, 1990; Monroe, 1994), and psychology (Batson, 1991; Clary and Snyder, 1991; Oliner and Oliner, 1988; Penner et al., 2005). The study of altruism has been important to sociology since Comte and Durkheim (Piliavin and Charng, 1990), was a central concern of Sorokin(1950, 1954), and remains important today (Healy, 2004; Piliavin and Charng, 1990; Piliavin and Callero, 1991; Smith, 2003).

Social scientists have paid more attention to altruism in the last few decades, in part because limitations have become evident in the explanatory power of traditional models that view human behavior as purely self-interested. Cooperation, the provision of public goods, volunteering, charitable giving, and informal helping behaviors are all difficult to explain in self-interested terms. A clearly articulated and empirically supported theory of altruistic behavior would help solve a number of empirical problems in a range of disciplines.

The easiest helping behaviors to explain are those directed to family members, and those conducted in the expectation of reciprocity. These behaviors occur even in non-human animal species, and can be explained through reference to evolutionary biology (Sober and Wilson, 1998). Many other helping behaviors are directed towards members of a group to which the helper belongs, and with which the helper identifies. This type of helping has been explained by social identity theory (Tajfel, 1981; Tajfel and Turner, 1986). Most difficult to explain are helping behaviors directed towards people who are not relatives, not members of the same social group, and not in a position to reciprocate. Helpers in these situations can expect no reward beyond the emotional "warm glow" (Andreoni, 1990) or "helper high" (Wuthnow, 1991) that comes from doing a good deed. This emotional reward may be enough to motivate helping behaviors that involve minimal effort and risk, but seems

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inadequate to explain risking one's life to help others, or donating significant amounts of one's money and time. Why do some people go to such lengths to help others – particularly individuals who are not related, not members of the same social group, and not expected to reciprocate?

Samuel and Pearl Oliner's 1988 book, *The Altruistic Personality: Rescuers of Jews in Nazi Europe*, proposed "extensivity" as a cause of altruistic behavior. They define extensivity as "the means to assume commitments and responsibilities toward diverse groups of people," and state that extensivity "includes two elements: the propensity to *attach* oneself to others in committed interpersonal relationships; and the propensity toward *inclusiveness* with respect to the diversity of individuals and groups to whom one will assume obligations" (Oliner et al., 1992, p. 370) [emphasis in the original].

The Oliners discovered extensivity through their interviews with individuals who had rescued Jews during the Holocaust. While they used quantitative measures of personality traits to support their theory of extensivity, neither their 1988 book nor their subsequent publications contain a direct quantitative measure of extensivity. Hundreds of publications on altruism cite their work, but no other scholar has devised a direct measure of extensivity. In this paper, I generate such a measure and subject it to a series of empirical tests, using data from a large, nationally representative longitudinal survey. The first element of extensivity, "attachment," has been widely studied in social psychology (Field, 1996), and the connection between childhood attachment, the adult desire for communion with others, and prosocial action is well documented (McAdams et al., 1998; Rossi, 2001). This paper focuses on the "inclusiveness" element of extensivity, which has received less attention. I seek to answer three questions:

1. Is extensivity versus constriction a valid way to classify variation in individuals' sense of moral obligation?
2. Are people with extensive moral views more likely to engage in prosocial behaviors?
3. Is extensivity an independent predictor of prosocial behaviors, or is it merely an expression of some known cause of prosocial action?

2. Review of the literature

After discussing the Oliners' theory, I provide a definition of altruistic or prosocial behaviors. I then examine other research on the relationship between moral obligations and prosocial behaviors. I also discuss research on other individual traits that predict helping behaviors, and discuss their possible relationship with extensivity.

2.1. Extensivity

The Oliners interviewed hundreds of people who had lived in Nazi-controlled Europe, including both rescuers and non-rescuers. One thing that distinguished the two groups is the sense of moral responsibility rescuers felt towards Jews. While non-rescuers felt no responsibility to help Jews who needed assistance, rescuers did feel obligated, even though in many cases the individuals they helped were total strangers to them. The Oliners concluded that both rescuers and non-rescuers had a sense of morality, but that non-rescuers constrained their moral obligations to family and other social groups, while rescuers extended their feeling of moral obligation to all humanity.

The Oliners found quantitative support for the concept of extensivity, but this quantitative support did not constitute a direct measure. They administered a battery of self-reported psychological scales to their subjects, which contained about 150 variables. They used factor analysis to group these into 27 "summary variables," and performed another factor analysis upon these, which reduced their data to four factors. These factors measured strength of family attachment, having Jewish friends, having broad social commitments, and subscribing to egalitarian values. The Oliners considered the first two of these variables to measure the attachment element of extensivity, and the latter two to measure the inclusiveness element. On average, rescuers scored higher on these four factors than non-rescuers (Oliner and Oliner, 1988, p. 312–324). In a later publication, Pearl Oliner (2004) re-analyzed the 1988 data to show that rescuers were more likely than non-rescuers to have positive feelings towards Jews, Turks, Gypsies, and other members of outsider groups, and that rescuers were more likely to have positive social contacts with Jews and other outsiders.

While Pearl Oliner (2004) considered extensivity in her re-analysis of the Oliners' 1988 data, neither author has generated a new measure of extensivity or tested it on new data. The Oliners produced an edited volume of research on altruism (Oliner et al., 1992), recommendations for constructing a more caring society (Oliner and Oliner, 1995), a theoretical work on altruism and forgiveness (S. Oliner, 2008), a narrative work about a Holocaust rescuer (Oliner and Lee, 1996), and a narrative of Samuel Oliner's own escape from Nazi Europe (S. Oliner, 2000). Samuel Oliner (2003) also studied recipients of the Carnegie medal for heroism, through interviews and a set of quantitative psychological measures. This study used existing measures of social responsibility, internal/external locus of control, self-esteem, empathy, and sensation-seeking (Oliner, 2003, p. 248), but did not include any quantitative measure of extensivity.

2.2. Altruism and prosocial behaviors

As this study examines the relationship between extensivity and helping behaviors, a note on how helping behaviors are defined and conceptualized is in order. Psychologists have studied the motives for helping behavior extensively, and have ar-

gued over whether truly altruistic behavior can even exist (Batson, 1991; Piliavin and Charng, 1990). While Batson (1991) has distinguished other-oriented from self-oriented motivations in his experimental designs, most researchers who study real-life helping behaviors have concluded that people generally have both self-oriented and other-oriented motivations for helping (Batson et al., 2002; Clary et al., 1998; Cnaan and Goldberg-Glen, 1991). For this reason, many social scientists avoid the term "altruism" and refer to "prosocial behavior" instead. While the title of this paper quotes the title of the Oliners' book, *The Altruistic Personality*, in the rest of this paper I follow the more common usage and refer to "prosocial" or "helping" behaviors.

2.3. Other research on extensivity

In addition to the Oliners, two other scholars have studied extensivity, both using only qualitative methods. In an ethnographical and interview study of pro-life activists, Maxwell (2002) found that extensive moral views were an important reason why her subjects made a commitment to activism. Monroe (1996, 2006) interviewed Holocaust rescuers, recipients of the Carnegie Foundation medal for heroism, and philanthropists about their reasons for helping others. After rejecting a number of existing explanations for altruistic behavior, Monroe concluded that what distinguished altruistic people was the fact that they "share a view of the world in which all people are one. This world view appears to bond them to all humanity in an affective manner that encourages altruistic treatment" (Monroe, 1996, p. 198). Monroe's concept of a universalistic moral perspective is essentially identical to the Oliners' concept of extensivity.

Research using social identity theory also tends to support the Oliners' claims about extensivity. Social identity theory (Tajfel, 1981; Tajfel and Turner, 1986) studies how individuals form their sense of self through identification with particular groups, including families, religious congregations, political parties, nation-states, and ethnic groups. Helping other members of these groups, or the group as a whole, can be considered rational and self-interested because an individual's sense of self is founded in that individual's membership in and identification with the group. Social identity theory has been used effectively to explain many actions that do not make sense from the perspective of purely individualistic self-interest (Fowler and Kam, 2007).

Other researchers have examined how feelings of moral obligation to help others differ according to the closeness of the helper's relationship with the other. Two large sample factorial survey studies (Rossi and Rossi,1990; Nock et al., 2006) have demonstrated that most people share a hierarchy of norms of moral obligation. People feel the strongest obligation to help close family members, such as a spouse, child, or parent, and somewhat less obligated to help more distant family members such as grandparents, grandchildren, aunts, uncles, and cousins. They feel even less obligation to help friends, neighbors, and acquaintances, and little or no obligation to help strangers. While people vary somewhat in the strength of these obligations, they do not vary in the general order in which they rank obligations. For example, almost nobody feels more obligated to help a stranger than a friend, or a friend more than a child or parent.

Shalom H. Schwartz (Schwartz, 1977; Schwartz and Fleishman, 1978) developed a cognitive process model that shows how norms of moral obligation motivate decisions to help others. Schwartz distinguished between internal norms, or one's expectations about oneself, and external norms, or others' expectations about one's behavior. Schwartz found that norms of moral obligation did motivate helping, but he disputed the contention made by many psychologists that feelings of moral obligation motivate helping through feelings of guilt. Schwartz noted that "people perform many self-sacrificing acts with little sign of the drivenness or duty-boundedness one typically associates with guilt-avoidance" (Schwartz, 1977:240). Similarly, in their study of the life history narratives of highly altruistic people, Colby and Damon (1992) found that their subjects did not identify guilt or a sense of duty as motivations for helping others.

Lee et al. (1999) found that both internal norms and external norms correlated with plans to engage in volunteering, charitable giving, and blood donation. Other sociologists have studied how external norms partially explain the correlation between membership in social networks and prosocial activities such as volunteering and charitable giving. These norms can exist in any group, but are found particularly in religious groups, fraternal organizations, and some professional organizations and labor unions (Schervish and Havens, 1997, 2002; Wilson, 2000).

Rossi (2001), using data from the 1995 wave of the Midlife in the United States (MIDUS) study, examined how norms of helping in specific domains predicted helping behaviors within those domains. She found that people with a high sense of obligation to help family members were more likely to give money or spend time helping family members, and people with a high sense of obligation to do volunteer work and fulfill civic obligations were more likely to volunteer or donate money to charity.

These earlier studies found that people do have a hierarchy of moral obligations that goes from close others (children and parents) to distant others (strangers), and that moral obligations do motivate helping behaviors. None, however, have studied whether people differ in how strongly they differentiate between the obligations held to close and distant others, or whether individual variation in the strength of this differentiation predicts helping strangers through charitable giving and volunteering. Rossi (2001) connected moral obligations in particular domains with helping behaviors in the same domains, but did not examine whether people had a general orientation towards an extensive or constricted sense of moral obligation. The current study uses moral obligations measures to construct a measure of extensivity and examine its relationship with helping.

2.4. Possible correlates of extensivity

A further goal of this study is to examine whether the relationship between extensivity and prosocial behaviors is a spurious effect of some other causal variable. As this study is the first to examine this issue, my research is exploratory, and I

examined only a small number of variables that have a plausible connection with both extensivity and helping: education, prosocial value orientations, social networks, and previous prosocial action.

Education may correlate with extensivity in that higher education provides individuals with an expanded view of the world, encouraging them to identify with communities outside of their immediate neighborhood and family. As education has been found to be a strong predictor of both volunteering and charitable giving (Independent Sector, 1996; Lee et al., 1999; Wilson, 2000; Wilson and Musick, 1997), the relationship between extensivity and helping may be a spurious effect of a correlation between extensivity and education.

Other prosocial value orientations may underlie the relationship between extensivity and helping. Religion can be an important source of prosocial values, and the emphasis that some religious teaching places on the common humanity of all people may lead religious people to have extensive moral views. Wuthnow (1991), for example, found that knowledge of the Good Samaritan parable, which praises a man who helped a member of a religious enemy group, was a strong predictor of volunteering.

I also examined the role of generativity, a personality trait that McAdams and de St. Aubin (1992) derived from the life stage theory of Erikson (1963). McAdams and de St. Aubin define generativity as the desire to help and pass along knowledge to the next generation. Highly generative people often want to leave a legacy not only for their own children but for all members of the next generation, so generative persons may also have extensive moral views.

Social capital, which consists of trust and social networks (Putnam, 2000), correlates with volunteering and charitable giving (Wilson, 2000; Wilson and Musick, 1997). Membership in broad social networks may lead to extensive moral views, as people who have close relationships with many non-family members in their networks may also feel more obligated to help non-family members. A feeling of greater trust towards non-family members may indicate a feeling of solidarity with broader society, and trusting individuals may be more likely to help others because they expect reciprocal help. Feelings of trust may therefore correlate with feelings of moral obligation towards non-kin others.

Finally, while the correlation between helping behaviors and extensivity may indicate that extensivity causes prosocial action, the reverse may be true. People who do volunteer work and donate to charity may come to feel solidarity with the recipients of their charity, and over time may come to view all human beings as members of their moral community. This change in moral perspective may lead them to engage in still more helping behaviors, creating a causal loop that reinforces both extensive moral feelings and prosocial action. It could also be that altruists developed an extensive moral perspective as an interpretation and justification after the fact for actions that they took for different reasons. The Oliners interviewed rescuers forty years after World War Two, and the passage of time may have changed how they regarded their motivations.

In summary, existing research shows that feelings of moral obligation influence decisions to help others, and that most people feel more obligated to help close others, such as friends and family members, than distant others, such as strangers. The Oliners' theory is plausible in the context of this research, as a person who felt strongly obligated to help distant others would be unusual, and perhaps unusually altruistic. The remainder of this paper tests for the presence of extensivity in individuals' sense of moral obligation, and whether extensivity predicts helping others.

3. Data, methods, results, and discussion

This article uses survey and interview data from the 1995 and 2005 waves of the MacArthur Foundation's Midlife in the United States (MIDUS) study. The MIDUS study was based on a nationally representative random-digit dialing sample of non-institutionalized, English-speaking adults, born between 1920 and 1970. Both telephone and written survey questionnaires were used, and the estimated overall response rate to the first wave was 60.8%. The MIDUS dataset contains weights to adjust for the biases related to the characteristics of non-responders to the first wave, and these weights were used in this study. The main MIDUS survey has a sample size of 3032, and the survey instrument contained nearly 2000 questions. The MIDUS survey contains modules specifically designed to measure volunteering and its correlates, making it a particularly useful source of data for this analysis. Full information about the sample, response rate, weighting, and survey design are contained in the MIDUS codebook, available from the MIDUS website at midmac.med.harvard.edu/research.html.

Only 1490 respondents to the original survey responded to both the telephone and written questionnaire given in the 2005 wave. Three hundred and fifty-five respondents completed only the phone survey in Wave Two, 212 died, and 735 either could not be located or refused to respond to either the phone or the mail survey. Those who responded to both the survey and the telephone questionnaire in the second wave differed from non-responders in several ways that correlate with charitable giving and volunteering. Responders were slightly older than non-responders, had higher incomes and more education, and were more likely to be white and female. They were more likely to be donors to religious and secular charities in the 1995 wave of the survey but were not more likely to be volunteers. Respondents who died between 1995 and 2005 were older than the rest of the sample, had lower education and incomes, were less likely to volunteer in 1995, and were more likely to be male.

This study has three questions: whether extensivity versus constriction is a meaningful way of describing people's sense of moral obligation, whether extensivity predicts prosocial behaviors, and whether the relationship between extensivity and helping can explained by reference to some other causal factor. As the data used to answer the latter two questions builds upon the findings from the earlier questions, I address each one in turn, with a separate methods, results, and discussion section. I then summarize the findings and their implications in the conclusion to the paper.

Table 1
Wording of obligations questions. Here is a list of hypothetical situations. Please rate how much obligation you would feel if they happened to you, using a 0–10 scale where 0 means "no obligation at all" and 10 means "a very great obligation." If the situation does not apply to you, please think about how much obligation you would feel if you were in this situation.

Variable	Question	Mean	Standard deviation
How much obligation would you feel...			
Drop plans for child	To drop your plans when your children seem very troubled?	8.9	1.8
Contact child	To call, write, or visit your adult children on a regular basis?	7.8	2.3
Take child in home	To take your divorced or unemployed adult child back into your home?	7.4	2.6
Call parents	To call your parents on a regular basis?	8.0	2.5
Drop plans for spouse	To drop your plans when your spouse seems very troubled?	8.6	2.3
Raise friend's child	To raise the child of a close friend if the friend died?	7.2	2.7
Take friend in home	To take a friend into your home who could not afford to live alone?	6.1	2.7
Give money to friend	To give money to a friend in need, even if this made it hard to meet your own needs?	6.4	2.6
Do more on job	To do more than most people would do on your kind of job?	8.0	2.0
Work hard	To work hard even if you didn't like or respect your employer or supervisor?	8.2	2.9
Work overtime	To cancel plans to visit friends if you were asked, but not required, to work overtime?	6.7	2.6
Vote	To vote in local and national elections?	8.0	2.7
Jury duty	To serve on a jury if called?	7.2	3.0
Stay informed	To keep fully informed about national news and public issues?	7.1	2.4
Testify in court	To testify in court about an accident you witnessed?	8.0	2.2
Volunteer or donate	To volunteer time or money to social causes you support?	6.3	2.6
Vote for redistributive tax	To vote for a law that would help others worse off than you but would increase your taxes?	5.4	2.9
Pay more for health care	To pay more for your health care so that everyone had access to health care?	5.8	2.9
Collect money for charity	To collect contributions for heart or cancer research if asked to do so?	5.8	2.9

3.1. Question 1. Is extensivity versus particularism a valid way to classify variation in moral views?

3.1.1. Method

The MIDUS survey has 19 questions about felt levels of moral obligation across a range of domains. Each question presents a hypothetical situation and asks respondents how obligated they would feel to help or act in that situation, on a scale from zero to 10. The questions ask about obligations to help friends and family members, obligations to one's employer, obligations to perform civic duties, and obligations to help unknown others through volunteering or other prosocial actions. Complete wordings for each question are listed in Table 1.

To determine whether people distinguish between extensive and constricted moral obligations, I used principal components analysis. If extensivity versus constriction is a valid way of describing moral thinking, then individual responses to the moral obligations questions should follow a pattern. Constricted respondents should have high values on the questions about obligations to help friends and family, and low scores on the questions about obligations to civic institutions and unknown others. Extensive respondents should report a nearly equal sense of obligation to both groups.

3.1.2. Results

Principal components analysis revealed four factors with Eigenvalues greater than one, which explained 32.4%, 10.5%, 8.5%, and 5.8% of the variance separately, and 57.3% of the variance taken together. As unrotated principal components analysis was used, the correlation between each factor and the others is zero.[2]

All 19 variables loaded positively on the first factor (Table 2), with extraction values ranging from .388 to .704. This factor measures each respondent's overall sense of moral obligation across domains. For the second factor, questions measuring obligations to children, friends, parents, and one's spouse loaded negatively, with extractions ranging from −.254 to −.455. Questions about obligations to help unknown others through volunteering, voting for a redistributive tax, and paying more for health care loaded positively, with extractions ranging from .138 to .215. Obligations to perform civic duties such as voting, keeping informed about issues, testifying in court, and serving on a jury loaded positively, with extractions from .331 to .518. The three questions about obligations to one's employer also loaded positively on this second factor, with extractions from .142 to .193. This second factor measures extensivity, with positive scores representing an extensive moral outlook and negative scores representing a constricted outlook.

As the third and fourth factors do not relate to extensivity, I discuss them only briefly. The third factor shows positive loadings for civic duties and family obligations, and negative loadings for charitable activities and redistributive tax and health care policies. It may measure a socially and politically conservative way of thinking in which civic engagement

[2] I used factor scores derived from the unrotated principal components analysis for part two of this paper, as the orthogonal relationship among factors makes the factor scores uncorrelated, which prevents collinearity from interfering with statistical significance in the regression analysis. However, I did examine whether an oblique rotation would indicate a correlation between one's overall sense of moral obligation and extensivity. When I rotated the first two factors using Promax rotation, the variables measuring obligations to work, civil society, and volunteering loaded on the first factor, and the variables measuring obligation to friends and family loaded on the second. The two factors correlated at .476, indicating that a sense of obligation to close others correlates moderately with a sense of obligation to distant others.

Table 2
Principal components analysis: component matrix.

Obligation measure	Component			
	1	2	3	4
Drop plans for child	.556	−.352	.376	−.074
Contact child	.602	−.359	.254	−.117
Take child in home	.600	−.455	−.024	.032
Call parents	.551	−.254	.128	−.061
Drop plans for spouse	.455	−.276	.397	−.179
Raise friend's child	.567	−.412	−.091	−.048
Take friend in home	.620	−.410	−.280	.011
Give money to friend	.622	−.313	−.258	.040
Do more on job	.605	.142	.245	.419
Work hard	.578	.175	.275	.513
Work overtime	.442	.193	−.052	.628
Testify in court	.615	.331	.251	−.194
Serve on jury	.517	.394	.182	−.246
Stay informed	.563	.433	.226	−.152
Vote	.494	.518	.232	−.194
Collect money for charity	.593	.138	−.372	−.142
Pay for others' health care	.544	.161	−.520	.079
Vote for redistributive tax	.568	.248	−.503	−.103
Obligation to volunteer	.662	.215	−.297	−.147

and helping family are seen as a duty, but charity is seen as optional and redistributive government policies are viewed negatively. The three work obligations questions load positively on the fourth factor between .419 and .628, and all other questions load at less than .250, indicating that this factor primarily measures one's sense of obligation in the workplace.

3.1.3. Discussion

Principal components analysis supports the view that individuals vary in both their general sense of moral obligation across domains (Factor 1) and the ratio between close-other and distant-other obligations (Factor 2), or extensivity. The common pattern to responses supports the Oliners' contention that extensivity versus constriction is a meaningful way to classify individual variation in norms of moral obligation.

3.2. Question 2. Does extensivity predict engagement in prosocial behaviors?

3.2.1. Method

I created two factor scales out of the moral obligations questions. The scale generated from the first factor measures how strongly respondents feel an obligation to help across all domains, and the scale generated from the second factor measures extensivity versus constriction, or the ratio of obligation to help close and distant others. I then regressed the variables measuring prosocial behaviors on these two factor scales, using both the 1995 and the 2005 measures of prosocial behaviors.

The Oliners did not find that extensive and constricted individuals differed on the level of help they extended to family and friends. What distinguished extensive people were that they were willing to include strangers in circle of moral obligation and helping that most people reserved for friends and family. Accordingly, one would expect extensivity to have a positive relationship with helping strangers but no relationship with helping friends and family. If the Oliners are correct, the regression analyses should show that overall moral obligation predicts all helping behaviors, but that extensivity only predicts helping non-kin others.

I tested the ability of moral obligations measured in 1995 to predict helping behaviors in both the 1995 and the 2005 wave of the MIDUS study. Both the 1995 and 2005 helping measures have certain advantages and disadvantages. The 1995 wave is a larger and more representative sample, but is cross-sectional, and this makes causality uncertain. Using the 2005 data makes for a stronger inference to causality, but the high attrition rate between waves makes the combined 1995 and 2005 sample less representative. If the 1995 moral obligations data predict helping behaviors in both the 1995 and 2005 waves of the study, this will provide better support for the theory of extensivity than a relationship found in one wave only. A relationship found in the 1995 wave would indicate correlation in a large, representative sample, and a relationship between extensivity measured in the 1995 wave and helping in the 2005 wave would provide stronger evidence for causality than a relationship found only in cross-sectional data from the 1995 wave.

I tested the ability of overall moral obligations and extensivity to predict participation in five helping behaviors: volunteering, donations to religious charities and institutions, donations of money to family members, donations to secular charities, and donations of time to family members. The MIDUS survey asks respondents how many hours they spend volunteering, how many dollars they donate to religious institutions, and how many dollars they donate to secular charities in an average month. Political volunteering and political donations are not included in these measures of altruistic behavior, nor is participation in non-altruistic voluntary organizations such as professional groups, unions, sports teams, social clubs,

Table 3
Descriptive statistics for helping behaviors.

	Percent who engage in the activity	Mean dollars or hours per month*	Median*	Standard deviation*
1995 data (N = 3032)				
Charitable volunteering	36.8	14.39	8.00	20.51
Donations to religious institutions	43.0	116.02	50.00	205.51
Donations to other charitable institutions	40.0	44.47	20.00	380.94
Volunteer assistance to family	59.4	27.74	10.00	50.13
Financial assistance to family	36.4	185.46	100.00	323.61
2005 data (N = 1490)				
Charitable volunteering	41.3	13.52	8.00	15.04
Donations to religious institutions	48.1	289.45	100.00	1077.21
Donations to other charitable institutions	47.5	99.59	25.00	298.77
Volunteer assistance to family	70.2	35.98	15.00	67.90
Financial assistance to family	49.1	400.16	125.00	2054.05

* For those who give more than zero.

and hobby groups. MIDUS also asks respondents how much money and how much time they give to help family members in a typical month. The questions and response categories are similar to the questions about volunteering and charitable giving, making a comparison among categories possible.

The distributions of the variables measuring helping behaviors were not normal, with the modal category being zero, the largest proportion of respondents doing only a small amount of each altruistic behavior, and a few individuals donating large amounts of time or money. Table 3 shows the percentage that engaged in each helping behavior in both 1995 and 2005, and then gives the mean, median, and standard deviation for those who did engage in these activities. A little over a third of the sample engages in volunteer work in a given month, and nearly half of all respondents give money to religious and secular charities. A larger proportion of respondents gave money and time to family members, but the distributions of these variables are also skewed, with a small number of respondents giving a large amount of assistance.

The skewed nature of the distribution of the dependent variables and the large number of zero responses made ordinary least squares regression unusable, so Tobit regression was used instead (Breen, 1996). I truncated the dependent variables at the 99% level to prevent outliers from biasing the regression coefficient.

3.2.2. Findings

Table 4 reports slope coefficients and statistical significance for bivariate Tobit regressions of helping variables on moral obligations and extensivity. Both the 1995 and 2005 measures of helping behaviors were regressed upon the 1995 measures of overall obligations and extensivity.

In the regression equations using 1995 measures of helping, the variable measuring an individual's overall sense of moral obligation was a positive and statistically significant predictor of all five types of helping behaviors. Extensivity predicted helping non-kin others through volunteering, secular charitable giving, and religious giving. However, it had no statistically

Table 4
Tobit regressions of moral obligation and extensivity on non-kin and kin helping.

	Moral obligation		Extensivity	
	Slope	*p* Value	Slope	*p* Value
1995 data (N = 3032)				
Helping non-family				
Volunteering	5.07	<.001	1.74	<.001
Religious giving	31.94	<.001	18.99	<.001
Secular giving	11.33	<.001	10.08	<.001
Helping family				
Helping family (time)	3.64	<.001	−3.14	<.001
Helping family (money)	41.66	<.001	−10.91	.107
2005 data (N = 1401)				
Helping non-family				
Volunteering	2.82	<.001	1.62	.007
Religious giving	45.39	.001	41.21	.002
Secular giving	16.86	.007	29.85	.003
Helping family				
Helping family (time):	4.06	<.001	−5.58	<.001
Helping family (money):	14.64	.091	−.08	.992

significant relationship with giving money to family members, and a statistically significant but negative relationship with spending time helping family members.

In the regression equations using 2005 measures of helping, overall obligations predicted all helping behaviors except giving money to family members. Extensivity predicted volunteering and secular giving, but not religious giving. As with the 1995 measures, extensivity had no statistically significant relationship with giving money to family members, and a statistically significant but negative relationship to spending time helping family members.

3.2.3. Discussion

Extensivity had the expected significant and positive relationship with helping distant others in both the cross-sectional and longitudinal analyses, with the exception of religious giving in 2005. Also as expected, extensivity did not correlate positively with helping family members. A respondent's general sense of moral obligation did predict helping family members, with the exception of helping family in 2005. These results support the Oliners' theory.

3.3. Question 3. Is extensivity an independent predictor of prosocial behaviors, or merely an expression of some known cause of prosocial action?

While the analysis above indicates that extensivity describes how people structure their sense of moral obligation and predicts prosocial behavior, it is still possible that the relationship between extensivity and helping is spurious. Some other factor may cause individuals both to help non-kin others and to feel morally obligated to help them.

3.3.1. Method

I tested for spurious relationships by seeing whether there were bivariate correlations between extensivity and variables measuring education, religiosity, generativity, social networks, and trust. I also tested to see whether extensivity remained a statistically significant predictor of helping in multivariate regression models containing these other variables.

The MIDUS survey measures education using a twelve point ordinal scale, ranging from less than a high school education to a doctoral degree or equivalent. As a measure of religiosity, I used the number of times per month a respondent attended religious services. The MIDUS survey measured generativity with a six-item reduction of the Loyola Generativity Scale (McAdams and de St. Aubin, 1992).

Social networks were measured by monthly attendance at meetings of non-political and non-religious voluntary associations, such as social clubs, sports teams, professional associations, and fraternal groups. The MIDUS study also has a four-item measure of trust and integration into one's community derived from Keyes (1998), which measures how much individuals trust their neighbors, feel safe in their neighborhoods, and feel that they can call on their neighbors when they need help.

3.3.2. Findings

These other causal variables had statistically significant but substantively small correlations with extensivity. Extensivity correlated with education at $R = .091$ ($p < .001$), religious services attendance at $R = .053$ ($p < .01$), and generativity at $R = .062$ ($p < .001$). Extensivity correlated with attendance at meetings of voluntary associations at $R = .043$ ($p < .05$), and trust in one's community at $R = .077$ ($p < .001$).

When these variables were included with extensivity in a multivariate models predicting volunteering and charitable giving, extensivity remained significant in three out of six models. Extensivity remained a significant predictor of religious giving and secular giving in 1995, but not volunteering in 1995, and extensivity remained a significant predictor of secular giving in 2005, but not volunteering or religious giving in 2005. I tested to see which independent variable caused extensivity to become non-significant in the multivariate models by adding the variables one at a time to the regression equations. I found that no single variable caused extensivity to become non-significant, but any two independent variables added together did. In other words, extensivity cannot be reduced to a single variable such as education or religiosity, but its correlations with these variables causes it to become non-significant in models containing two or more of them. Full results are available from the author upon request.

3.3.3. Discussion

The data provided mixed support for the hypothesis that extensivity is an independent predictor of helping. The weak correlations between extensivity and the other variables, and the fact that extensivity retains statistical significance in three of the six multivariate models, support this hypothesis. However, the fact that extensivity loses significance in the other three models indicates that extensivity may not be an independent cause. No single independent variable caused extensivity to lose statistical significance, so the correlation between extensivity and helping does not seem to be a spurious effect of some other single variable.

While the loss of significance in the full models could be interpreted as evidence that extensivity is not an independent cause of helping, it could also be interpreted as support for the Oliners' statements about the origins of extensivity. Their subjects stated that their extensive sense of moral obligation had a source in internal moral principles, and the values of social, religious, and political groups to which they belonged. Education and religious attendance could be considered proxy

measures of independent moral principles, and attendance at religious services and meetings of voluntary associations may indicate membership in groups which support extensive moral values. Further research, using measures specifically designed for the purpose, is needed to clarify the nature of these relationships.

4. Conclusion

In general, the results support the Oliners' theory that extensivity predicts prosocial behavior. The factor analysis supports their contention that extensivity versus constriction is a valid way to describe how individuals structure their sense of moral obligation. Regression analysis showed that extensivity consistently predicts volunteering and charitable giving in both the cross-sectional and panel data.

This study provides mixed support for the contention that extensivity is an independent predictor of prosocial behaviors. Extensivity correlates only weakly with other causes of prosocial behavior, and is a statistically independent predictor of prosocial behavior in three out of six multivariate regression equations containing these other predictors. However, in other multivariate models, extensivity does become non-significant. Further research is needed to clarify the relationship between extensivity and other predictors of prosocial behavior.

While this study found empirical support for the Oliners' theory of extensivity, there are a number of limitations to its findings. Since the data were collected using self-reported surveys, errors in recollection of helping behaviors and social desirability bias may affect the results. While spuriousness was tested using a few measures of other predictors of helping behaviors, it is possible that some other, untested variable explains the relationship between extensivity and helping. Finding a relationship between extensivity measured in 1995 and helping measured in 2005 provides some support for causality, but further research would be needed, using a different design, to examine whether the relationship between extensivity and helping is truly causal.

Finally, the current study measured ordinary prosocial behaviors, while the Oliners studied an extreme form of prosocial behavior: helping a member of a different and stigmatized religious and ethnic group, at great personal risk to oneself. Most volunteering and charitable giving helps a group that the donor belongs to, and rarely involves personal risk. Given how different ordinary giving and volunteering are from the extreme altruism of Holocaust rescuers, it is striking that this study found a relationship between these ordinary prosocial behaviors and extensivity. Future research should distinguish between the types of risky helping behaviors studied by the Oliners, and the types of ordinary, non-risky helping behaviors that constitute all charitable giving and most volunteering. Future research should also distinguish between more and less altruistic forms of volunteering and charitable giving. Extensivity may correlate more with donating time and money to a charity that exclusively benefits others, and less with donating time and money to an organization that the donor belongs to and benefits from, such as a church or community organization.

The Oliners' theory of extensive moral obligations is original and compelling, and it has not received the research attention that it deserves. This study provides quantitative evidence to support of the validity of the construct of extensivity, and the theory that extensivity motivates prosocial behavior. This study used a measure derived from a survey constructed for other purposes, so the next step is for psychologists to construct and validate an instrument specifically designed to measure extensivity. Future researchers should also examine the correlation between extensivity and engagement in a range of prosocial behaviors, including helping behaviors directed towards members of outsider groups. Further research is also needed on what causes people to develop an extensive moral orientation, and how this orientation changes through the life course. I believe the Oliners' concept of extensivity to be an important insight into what motivates altruistic behavior, and I hope that this article will encourage more exploration of this concept.

References

Andreoni, J., 1990. Impure altruism and donations to public goods: a theory of warm-glow giving? Economic Journal 100, 464–477.
Batson, C.D., 1991. The Altruism Question: Toward a Social-Psychological Answer. Lawrence Erlbaum Associates, Hillsdale, NJ.
Batson, C.D., Ahmad, N., Tsang, J., 2002. Four motives for community involvement. Journal of Social Issues 58, 429–445.
Boyd, R., 1990. Culture and cooperation. In: Mansbridge, J. (Ed.), Beyond Self-Interest. University of Chicago Press, Chicago, pp. 111–132.
Breen, R., 1996. Regression Models: Censored, Sample Selected, or Truncated Data. Sage, Thousand Oaks, CA.
Clary, M., Snyder, E.G., 1991. A functional analysis of altruism and prosocial behavior: the case of volunteerism. Review of Personality and Social Psychology 12, 119–148.
Clary, E.G, Snyder, M., Ridge, R.D., Copeland, J., Stukas, A.A., Haugen, J., Miene, P., 1998. Understanding and assessing the motivations of volunteers: a functional approach. Journal of Personality and Social Psychology 74, 1516–1530.
Cnaan, R.A., Goldberg-Glen, R.S., 1991. Measuring motivation to volunteer in human services. Journal of Applied Behavioral Sciences 27, 269–284.
Colby, A., Damon, W., 1992. Some Do Care: Contemporary Lives of Moral Commitment. Free Press, New York.
Erikson, E., 1963. Childhood and Society, second ed. Norton, New York.
Field, T., 1996. Attachment and separation in young children. Annual Review of Psychology 47, 541–561.
Fowler, J.H., Kam, C.D., 2007. Beyond the self: social identity, altruism, and political participation. Journal of Politics 69, 813–827.
Healy, K., 2004. Altruism as an organizational problem: the case of organ procurement. American Sociological Review 69, 387–404.
Independent Sector, 1996. Giving and Volunteering in the United States: Findings from a National Survey. Independent Sector, Washington, DC.
Keyes, C.L.M., 1998. Social well-being. Social Psychology Quarterly 61, 121–137.
Lee, L., Piliavin, J.A., Call, V.R.A., 1999. Giving time, blood, and money: differences and similarities. Social Psychology Quarterly 62, 276–290.
Mansbridge, J. (Ed.), 1990. Beyond Self Interest. University of Chicago Press, Chicago.
Maxwell, C.J.C., 2002. Pro-life Activists in America: Meaning, Motivation, and Direct Action. Cambridge University Press, Cambridge, England.
McAdams, D., de St. Aubin, E., 1992. A theory of generativity and its assessment through self-report, behavioral acts, and narrative themes in autobiography. Journal of Personality and Social Psychology 62, 1003–1015.

McAdams, D.P., Hart, H.M., Maruna, S., 1998. The anatomy of generativity. In: McAdams, D.P., de St. Aubin, E. (Eds.), Generativity and Adult Development: How and Why We Care for the Next Generation. American Psychological Association, Washington, DC, pp. 7–43.
Monroe, K.R., 1994. A fat lady in a corset jacket: altruism and social theory. The American Journal of Political Science 38, 861–893.
Monroe, K.R., 1996. The Heart of Altruism: Perceptions of a Common Humanity. Princeton University Press, Princeton, NJ.
Monroe, K.R., 2006. The Hand of Compassion: Portraits of Moral Choice During the Holocaust. Princeton University Press, Princeton, NJ.
Nock, S.L., Kingston, P.W., Holian, L.M., 2006. The distribution of obligations. Paper Presented at the National Symposium on Family Issues, Pennsylvania State University, October 2006.
Oliner, P.M., 2004. Saving the Forsaken: Religious Culture and the Rescue of Jews in Nazi Europe. Yale University Press, New Haven.
Oliner, P.M., Oliner, S.P., 1995. Toward a Caring Society: Ideas into Action. Praeger, Westport, CT.
Oliner, P.M., Oliner, S.P., Baron, L., Blum, L.A., Krebs, D.L., Smolenska, M.Z. (Eds.), 1992. Embracing the Other: Philosophical, Psychological, and Historical Perspectives on Altruism. New York University Press, New York.
Oliner, S.P., 2000. Narrow Escapes: A Boy's Holocaust Memories and their Legacy. Paragon House, St. Paul, Minnesota.
Oliner, S.P., 2003. Do Unto Others: Extraordinary Acts of Ordinary People. Westview Press, Cambridge, Mass.
Oliner, S.P., 2008. Altruism, Intergroup Apology, Forgiveness, and Reconciliation. Paragon House, St. Paul, MN.
Oliner, S.P., Lee, K., 1996. Who Shall Live: The Wilhelm Bachner Story. Academy Chicago Publishers, Chicago.
Oliner, S.P., Oliner, P.M., 1988. The Altruistic Personality. Free Press, New York.
Penner, L.A., Dovidio, J.F., Piliavin, J.A., Schroeder, D.A., 2005. Prosocial behavior: multilevel perspectives. Annual Review of Psychology 56, 365–392.
Piliavin, J.A., Charng, H., 1990. Altruism: a review of recent research. Annual Review of Sociology 16, 27–65.
Piliavin, J.A., Callero, P.L., 1991. Giving Blood: The Development of an Altruistic Identity. Johns Hopkins University Press, Baltimore.
Putnam, R., 2000. Bowling Alone: The Collapse and Revival of American Community. Simon and Schuster, New York.
Ray, L., 1998. Why we give: testing economic and social psychological accounts of altruism. Polity 30, 383–416.
Rossi, A.S. (Ed.), 2001. Caring and Doing for Others: Social Responsibility in the Domains of Work, Family, and Community. University of Chicago Press, Chicago.
Rossi, A.S., Rossi, P.H., 1990. Of Human Bonding: Parent–Child Relations Across the Life-Course. Aldine de Gruyter, New York.
Schervish, P.G., Havens, J.J., 1997. Social participation and charitable giving: a multivariate analysis. Voluntas 8, 235–260.
Schervish, P.G., Havens, J.J., 2002. The Boston area diary study and the moral citizenship of care. Voluntas 13, 47–71.
Schwartz, S.H., 1977. Normative influences on altruism. Advances in Experimental Social Psychology 10, 221–279.
Schwartz, S.H., Fleishman, J.A., 1978. Personal norms and the mediation of legitimacy effects on helping. Social Psychology 41, 306–315.
Smith, T.W., 2003. Altruism in Contemporary America: A Report From the National Altruism Study. National Opinion Research Center, Chicago.
Sober, E., Wilson, D., 1998. Unto Others: The Evolution and Psychology of Unselfish Behavior. Harvard University Press, Cambridge, Massachusetts.
Sorokin, P., 1950. Altruistic Love: A Study of American Good Neighbors and Christian Saints. Beacon Press, Boston.
Sorokin, P., 1954. The Ways and Powers of Love: Types, Factors, and Techniques of Moral Transformation. Beacon Press, Boston.
Tajfel, H., 1981. Human Groups and Social Categories. Cambridge University Press, Cambridge.
Tajfel, H., Turner, J.C., 1986. The social identity theory of in-group behavior. In: Worchel, S., Austin, L.W. (Eds.), Psychology of Intergroup Relations. Nelson-Hall, Chicago.
Wilson, J., 2000. Volunteering. Annual Review of Sociology 26, 215–240.
Wilson, J., Musick, M., 1997. Who cares? Towards an integrated theory of volunteer work. American Sociological Review 62, 694–713.
Wuthnow, R., 1991. Acts of Compassion: Caring for Others and Helping Ourselves. Princeton University Press, Princeton.