The Effects of Race, Gender, and Marital Status on Giving and Volunteering in Indiana

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The purpose of this study is to examine the effects of race, gender, and marital status on giving and volunteering behavior. A second purpose is to examine these effects across different survey methodologies. Using data from Indiana households, a multi-method, multigroup research design was used to compare giving and volunteering across eight different survey methodologies. Results indicate important differences in philanthropic behaviors by gender, race, marital status, and survey methodology—even when controlling for differences in income, age, and educational attainment. These results highlight the importance of looking specifically at human and social capital variables, and survey methodology, when making assumptions about and interpreting the measurement of philanthropic behavior.

**Keywords:** giving; volunteering; race; gender

Giving in the United States has more than doubled in the past decade (Giving USA Foundation, 2004); 89% of households gave charitable contributions in 2000 (M. Hall, 2000, 2001; Independent Sector, 2001)—higher percentages than previously reported studies. The latest findings from *Giving USA 2004* show increases in total giving and giving by individuals in almost all areas of the nonprofit sector (Giving USA Foundation, 2004). Similarly, 44% of adults older than...
age 21 years volunteered with a formal organization, 69% of those who volunteered reported that they did so on a regular basis (Independent Sector, 2001).

At the same time, the demographic composition of the United States is undergoing dramatic shifts resulting in changes in our nation’s social and economic environment. Compared with the demographics 20 years ago, more women and people of color now participate in the American workforce and our other institutions (Riccucci, 2002). As the percentages of giving and volunteering increase, in combination with the changing nature of our workforce, comparative multiracial and gender research will become ever more important in understanding the dynamics of giving and volunteering (Carson, 1993). Carson (1993) implored researchers to “incorporate issues of race, gender, and culture into the routine study” of academic disciplines. This is particularly important given that women increasingly are in control of more charitable dollars (Kaplan & Hayes, 1993), and where minorities in cities are becoming majorities (Carson, 1993). Yet “women’s philanthropy has received little systematic attention within the field of non-profit studies” (McCarthy, 1996, p. 332). Reliable empirical data that distinguish between the characteristics of male and female donors are scarce (Kaplan & Hayes, 1993), and even less is known about race or ethnic differences (Wilson, 2000).

In addition to race and gender, researchers in this field have been interested in the human and social capital that influences people as to whether they give their time and money for the benefit of others (Bryant, Jeon-Slaughter, Kang, & Tax, 2003). Volunteering may be undertaken as a form of investment in human and social capital in making the decision to donate time and money. Human capital includes age, education, skills, and experience. Human capital theory views these factors as the major source of a worker’s productivity and posits a rationale for research findings of the positive correlation between age and education and/or experience and earnings. General investment in human capital can be readily transferred, making an individual more productive across a variety of jobs and occupations (Becker, 1993). Social capital refers to the social networks and connections people possess that allow them access to social markets. Social capital includes prior social participation and one’s marital status (Janoski, Musick, & Wilson, 1998). Single and divorced individuals are less connected with social networks than are married people—primarily because married people share each other’s social networks (Bryant et al., 2003).

Menchik and Weisbrod (1987) extended human capital theory to voluntary behaviors. In their model, voluntarism is regarded as a means to increase one’s labor market value. Furthermore, by having the right kind of social connections, while improving and expanding one’s skill set through volunteering, individuals further advance their labor market value and gain access to higher level jobs. Volunteering is a way to create those connections and to learn new skills. As such, many volunteers discount the cost of their free labor because they see volunteering as benefiting themselves. (For literature on
motonizations for volunteering, see Clary, Snyder, & Ridge, 1992; Clary, Snyder & Stukas, 1996; Cnaan & Goldberg-Glen, 1991.)

There is strong empirical evidence in favor of a human and social capital perspective with respect to philanthropic behaviors (e.g., Andreoni, Brown, & Rischall, 2001; Brooks, 2005; Brown & Lankford, 1992; Bryant et al., 2003; Gallagher, 1994; Hayghe, 1991; Lammers, 1991; Menchick & Weisbrod, 1987; Rosenthal, Feiring, & Lewis, 1998; M. T. Smith, 2002; Wilson & Musick, 1997, 1998). In general, this research has found a greater likelihood of volunteer participation for individuals with more human and social capital (e.g., Brown & Lankford, 1992; Bryant et al., 2003; M. T. Smith, 2002). Conversely, a shortage of human and social capital might be a reason for not volunteering (Musick, Wilson, & Bynum, 2000).

The purpose of the current study is to examine race, gender, and marital status differences on giving and volunteering behavior. One’s gender, race, and marital status affect an individual’s human and social capital and are reflected “in the gendered and racial roles people play and are allowed to play” (Bryant et al., 2003, p. 46). Although there are several studies examining gender differences in giving and volunteering, race differences only lately have begun to receive serious study (e.g., Conley, 2000; Latting, 1990; Musick et al., 2000; Rooney, Mesch, Chin, & Steinberg, 2005), and even less is known regarding marital status.

A second purpose of the current study is to examine these differences across different survey methodologies. Researchers and practitioners have been paying closer attention to the methodology by which giving and volunteering behavior have been measured, mainly because estimates of the amount of philanthropic behavior rely heavily on the methods and measures of each survey (Rooney, Steinberg, & Schervish, 2001, 2004; Steinberg, Rooney, & Chin, 2002). Steinberg et al. (2002) found that the longer and more detailed the questions asked, the more likely individuals responded that they had volunteered and reported volunteering more hours. Similarly, Rooney et al. (2001, 2004) found the same pattern of results for giving; the longer the survey and more detailed the prompts, the more likely a household was to recall that it made a charitable contribution, and the higher the average level of its reported giving. These recent findings on the measurement of giving and volunteering behavior suggest that “methodology is destiny” (Rooney et al., 2004) and methodological considerations need to be taken into account when interpreting research findings on giving and volunteering.

Although much empirical work has included race, gender, and marital status as control variables in research on giving and volunteering, we found little prior research that looked at the these variables as a function of survey methodology. Rooney et al. (2005) found that the interaction effects between the methods and gender and/or race suggested that women and minorities, especially female minorities, responded to the survey methodologies differently from men and Whites. We anticipate that if there are differences in
giving or volunteering by race and/or by gender, some of those differences may be a result of how different groups “hear” or respond to the questions (Bertrand & Mullainathan, 2001); that is, there may be differences in reported giving and/or volunteering by race and/or gender arising from differences in how the groups process the request for information or understand the connotations of words (Huer & Saenz, 2003).

Although there is a paucity of research in this area, there is some empirical research to indicate these differences do occur. Groves, Fultz, and Martin (1991) found that male and female respondents inferred different meanings to a series of health-related questions and produced very different kinds of information depending on their comprehension of the question. Loftus, Smith, Klinger, and Fiedler (1991) found gender differences in recall where respondents were asked how many times they saw or spoke to a medical doctor during the past 12 months, and the misreporting of voting has been found to be higher in certain demographic groups (Bertrand & Mullainathan, 2001). With regard to philanthropic behavior, B. Smith, Shue, Vest, and Villareal (1999) described ethnographic differences with some minority groups describing their philanthropic activities as “sharing” and “helping” (p. 6) rather than “charity.” Ramos and Kasper (2000) stated, “nonprofit fundraisers must appeal to prospective Latino donors differently than they would mainstream white donors” (p. 22). These differences may affect how diverse cultural groups think about and report giving and volunteering behavior.

GENDER AND GIVING AND VOLUNTEERING

It has long been thought that altruism or prosocial behavior is more highly developed in women than in men (Eisenberg, 1992; Mills, Pedersen, & Grusec, 1989), and the more recent empirical research suggests that women appear to be more charitable than their male counterparts, (e.g., Anderson, 1993; Andreoni & Vesterlund, 2001; Belfield & Beney, 2000; Bolton & Katok, 1995; Gallagher, 1994; Lammers, 1991; Maslanka, 1993; O’Brien, Sedlacek, & Kandell, 1994). The body of research in this area indicates significant gender differences in attitudes and beliefs about caring and self-sacrifice (e.g., Belle, 1982; Eagly & Steffen, 1984), altruism, and empathy (e.g., Andreoni & Vesterlund, 2001; Feshbach, 1982; Hoffman, 1977; Mills et al., 1989; Wilson & Musick, 1997), social reasoning (e.g., Gilligan, 1982), role-related norms and motives (e.g., Piliavin & Unger, 1985), and care and well-being of others (e.g., Gilligan & Attanucci, 1988; Lyons, 1983).

The research examining gender effects on volunteering has found differences as well. In general, national survey data and bivariate results show that women volunteer more than men (e.g., Hodgkinson, Weitzman, Noga, & Gorski, 1992; Independent Sector, 2001). This finding appears to be consistent across age groups (Gallagher, 1994; O’Brien et al., 1994; Trudeau & Devlin, 1996). Other empirical research indicates that gender makes a difference depending on the variable being measured—such as the amount of time and
frequency of volunteering, (Chambre, 1984; Gallagher, 1994; Rosenthal et al., 1998; Todd, Davis, & Cafferty, 1984), motives for volunteering (Maslanka, 1993; Trudeau & Devlin, 1996), interest in volunteering (Trudeau & Devlin, 1996), leadership roles (Thompson, 1995), the nature of the institution (Schlozman, Burns, & Verba, 1994), and volunteer commitment (Lammers, 1991).

In terms of giving, however, there is a paucity of empirical research. Recent reports have found women to be more philanthropic than men (i.e., Council of Economic Advisors, 2000; Independent Sector, 1995). Among donors who gave U.S. $500 or more, single women gave more often than single men, although no difference was found in the amount given between men and women (Council of Economic Advisors, 2000). “Men tend to give to enhance their own standing or maintain the status quo, it is believed, while women give to promote social change or help others less fortunate” (H. Hall, 2004, p. 71). Some research has found that significantly more women than men left bequests to charity (although the annual dollar value of bequests by men exceeded that of women; Johnson & Rosenfeld, cited in Kaplan & Hayes, 1993), gave significantly more money to their religious organizations, (Schlozman et al., 1994), and were more generous alumni than male graduates (Belfield & Beney, 2000). This may be explained, in part, by the notion that women desire involvement with organizations to which they contribute their money (Kaplan & Hayes, 1993) and are more interested in affecting change with their giving (Sublett, 1993), whereas men make gifts for purposes of recognition and status (Kaplan & Hayes, 1993). Colleges and religious organizations meet this criterion of involvement for women. In contrast, one recent experiment that used a dictator game, where women and men were allowed to split money with a stranger, found that women gave systematically less to women as compared to men and persons of unknown gender; no such finding for men giving to others was found (Ben-Ner, Kong, & Putterman, 2004).

RACE AND GIVING AND VOLUNTEERING

The literature on race or ethnic differences in explaining giving and volunteering has not received as much attention in the theoretical and empirical literature as gender—and the results are more ambiguous (Wilson, 2000). The dominant status model developed by Lemon, Palisi, and Bennett-Sandler (1972) and further elaborated by D. H. Smith (1983, 1994) would predict less participation for minorities because of their less prevalent social positions and roles within our sociocultural system. In general, most studies find that Whites do volunteer more than Blacks and Latinos (e.g., Bryant et al., 2003; Cannon, Higginbotham, & Leung, 1988; Gallagher, 1994; Sundeen, 1992; Todd et al., 1984); however, this often depends on whether bivariate or multivariate techniques are employed (D. H. Smith, 1994) or whether the individual was asked to volunteer (Bryant et al., 2003, Musick et al., 2000).
Several studies have found that racial differences in giving and volunteering disappear after controlling for human capital variables of education, income, and occupational status (Clary et al., 1996; Latting, 1990; Musick et al., 2000; O’Neill, 2001; Rooney et al., 2005; Woodard, 1987). Human capital theory would predict racial differences in giving and volunteering because minority group members typically have fewer individual resources (Wilson, 2000). However, Morrow-Howell, Lott, and Ozawa (1990) found that Black volunteers who served Black clients in a community self-help program committed more time and were seen as more helpful by clients than Black volunteers who served White clients. For White volunteers, the pattern was similar (p. 400). Van Slyke and Eschholz (2002) found that Blacks were more likely to volunteer than Whites, even when using multivariate analysis. Although, when they partitioned their sample based on gender, they found that being Black was positively related with volunteering for women, but not for men.

The 2001 Independent Sector survey found no differences in the number of monthly hours volunteered based on gender, race, or ethnicity. However, as with gender, race makes a difference as to what kind of volunteer work people do, the number of hours volunteering, motives for volunteering, and the influence of church and community (Wilson, 2000). There is some preliminary evidence that minorities are disproportionately involved in informal philanthropy (e.g., B. Smith et al., 1999); however, more attention to this phenomenon is needed in survey research to understand this type of charitable behavior (Havens & Schervish, 2001; O’Neill, 2001).

Wilson (2000) demonstrated that besides human capital, there may be compensating factors in the form of social resources and cultural understandings that motivate minority group members to give and volunteer differently than the majority group. Musick et al. (2000) used human capital theory to explain their findings that show Whites volunteer more than Blacks. They postulated that Black Americans tend to be better endowed with social and cultural resources, which partially compensate for their lack of human capital or personal resources. Their study found that the effect of race on volunteering is mediated or suppressed by personal and social resources, and that once controlled, the effect of race diminishes or decreases. This study explains much of the research findings showing that Whites engage in more volunteering than Blacks; when these other variables are taken into account, the volunteer gap between these two groups significantly diminishes.

Conley (2000) investigated the role of net worth in accounting for Black and White differences in giving. Similar to Musick et al. (2000), he found that, when controlling for human capital variables, the race gap is eliminated. In contrast, Bryant et al. (2003) found that being Black significantly reduced the probability of donating for those that had and had not been asked to give. Van Slyke and Eschholz’s (2002) also found that Whites were significantly more likely to donate and donate more than African Americans, ceteris paribus.
HYPOTHESES

In general, the more social and human capital one has, the more likely one is to engage in philanthropic behaviors. We would expect those who are older, have higher incomes, more education, and are married to engage in more giving and volunteering. Although there are contradictions in the empirical literature, the preponderance of the research on philanthropic behavior suggests that we would expect to see race and gender differences in giving and volunteering, even when controlling for human and social capital. “Females have traditionally carried the burden of much of the volunteering” just as discrimination and lack of resources has excluded minorities from membership in many charitable and volunteer organizations (Bryant et al., 2003, p. 46).

Because marital status is viewed as a form of social capital and often complicates responses to household surveys about giving (Kaplan & Hayes, 1993), we examine whether or not there are differences between single men and women, and between marrieds and singles. Given that it is less clear who decides whether to give, how much is given, and to what organizations within households, the gender tests between men and women are the most compelling when examining single men versus single women.

We also predict that differences in giving and volunteering by gender and race depend on the type of survey methodology utilized. We conduct preliminary analyses that explore the relationship between race and gender and survey methodology. Although previous research found that research methodologies have a significant effect on how individuals respond to giving and volunteering surveys, little research has examined these differences by gender and race. Rooney et al. (2005) found that single minorities recall giving more money than single Whites when using a particular methodology—specifically, minority women were most responsive to a different methodology. In the current study, we investigate whether or not these effects vary by race and gender. Do longer surveys simply produce a shift factor, where respondents generally report more giving and volunteering than in shorter surveys, or does the survey methodology affect gender and racial groups differently? We address this question by examining race, gender, and survey methodology interaction effects.

METHOD

DEPENDENT VARIABLES

We define volunteering as any activity in which time is given freely to benefit another person, group, or cause (Wilson, 2000). Volunteering has traditionally been dichotomized as “formal,” where an individual volunteers through a formal organizational structure to benefit strangers, or “informal,” helping friends or family members outside a formal organizational structure. We
address only formal volunteering in the current study. We use the number of hours volunteered per year as the measure of the dependent variable.

Giving can be similarly grouped—formal and informal. In the current study, the emphasis is on measurement of total “formal” giving—contributions to charities that are legally tax deductible. Philanthropic giving is best operationalized as household giving because it is more comparable to data reported on tax returns and could be verified with IRS data—at least theoretically (Rooney et al., 2001). For the current study, giving is operationalized as the total dollars given in the previous year.

INDEPENDENT VARIABLES

Our independent variables of interest are gender, race (White, Black, Other) and marital status. However, we include the following human and social capital variables as control variables: age of respondent, household income defined as total income from previous year, education (high school or less versus all others). These variables have been found in the literature to be significant predictors of giving and volunteering.

RESEARCH DESIGN

We used a multimethod, multigroup research design to compare and contrast giving and volunteering across eight different survey methodologies. In developing the different survey methodologies, we replicated central design elements of the most widely cited surveys. The methodologies were based on previous research on giving and volunteering and are well established in the literature (e.g., M. Hall, 2000; Independent Sector, 1999; O’Neill & Roberts, 2000; Rooney et al., 2001; Steinberg et al., 2002).

Table 1 is a summary of the survey instruments (modules) and sample information, including the number and type of questions in each module, module classification, the types of prompts, and the sample sizes and refusal rates for each survey. The survey methodologies and the dependent variables are described in detail in Rooney et al. (2001) and Steinberg et al., (2002).

DATA ANALYSIS

To test the data for differences between race, gender, and marital status on formal giving and volunteering, controlling for differences in methodology, we first use t tests to see whether the various groups report similar amounts of dollars given or hours volunteered in the previous year. We then perform several multivariate analyses (as suggested by O’Neill, 2001) to see whether any differences in mean values for giving and/or volunteering across modules can be explained by variations in sample characteristics, or appear to be pure effects of the module administered.

Given that ordinary least squares (OLS) regressions suffer from truncation bias because dollars donated and volunteering hours are never negative (OLS
<table>
<thead>
<tr>
<th></th>
<th>Very Short</th>
<th>PSID</th>
<th>Area</th>
<th>Method</th>
<th>Area-Method</th>
<th>Method-Area</th>
<th>Giving Only</th>
<th>Volunteer Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample size for each module</td>
<td>110</td>
<td>113</td>
<td>106</td>
<td>124</td>
<td>124</td>
<td>124</td>
<td>101</td>
<td>104</td>
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<tr>
<td>Male/Female</td>
<td>35/75</td>
<td>36/77</td>
<td>37/69</td>
<td>41/83</td>
<td>46/78</td>
<td>41/83</td>
<td>40/61</td>
<td>37/67</td>
</tr>
<tr>
<td>White/Black/Other</td>
<td>105/2/3</td>
<td>98/13/2</td>
<td>84/20/2</td>
<td>110/9/5</td>
<td>105/13/6</td>
<td>110/9/5</td>
<td>83/11/7</td>
<td>78/16/10</td>
</tr>
<tr>
<td>Refusal rate (%)</td>
<td>16.4</td>
<td>23.7</td>
<td>20.2</td>
<td>31.3</td>
<td>30.4</td>
<td>22.4</td>
<td></td>
<td>20.0</td>
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<td># questions: Total</td>
<td>16</td>
<td>137</td>
<td>337</td>
<td>368</td>
<td>676</td>
<td>680</td>
<td>168</td>
<td>223</td>
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<td>Giving</td>
<td>4</td>
<td>120</td>
<td>159</td>
<td>156</td>
<td>453</td>
<td>457</td>
<td>160</td>
<td>0</td>
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<tr>
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<td>4</td>
<td>9</td>
<td>170</td>
<td>204</td>
<td>215</td>
<td>215</td>
<td>0</td>
<td>215</td>
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<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
<td>Long</td>
<td>Long</td>
<td>Medium</td>
<td>–</td>
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<tr>
<td>Volunteer module classification</td>
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<td>Short</td>
<td>Medium</td>
<td>Medium</td>
<td>Long</td>
<td>Long</td>
<td>–</td>
<td>Long</td>
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<td>Types of prompts:</td>
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<td></td>
<td></td>
<td></td>
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<td>Giving</td>
<td>yes/no, amount, (formal only)</td>
<td>Prompts by subsector of giving, with short prompt for method</td>
<td>Prompts by subsector of contribution</td>
<td>Prompts by method of contact</td>
<td>Prompts by subsector of contribution, then by method of contact</td>
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<td>Very Short</td>
<td>PSID</td>
<td>Area</td>
<td>Method</td>
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<td>Method-Area</td>
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<td>Volunteer Only</td>
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<tr>
<td></td>
<td>yes/no, amount (formal only)</td>
<td>yes/no, then by two subsectors (human services, community)</td>
<td>Prompts formal volunteering by subsector</td>
<td>Prompts formal &amp; informal volunteering by method</td>
<td>Prompts formal and informal volunteering by method</td>
<td>Prompts formal and informal volunteering by method</td>
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<td>% donors</td>
<td>69.6</td>
<td>68.3</td>
<td>67.9</td>
<td>92.2</td>
<td>97.6</td>
<td>93.5</td>
<td>83.0</td>
<td>NA</td>
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<td>% volunteers</td>
<td>39.0</td>
<td>28.8</td>
<td>43.4</td>
<td>44.7</td>
<td>66.1</td>
<td>70.2</td>
<td>NA</td>
<td>76.0</td>
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<td>Average giving ($)</td>
<td>504</td>
<td>867</td>
<td>1,395</td>
<td>1,218</td>
<td>1,462</td>
<td>2,336</td>
<td>1,051</td>
<td>NA</td>
</tr>
<tr>
<td>Average hours (hr)</td>
<td>50</td>
<td>36</td>
<td>160</td>
<td>76</td>
<td>236</td>
<td>184</td>
<td>n/a</td>
<td>463</td>
</tr>
<tr>
<td>Average giving among donors ($)</td>
<td>724</td>
<td>1,270</td>
<td>2,053</td>
<td>1,321</td>
<td>1,498</td>
<td>2,497</td>
<td>1,266</td>
<td>NA</td>
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<tr>
<td>Average hours among volunteers (hr)</td>
<td>127</td>
<td>124</td>
<td>369</td>
<td>170</td>
<td>358</td>
<td>262</td>
<td>NA</td>
<td>609</td>
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assumes a symmetrical distribution, including the possibility of negative values), we performed Tobit analyses, which do not generate negative predicted dollars donated or volunteer hours. The probit analyses identifies whether various independent variables can predict whether or not an individual donates and/or volunteers at all. Because the current data included outliers, we also performed each of these analyses with outliers excluded. Based on the distributions of the giving, volunteering, and income variables, we took the log of each of those variables. Given that marriage confounds gender and other factors (Kaplan & Hayes, 1993), and that marital status may be more significant in predicting giving than sex (Johnson & Rosenfeld, cited in Kaplan & Hayes, 1993), we compared single males with single females and single males with marrieds.

Because of limited sample sizes for each module and the limited number of minority households in each module, we grouped the giving and volunteering modules into three groups: short, medium, and long, based on the number of prompts for giving (and then regrouped them appropriately for the number of prompts about volunteering; see Table 1). Furthermore, because this article is most concerned with race, gender, and marital status, the eight modules were condensed into three categories to simplify the analysis of module effects (see Table 1). Module classification is based on the number of giving and volunteering questions in each module. Previous research (Rooney et al., 2001, 2004; Steinberg et al., 2002) found highly significant, positive correlations between the number of questions and module means, for giving and volunteering. We ran a base model that includes the traditional variables and the two dummy variables for the medium and long modules (short is the omitted variable). We also ran an expanded model that contains all of the traditional variables plus the modules plus all of the possible two-way interactions between the modules and race and gender.

Thus, we explain giving and volunteering in a regression framework by including a set of dummy variables for three module lengths (short, medium, long), along with age, income, race (White, Black, Other), marital status (married and/or cohabitating vs. single, widowed, and divorced), education (high school or less vs. all others), and gender. If there are module effects, they will show up as significant coefficients for the module length dummy variables and/or interaction effects between race and gender and module lengths.

RESULTS

IMPACT OF RACE, GENDER, AND MARITAL STATUS ON GIVING

To test for the effects of race and gender on giving, we start by testing for significant differences between the means for giving by gender, race and marital status. Single females report giving significantly more than males ($935 vs. $470, p < .05); marrieds gave significantly more than singles (both
singles overall [$1,709 vs. $796, \textit{p} < .001] and for either single males or single females). Whites report giving significantly more than Blacks ($1,379 vs. $778, \textit{p} < .05), and all minorities—Black plus Other ($1,379 vs. $807, \textit{p} < .1) and all minorities ($1,379 vs. $787, \textit{p} < .01). We found identical patterns when we examined the “donors only” groups. Single females were more likely to be donors than single males (78% vs. 68%; \textit{p} < .05), and Whites were more likely to be donors than Blacks (83% vs. 76%) or all minorities (83% vs. 79%); however, these racial differences were not statistically significant.

Looking at the human capital variables in the regression model for the entire sample (age, race, gender, education, income, and marital status), we found several noteworthy results. In spite of the significant differences between the proportion of donors among Whites and minorities in the unconditional means, race does not have a significant effect on predicting whether somebody is a donor nor how much that person gives, holding everything else constant (see Table 2). This holds in the base models and the fully interactive models. (The fully interactive model is the base model plus interaction terms between the length of the survey that respondent answered and their race and/or gender).

However, being a single female or married is associated with an increase in the probability of giving, when compared to single men (the omitted category), holding everything else constant. Single women are 9% to 10% more likely to be donors than single men. Married men are 6% more likely to be donors than single men, and married women are 11% to 12% more likely to be donors than single men. Age has a small, but significant, impact on the probability of being a donor. Income has a small positive effect for each additional $1,000 in earnings on the probability of being a donor at all.4 The squares of income and age were tested but were not found to be significant predictors and are excluded from the final analysis. Those with a high school degree or less are less likely to be donors (6%) when compared to those with some college (or more).

The probit results indicate that, holding everything else constant, the coefficients for medium module and the long module were statistically significant and positive, relative to the short module (the omitted variable). This suggests that those respondents to these modules are associated with a higher probability of being a donor than the short (omitted) module. Hence, methodology does matter in predicting the probability of giving; longer, more detailed prompts are more likely to stimulate recall about being a donor at all (see Rooney et al., 2001, for more details).5

The results of the Tobit analysis suggest that, after controlling for the other demographic variables and survey methodologies, single females gave $630 more than single men in the base model; however, the difference was not significant in the fully interactive model. Married couples gave much more than single men; however, these differences were not significant at traditional levels. However, there were no differences in the amounts given by race after controlling for other factors. People gave $21 more with each additional year.
Table 2. Giving Tobit and Probit (Three Modules, All Sample) – Marginal Effects

<table>
<thead>
<tr>
<th>Variable</th>
<th>Tobit</th>
<th>Probit</th>
<th>Tobit</th>
<th>Probit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Marginal</td>
<td>SE</td>
<td>Marginal</td>
<td>SE</td>
</tr>
<tr>
<td>Age</td>
<td>20.61</td>
<td>5.44****</td>
<td>1.09E-03</td>
<td>5.80E-04**</td>
</tr>
<tr>
<td>Single female</td>
<td>629.82</td>
<td>310.09**</td>
<td>.086</td>
<td>.022****</td>
</tr>
<tr>
<td>Married male</td>
<td>483.04</td>
<td>330.71</td>
<td>.063</td>
<td>.020****</td>
</tr>
<tr>
<td>Married female</td>
<td>562.31</td>
<td>309.78*</td>
<td>.114</td>
<td>.025****</td>
</tr>
<tr>
<td>Income ($1,000s)</td>
<td>21.42</td>
<td>2.68****</td>
<td>6.70E-04</td>
<td>3.58E-04*</td>
</tr>
<tr>
<td>High school or less</td>
<td>-497.78</td>
<td>206.47**</td>
<td>-.066</td>
<td>.026***</td>
</tr>
<tr>
<td>Black</td>
<td>-108.42</td>
<td>321.19</td>
<td>-.061</td>
<td>.046</td>
</tr>
<tr>
<td>Other</td>
<td>-72.01</td>
<td>485.93</td>
<td>-9.13E-05</td>
<td>.047</td>
</tr>
<tr>
<td>Medium module</td>
<td>729.59</td>
<td>311.34**</td>
<td>.076</td>
<td>.029***</td>
</tr>
<tr>
<td>Long module</td>
<td>1338.07</td>
<td>320.49****</td>
<td>.184</td>
<td>.029****</td>
</tr>
<tr>
<td>Constant</td>
<td>-2482.85</td>
<td>453.86****</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>532</td>
<td>532</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pseudo R²</td>
<td>.0154</td>
<td>.2460</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-4460.8593</td>
<td>-154.7527</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correct predictions</td>
<td>87.97%</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>532</td>
<td>532</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pseudo R²</td>
<td>.0163</td>
<td>.2562</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-4455.9021</td>
<td>-152.6588</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correct predictions</td>
<td>87.78%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Survey methods: All modules had identical demographic questions but varied in the types and number of prompts about donations. Marginal effects are calculated at the mean of the independent variables.

*p < .1. **p < .05. ***p < .01. ****p < .001.
of age, and they donated $21 more for each additional $1,000 increase in their incomes. Those with a high school education or less gave ~$500 less than those with more education. Again, research methodology does matter; those who responded to the longer, more detailed prompts reported giving significantly more dollars than those who responded to the shorter surveys (see Table 2).

In summary, in terms of giving at the mean level, single women are more likely to be donors and give approximately twice as much as single men. Holding other factors constant, single females are 9% to 10% more likely to be donors at all, and they give $630 per year more than single men. Marrieds are more likely to be donors and give more than twice as much as singles. Marrieds are more likely to give and give more than three times as much as single men, and they are also more likely to be donors and to give almost twice as much as single females. Although there are differences in giving at the mean levels, Whites are no more likely to be donors or to give more than Blacks or other minorities, ceteris paribus. Furthermore, the probability of being a donor and the amounts donated increased with income, age, education, and the length of the survey module.

IMPACT OF RACE, GENDER, AND MARITAL STATUS ON VOLUNTEERING

We start the analysis of volunteering behaviors by looking at differences in average values by gender and race. Single females reported volunteering more than twice as many hours as single males (234 vs. 105, p < .05). Among only those who volunteer at all, single females volunteer almost 2 times more hours than single men (425 vs. 234, p < .05). Singles volunteer more than marrieds (394 vs. 269, p < .05), which seems to be driven mostly by the fact that single females volunteer more hours than marrieds (452 vs. 269, p < .05).

The results of the probit found that, after controlling for differences in human capital variables and research methodologies, single females were 18% more likely to volunteer at all than single men; however, this difference lost its significance in the fully interactive model (see Table 3). There was no difference between marrieds and singles in the probability of volunteering at all. In the fully interactive model, there were no significant differences by race at traditional levels of significance; however, the difference between Blacks and Whites approached significance (with Blacks being 26% more likely to volunteer, p < .1). Other minorities were 30% less likely to volunteer than Whites in the base model; however, this difference was not maintained in the fully interactive model. There was a small increase in the probability of being a volunteer with small increases in income; however, there was a conspicuous drop in volunteering (15% to 16%) for those with a high school education or less. Once again, we found that the survey methodology matters: the long modules with more prompts led to between 30% and 39% higher probability of remembering having done any volunteering at all. However, those replying to the medium module were not significantly more likely to recall volunteering than those answering the short module. Age had no effect on whether or not somebody
volunteers at all. The interaction terms in the fully interactive model suggest that women were more likely to recall being a volunteer when surveyed with the long module, and minorities were less likely to recall being a volunteer when using the medium module.

Tobit results suggest that, after controlling for differences in human capital and research methodologies, single females volunteered 146 more hours more than single men in the base model; however, there was no significant difference in the fully interactive model (see Table 3). There were no significant differences between marrieds (male or female respondents) and single men. There was no significant increase in hours volunteered with increases in income; however, there was a large and significant decline among those with a high school education or less (almost 100 hrs a year fewer than those with some college or more education). There were no significant differences in the number of hours volunteered by race at traditional levels of significance. Once again, we found that the research methodology matters: More prompts were significantly related to more hours being volunteered when compared to fewer prompts. The differences between the long module and short modules were quite large and highly significant (more than 200 hrs per year).

In summary, in terms of volunteering, single females are 18% more likely to be a volunteer and to volunteer 146 hrs per year more than single men, ceteris paribus. The probability of being a volunteer and the hours volunteered increased with education and survey length. Income increased the probability of being a volunteer at all but did not affect the hours volunteered.

DIFFERENCES BY RACE AND GENDER AND SURVEY METHODOLOGY

Tables 2 and 3 also show results of the race, gender, and survey methodology interactions. The analysis allows us to examine whether or not different race and gender groups respond to the survey methodologies in consistently different manners—even after controlling for differences in income, age, marital status, educational attainment, and survey methodology. We measured this by using interaction terms between race, gender, race and gender, and the module variables.

We found no statistically significant differences measured by interaction terms between gender or race and the various research methodologies for giving. We did find some significant differences for volunteering for both gender and race, which suggests that there may be differences in how women and minorities hear questions about their personal volunteering, but not their personal giving. Chow tests also indicated that some of the interaction terms added explanatory power to the model. Although the Chow tests for the interaction terms for giving were not significant, there was a significant impact when looking at whether women volunteer and the survey module (test statistic = 9.34, \( p < .1 \)). It should be noted that the Chow tests were significant only at low levels \( (p < .1) \); that is, the inclusion of the interaction terms enhanced the explanatory power more than it reduced the
Table 3. Volunteering Tobit and Probit (Three Modules, All Sample) – Marginal Effects

<table>
<thead>
<tr>
<th>Variable</th>
<th>Tobit</th>
<th>Probit</th>
<th>Tobit</th>
<th>Probit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Marginal</td>
<td>SE</td>
<td>SE</td>
<td>SE</td>
</tr>
<tr>
<td>Age</td>
<td>–.66</td>
<td>.87</td>
<td>–1.53E-03</td>
<td>1.35E-03</td>
</tr>
<tr>
<td>Single female</td>
<td>146.31</td>
<td>48.36***</td>
<td>.182</td>
<td>.069**</td>
</tr>
<tr>
<td>Married male</td>
<td>28.74</td>
<td>52.07</td>
<td>.043</td>
<td>.078</td>
</tr>
<tr>
<td>Married female</td>
<td>73.54</td>
<td>47.98</td>
<td>.135</td>
<td>.070*</td>
</tr>
<tr>
<td>Income ($1,000s)</td>
<td>.45</td>
<td>.39</td>
<td>1.82E-03</td>
<td>6.68E-04***</td>
</tr>
<tr>
<td>High school or less</td>
<td>–98.50</td>
<td>32.89***</td>
<td>–.162</td>
<td>.050***</td>
</tr>
<tr>
<td>Black</td>
<td>41.34</td>
<td>47.18</td>
<td>–.009</td>
<td>.077</td>
</tr>
<tr>
<td>Other</td>
<td>–126.48</td>
<td>83.40</td>
<td>–.297</td>
<td>.103**</td>
</tr>
<tr>
<td>Medium module</td>
<td>81.53</td>
<td>43.43*</td>
<td>.068</td>
<td>.061</td>
</tr>
<tr>
<td>Long module</td>
<td>266.16</td>
<td>37.40***</td>
<td>.390</td>
<td>.048***</td>
</tr>
<tr>
<td>Constant</td>
<td>–208.63</td>
<td>62.64***</td>
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</table>

<table>
<thead>
<tr>
<th>Variable</th>
<th>Tobit</th>
<th>Probit</th>
<th>Tobit</th>
<th>Probit</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Marginal</td>
<td>SE</td>
<td>SE</td>
<td>SE</td>
</tr>
<tr>
<td>Age</td>
<td>–.65</td>
<td>.87</td>
<td>–1.67E-03</td>
<td>1.36E-03</td>
</tr>
<tr>
<td>Single Female</td>
<td>65.82</td>
<td>75.92</td>
<td>.070</td>
<td>.108</td>
</tr>
<tr>
<td>Married Male</td>
<td>24.62</td>
<td>52.24</td>
<td>.048</td>
<td>.078</td>
</tr>
<tr>
<td>Married Female</td>
<td>–4.13</td>
<td>76.47</td>
<td>.005</td>
<td>.110</td>
</tr>
<tr>
<td>Income ($1,000s)</td>
<td>.43</td>
<td>.39</td>
<td>1.90E-03</td>
<td>6.76E-04***</td>
</tr>
<tr>
<td>High School or Less</td>
<td>–95.27</td>
<td>32.94***</td>
<td>–.153</td>
<td>.051**</td>
</tr>
<tr>
<td>Black</td>
<td>88.74</td>
<td>109.55</td>
<td>.260</td>
<td>.124*</td>
</tr>
<tr>
<td>Other</td>
<td>–107.78</td>
<td>123.60</td>
<td>–.061</td>
<td>.183</td>
</tr>
<tr>
<td>Medium Module</td>
<td>46.08</td>
<td>74.20</td>
<td>2.19E-04</td>
<td>.105</td>
</tr>
<tr>
<td>Long Module</td>
<td>217.43</td>
<td>63.94***</td>
<td>.296</td>
<td>.086***</td>
</tr>
<tr>
<td>Female × Medium</td>
<td>90.25</td>
<td>90.66</td>
<td>.179</td>
<td>.114</td>
</tr>
<tr>
<td>Female × Long</td>
<td>86.03</td>
<td>77.21</td>
<td>.202</td>
<td>.106*</td>
</tr>
<tr>
<td>Minority × Medium</td>
<td>–150.67</td>
<td>137.69</td>
<td>–.410</td>
<td>.133*</td>
</tr>
<tr>
<td>Minority × Long</td>
<td>–63.94</td>
<td>105.38</td>
<td>–.244</td>
<td>.150</td>
</tr>
<tr>
<td>Female × Minority</td>
<td>67.58</td>
<td>92.14</td>
<td>–.091</td>
<td>.147</td>
</tr>
<tr>
<td>Constant</td>
<td>–168.47</td>
<td>73.79**</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Number of observations: 547
Pseudo $R^2$: .0181
Log likelihood: –2545.5396
Correct predictions: 69.84%

Number of observations: 547
Pseudo $R^2$: .0189
Log likelihood: –2543.6238
Correct predictions: 71.12%

Note: Survey methods: All modules had identical demographic questions but varied in the types and number of prompts about donations. Marginal effects are calculated at the mean of the independent variables.

*p < .1. **p < .05. ***p < .01. ****p < .001.
degrees of freedom, suggesting that the males and females may hear and respond differently to questions about volunteering.

Thus, although none of the interaction terms between survey length and race or gender were significant for hours volunteered, there were some interaction terms that were significant for the probability of being a volunteer at all, which suggests that there may be some differences in how men and women and/or Whites and minorities hear questions with respect to volunteering.

**DISCUSSION**

The main purpose of the current study was to examine whether or not race, gender, and/or marital status make a difference in giving and volunteering behavior, after controlling for human and social capital. Our findings from the probit and Tobit analyses suggest that there are some important differences in philanthropic behaviors by gender and marital status, when controlling for differences in income, age, educational attainment, and survey methodology. After controlling for these variables, single women were significantly more likely to give at all and to give more money than single men; and, single women were more likely to volunteer and volunteer more hours than single men. These results are consistent with Andreoni et al. (2001) who found that, among single people, women were more likely than men to give across all categories of charity. We also found that marrieds (males and females) were more likely to donate; however, they do not donate more money than single men after controlling for income and other factors. These findings are inconsistent with the results found by Bryant et al., (2003) who found that being single or female made no difference in the probability of giving when controlling for human and social capital variables—as well as findings by Belfield and Beney (2000) and Hodgkinson et al. (1992).

It is interesting that we found that being married or a single female was associated with an increase in probability of giving. Given that single women and married couples appear to be more philanthropic, one could argue that women socialize men with regard to philanthropic giving. These results again are consistent with Andreoni et al. (2001), who found that charitable giving was influenced by who in the household was primarily responsible for giving decisions.

With respect to donations, we found no significant differences for race, whether measured for Blacks or all other minorities. Even though there were some differences by racial groups when looking at the simple means (and medians)—for giving—these differences disappear after controlling for human capital variables. Hence, what some might categorize as a “race difference,” is actually attributable to differences in income and/or education—at least in this sample. These results support other research that has examined race differences in giving and volunteering (e.g., Musick et al., 2000; Rooney et al., 2005).
However, we found no significant differences measured by interaction terms between gender or race and research methodologies for giving. These results are inconsistent with Rooney et al., (2005) who found significant interaction effects for giving for race, gender, and survey methodology for a national sample, and the literature suggesting that cognitive factors can affect the way people answer survey questions (e.g., Bertrand & Mullainathan, 2001; Tanur, 1991). Rooney et al. (2005), however, tested interactions for five different methodologies; and, because of sample size restrictions, we were not able to replicate their research design.

Although our sample is based on one state, our findings regarding volunteering are fairly consistent with the literature on determinants of volunteer behavior (e.g., D. H. Smith, 1994; Wilson, 2000). We found that single females are more likely to volunteer and volunteer more hours than single men; and, consistent with human capital theory, income and education beyond a high school degree are significant predictors of volunteer behavior. National surveys, too, have found education and higher income to be the strongest and most consistent predictor of philanthropic participation (D. H. Smith, 1994). However, an alternative hypothesis is that because single women as a group may have less social and human capital (i.e., lower incomes and occupational status and fewer social networks), single women, in particular, may be more compelled to volunteer by using volunteering as a means to build or rebuild social capital (Bryant et al., 2003). Minorities (Black and Other) do not volunteer significantly more or less hours than Whites. However, there is mixed evidence on whether various racial groups have different propensities to volunteer.

We did find a significant interaction effect for race and gender with survey methodology for volunteering—providing some evidence that minorities and women interpreted these questions differently than men and Whites. Females were more likely to recall volunteering at all when surveyed using the long module. Minorities were less likely to recall volunteering at all when asked in the medium module. These results, however, must be interpreted as preliminary, and further research needs to be conducted in this area.

Nonprofit managers and fund-raisers must rely on precise ways of estimating how much time and money particular groups of people give (Steinberg et al., 2002). Although the results of the current study provide inconclusive results that different groups may respond differently to questions, our findings do indicate that the more prompts or questions asked, the higher the probability of reporting donations and volunteering, and the more dollars donated and hours reported of volunteer activities. This is consistent with recent research on giving and volunteering (e.g., Rooney et al., 2001, 2004; Steinberg et al., 2002). Future research on giving and volunteering needs to take into consideration the type of survey methodology employed—particularly when addressing race and gender issues.
Recent changes in the United States have made it possible for women and minorities to move into many areas of our society in which they were previously excluded. These gains have been achieved in the areas of education, income, and occupational status (Musick et al., 2000). As a result, women and minority groups are becoming more affluent and moving into the ranks of middle and upper classes at an increasing rate. It is important to understand the philanthropic behavior of these previously disenfranchised groups. As researchers, paying closer attention to these issues when conducting our own research will serve to better inform theory and practice.

NOTES

1. The outliers can be so large that they can drive the results such that they swamp meaningful differences in methodology—even though they are not part of the measurement analysis and even though they may contain information that might be useful for other purposes. For example, if a very generous donor who made one large gift that year and remembered it without much prompting happened to be called in the subsample for the very short, then very short might become the best way to elicit total giving in the regressions—even though it does not work as well overall. Given the sample sizes and given the fact that the outliers are not likely to be normally distributed across the various survey methodologies, we determined that it would be best to suppress the outliers for this analysis.

2. We also wanted to test if “singles” were so different from marrieds that the two groups should be run separately. The results suggest single women and marrieds are more likely to be donors than single men early and later in life. We used Chow tests to examine whether or not these various subsamples (e.g., marrieds vs. singles and young [younger than age 40 years] vs. old [age 40 years and older]) should be pooled or run separately; the tests indicated that singles and marrieds should not be run separately (test statistic = 9.494, critical value = 11.07). Similarly, males and females should not be run separately (test statistic = 1.129, critical value = 11.07). We also tested whether or not the young and old samples should be run separately but rejected that hypothesis (test statistic = 3.958, critical value = 14.067); and, we tested whether the survey methods were so different that they should be run separately; however, this was rejected as well (test statistic = 2.405, critical value = 18.307). As a result, we focus our discussion of the results of the pooled sample across all of the age cohorts and marital statuses.

3. In addition, we conducted t tests (not reported here) to determine significant differences in total giving and volunteering between module means, for all combinations of modules, and for each module compared to the total sample. Results supported our classification of modules based on the number of questions relating to giving and volunteering.

4. Ln(Income) (natural log) also was tested; however, the results were similar, so we used levels for simplicity.

5. It does seem that a greater number of detailed prompts do stimulate greater recall. Of course, there is a danger that respondents report gifts that they did not actually give in an effort to conform to a perceived set of social expectations and/or to please and/or impress the interviewer. Although this is a problem in any type of survey research, it may be exacerbated by repeated questions about giving, which may convey the message to the respondent that it is expected or “normal” to give. Similarly, respondents may be embarrassed or bored if they repeatedly report no giving in surveys that ask about giving by many different areas and/or many different methods of contacts. These concerns are not readily resolved; however, they do indicate the need to verify survey results through independent data sources whenever feasible. However, Havens and Schervish’s (2001) diary study, which used weekly prompting, found
that 100% of their sample made donations to charities during the course of a year. In addition, they tested for the effects of repeated prompting by conducting the surveys during a 13th month. They found in surveying respondents during two consecutive Januaries that reported giving was not lower in the first January when compared to the second January, which suggests that the participants had not changed or reported changing their behavior as a result of participating in the study. This strongly suggests that fewer prompts are more likely to lead to an understatement of gifts, rather than more prompts creating an exaggerated list of gifts.

REFERENCES


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Kathryn S. Steinberg is an assistant director of Research at The Center on Philanthropy at Indiana University.

Brian Denton is a graduate student in economics at Indiana University-Purdue University Indianapolis.