Preparing Students for Citizenship:  
An Exploration of the Antecedents and Outcomes of Self-Efficacy Toward Service  

*James E. Weber, **Paula S. Weber, ***Kenneth Schneider, and ****Bradley J. Sleeper  
St. Cloud State University

This study explored potential antecedents and outcomes of student self-efficacy toward service using a recently developed scale. Survey results show that nationality and family/friend/peer involvement in civic activities positively impact student self-efficacy toward service. Further, self-efficacy toward service had a positive impact on civic behaviors of volunteerism, charitable giving, and membership in civic organizations.

Key Words: Self-efficacy, Service, Service learning

Introduction

Higher education is expected to play a pivotal role in the development of democratic citizens (Epstein, 1999; Gamson, 1997; Gabelnick, 1997; Hauser, 2001). To fulfill this goal, faculty across many disciplines have developed pedagogical approaches such as community service experiences, case studies, experiential assignments, and volunteer projects in an effort to develop civic behaviors. In doing so, instructors have adopted class projects and assignments that put students in positions of actual civic involvement. Their hope is that such activities would help develop students’ self-efficacy toward service, later leading to greater levels of civic involvement in such areas as volunteering, charitable giving, and civic participation (Glenn, 1992; Weber & Glyptis, 2000).

Our research found no studies that identified antecedents for and outcomes of increased self-efficacy toward service. Some research identified potential demographic and behavioral antecedents of volunteering activities but none focused on such antecedents for self-efficacy toward service. Figure 1 presents a simplified view of a self-efficacy – civic behaviors relationship model based on the work of Bandura, 1982 and Gist & Mitchell, 1992.

Figure 1. Simplified Model of Self-Efficacy and Civic Behaviors.

Our study will examine gender, nationality, and family volunteerism as potential antecedents of student self-efficacy toward service. Potential outcomes of student self-efficacy toward service such as increased levels of charitable giving or increased volunteerism will also be explored. Our research goal is to move the field closer to confirming that...
increases in self-efficacy toward service lead to increased civic involvement.

In this study, a recently developed survey instrument that evaluates student self-efficacy toward service was utilized. Relevant literature was reviewed, an explanation of our methodology presented, and the results of the analysis documented. Finally, a discussion of findings and their implications is provided.

**Literature Review**

**Self Efficacy**

Self-efficacy is the self-confidence people have in their ability to perform a specific task (Bandura, 1977). Extensive research suggests that self-efficacy is a key predictor of intentions to pursue a task (Maurer, 2001; Bandura & Locke, 2003). According to social cognitive theory (Bandura, 1986, 1988), people strengthen beliefs about self-efficacy in four ways: through mastery experiences, through modeling (observations of others), through social persuasion, and by one’s physiological state when assessing personal capabilities (Bandura, 1982; Gist, 1987; Steers & Porter, 1975; Reeb, Katsuyama, Sammon, & Yoder, 1998).

Numerous studies have shown that efficacy beliefs contribute significantly to an individual’s level of motivation and performance (Bandura & Locke, 2003). The higher the perceived self-efficacy, the greater the level of motivation to accomplish tasks (Bandura & Locke, 2003). In this study, we explored factors that may increase self-efficacy within a particular context (that is, self-efficacy toward service) and the behaviors that might be impacted by strengthening self-efficacy toward service.

**Civic Involvement**

Civic involvement includes such activities as volunteering, charitable giving, and participation in civic organizations. Within this framework, volunteerism is generally defined as those activities in which individual’s engage without pay on behalf of others in need (Smith, 1997; Wilson & Janoski, 1995). Existing studies on the antecedents of civic involvement and volunteerism, while cross disciplinary in nature, have primarily focused on demographic characteristics such as gender and age.

Based on our literature review, the following potential antecedents of self-efficacy toward service were examined.

**Potential Antecedents**

**Gender.** Numerous studies have examined differences in volunteerism based on gender, but their results are inconclusive (Eley & Kirk, 2002). Most studies report that females are more likely to volunteer than males (Keith, Nelson, Schlabach, & Thompson, 1990; Lauber, Nordt, Falcato, & Roessler, 2002; Pancer & Pratt, 1999). However, some find no gender differences in volunteerism (Rasskoff & Sundeen, 1994; Davis-Smith, 1998) and others have found that males are even more likely than females to volunteer for sports-related organizations (Shilbi, Taylor, Nichols, Gratton, & Kokolakakis, 1999).

**Familial Influence.** In the area of family influence, Eley and Kirk (2002) found strong correlations between students who volunteered and their parents who had also volunteered. Another study found that volunteering is more likely from those with a strong role model (Toole, Hanusa, Gibba & Boyles, 1999). These findings are consistent with self-efficacy theories suggesting that modeling and social persuasion strengthen self-efficacy.

**Religious Attendance.** Research on the effect of religious service attendance and volunteering was both limited and contradictory. Wilson and Janoski (1995) and Musick, Wilson, and Bynum (2000) found that religious affiliation is positively associated with participation in volunteer organizations although denominational differences existed. Contrarily, attendance at religious services was found to be negatively correlated with volunteering (Lam, 2002) due to choices individuals make between volunteer activities and church related duties.

**Nationality.** One study in Switzerland examined attitudes towards volunteering. Their results showed that nationality was a strong predictor of positive attitudes towards volunteering (Lauber, et al., 2002). Specifically, that non-Swiss were more likely to volunteer than those reporting Swiss nationality.

**Friends or Peer Influence.** Bandura’s (1982) model of self-efficacy posits that modeling and social persuasion can impact motivation to perform tasks.
Farmer & Fedor (2001) found that a significant positive predictor of hours volunteered was coworkers who volunteered. Consequently, we explored whether students with friends/peers involved in the community, or with friends/peers who volunteered to help those in need, would report higher levels of self-efficacy toward service.

The potential antecedents identified above of gender, familial influence, religious attendance, nationality and friends or peer influence are further explored in this study.

Literature also provided guidance on potential outcome variables, that is, behaviors that might increase as self-efficacy toward service increases.

Potential Outcomes

Volunteer Hours. A desired outcome of class projects involving community service is that such experiences will lead to increased civic involvement. A study by O’Toole, Hanusa, Gibbon, & Boyles (1999) found initial evidence that student volunteering is positively influenced by prior volunteer experiences. This survey explored the number of hours students volunteered in outreach or social service activities in the past year to find out if students with higher levels of self-efficacy reported higher levels of volunteering.

Membership in Service Organizations. This study explored the number of years of student membership in service organizations, defined as organizations with outreach or social service as part of their mission. Similar to volunteer hours, a goal of this research was to determine if students with higher levels of self-efficacy also demonstrated higher levels of membership in service organizations.

Charitable Giving. A final potential outcome explored was whether students with higher levels of self-efficacy reported a greater level of financial contributions to charitable or non-profit organizations in the prior year.

It is hoped that these study results will bolster support for pedagogical approaches designed to strengthen self-efficacy toward service and help prove that increases in self-efficacy toward service lead to increased civic involvement.

Method

Data Collection Process
A written survey was administered to students attending 29 different classes in the business college of a large, mid-western university. These sections represented a cross-section of business topics and student ranks. Nearly half (48.5%) of the completed surveys were collected from students in core courses required of all business majors. The largest portion of the surveys (40%) came from students in a course entitled Legal Environment of Business. Inclusion of this course was a priority for survey administration since it addresses AACSB required coverage of ethics and social responsibility.

Surveys were distributed and collected by course instructors. Instructors directed students, during regularly scheduled class periods, to read the cover letter and complete the survey. Responses were recorded directly on the survey instruments.

Sample Demographics
Respondents were representative of a typical U.S. business college population of students. The 851 respondents in the sample were 51.2% female, 87.8% U. S. citizens, and the average age was 22.5 years. Detailed charts on the range of respondent ages, class rank and major fields of study are included in Appendix 1. These demographics approximate that of the college as a whole.

Measures
A five-item measurement instrument, with each item scored with a five-point Likert scale, was used to collect data on self-efficacy toward service (SETS). The SETS scale has been previously examined and found to possess more than adequate psychometric properties, including a reliability of $\alpha = .8042$ (Weber, Weber, Sleeper, & Schneider, 2004). The SETS scale was designed to measure student perceptions of their ability to provide service. This scale is presented in Appendix 2.

Seven demographic, fill-in-the-blank questions and four questions on family and friends involvement in social activities using a 5-point Likert Scale were included in the survey (see Appendix 2).
Data Analysis and Results

Student responses to four survey items developed by the researchers to explore the potential influence of civic involvement and volunteerism of students’ family and friends on student self-efficacy toward service were examined (see Social Involvement, Appendix 2). These four items exhibited relatively high correlations typical of a scale (correlations ranged from r = .36 to r = .58). Next, coefficient alpha and associated statistics for the four items were calculated in an attempt to clarify the nature of the relationship between the four items. Coefficient alpha for the potential four-item “Social Involvement” scale was .794, an extremely high value for a four-item scale. The highest “alpha if deleted” value was .769.

Correlations between a Civic Participation Scale (Weber, et al., 2004) that might be expected to correlate positively and moderately with a potential social involvement scale equaled r = .37. Correlations between the potential social involvement scale and a conceptually unrelated Fashion Leadership Scale (Goldsmith, Freiden & Kilsheimer, 1993) was r = .12. Based on available evidence, the four social involvement items were treated as a scale, which will be referred to as the Social Involvement Scale (SI). This four-item SI scale is shown in Appendix 2 along with the other survey items.

Next, an Analysis of Covariance (ANCOVA) was used to examine whether gender, country of citizenship, SI, and times attended religious services might impact self-efficacy toward service as measured in the SETS scale. SETS was the dependent variable, gender and country were entered as categorical variables, and times attended religious services and social involvement were entered as covariates. The only variables found to impact SETS were nationality and SI. In the case of nationality, U.S. students reported higher self-efficacy toward service than non-U.S. students. Students reporting higher levels of SI (family/friends/peers involved in civic activities) were associated with higher levels of self-efficacy toward service. None of the interactions were significant. ANCOVA results appear in Table 1.

Table 1. ANCOVA with Self-efficacy Toward Service as the Dependent Variable.

<table>
<thead>
<tr>
<th>Source</th>
<th>F-Value</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Involvement</td>
<td>99.821</td>
<td>.000</td>
</tr>
<tr>
<td>Times attended religious services</td>
<td>.372</td>
<td>.542</td>
</tr>
<tr>
<td>Gender</td>
<td>1.540</td>
<td>.215</td>
</tr>
<tr>
<td>Country of citizenship (US and Other)</td>
<td>7.122</td>
<td>.008</td>
</tr>
</tbody>
</table>

Correlations between SETS and a group of three distinct civic behaviors (hours volunteered, money donated to charity, and years as members of a service organization) were small to moderate and positive. Therefore, a second analysis using SETS as the independent variable and three different civic behaviors as dependent variables was conducted using the General Linear Model feature in SPSS. The overall multivariate F-test was significant (F3, 717 = 8.894, p = .000 for Pillai’s, Wilks’, Hotelling’s and Roy’s tests), so an examination of individual effects was appropriate. As shown in Table 2, self-efficacy toward service had a significant, positive impact on all three dependent variables.

Table 2. Impact of Self-Efficacy Toward Service on Civic Behaviors.

<table>
<thead>
<tr>
<th>Behaviors</th>
<th>F-Value</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours volunteered</td>
<td>16.617</td>
<td>.000</td>
</tr>
<tr>
<td>$ donated to charity</td>
<td>9.923</td>
<td>.002</td>
</tr>
<tr>
<td>Years member of service organization</td>
<td>13.703</td>
<td>.000</td>
</tr>
</tbody>
</table>
Correlations between the SETS and SI scales, nationality, hours volunteered, money donated to charity and years a member of a service organization appear in Table 3.

Table 3. Intercorrelations Between SETS and Antecedent and Consequent Variables.

<table>
<thead>
<tr>
<th></th>
<th>SI</th>
<th>Nationality</th>
<th>Hrs Vol.</th>
<th>$ Donated</th>
<th>Yrs. Member</th>
</tr>
</thead>
<tbody>
<tr>
<td>SETS</td>
<td>.333**</td>
<td>.037</td>
<td>.147**</td>
<td>.106**</td>
<td>.128**</td>
</tr>
<tr>
<td>SI</td>
<td>.119**</td>
<td></td>
<td>.177**</td>
<td>.174**</td>
<td>.236**</td>
</tr>
<tr>
<td>Nationality</td>
<td>.235**</td>
<td></td>
<td>.037</td>
<td>-.026</td>
<td></td>
</tr>
<tr>
<td>Hrs. Vol.</td>
<td>.261**</td>
<td>.231**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$ Donated</td>
<td></td>
<td></td>
<td></td>
<td>.325**</td>
<td></td>
</tr>
</tbody>
</table>

Study Limitations

As the study sample had a limited range of results for age and education, these potential antecedents were not explored. The possible impact of social status and wealth on self-efficacy toward service was also not explored. Historically, strong correlations have been found between volunteerism and social class with those most likely to volunteer coming from higher social classes (Davis-Smith, 1998; Musick, Wilson, & Bynum, 2000; Pancer & Pratt, 1999). Future studies on self-efficacy toward service should include these variables. As this study was not longitudinal in nature, it was not possible to measure changes in self-efficacy toward service or differences in behavioral intentions over time. In cases like this study where intercorrelations between proposed antecedent variables and proposed outcome variables are small to moderate, it can be difficult to use statistical analysis to determine the causal relationships between variables. In this study the process of categorizing variables within the causal chain was made a priori, based on theory and supposed temporal precedence. It can be argued that the friends/peers variable could fall elsewhere within the causal chain. Do friends come prior to service or do they come from associations developed during service? Questions of this nature should be examined in future research.

Discussion

In this study, factors that may potentially increase self-efficacy toward service, and the behaviors that might be impacted by strengthening it, were explored. Findings indicate that nationality and the civic involvement of friends and peers are antecedents of self-efficacy toward service. Students in the sample who listed the U.S. as their nationality scored higher on self-efficacy toward service than non-U.S. citizens. Cultural values and differences in social roles will be an interesting area for further exploration.

The finding that self-efficacy toward service is higher for those students whose family or friends have been involved in civic activities is consistent with Bandura’s (1986) finding that self-efficacy can be increased through modeling (observation of others) and social persuasion. This result is also consistent with a prior study of medical volunteers. O’Toole, Hanusa, Gibbon and Boyles (1999), found that volunteering was more likely from those who have previously volunteered or have strong role models. These results are critical to faculty who utilize civic involvement projects to increase student self-efficacy toward service.

Other potential antecedents of gender and religious attendance were explored. Previous studies reported that females tend to have higher levels of volunteerism. This study did not support the existence of gender differences in self-efficacy toward service. Religious attendance as an antecedent of self-efficacy toward service was also unsupported.

Results of this study are very exciting for faculty and administrators anxious to develop civic behaviors in students. As expected, students with higher levels of self-efficacy toward service also reported higher levels of charitable contributions, volunteer hours, and membership in service organizations. These findings support the work of faculty and administrators who offer volunteer experiences in the hope that such experiences may lead to increased
civic behaviors. These findings demonstrate that providing students with volunteer experiences can lead to increased self-efficacy toward service which in turn can lead to higher levels of involvement in communities.

*James E. Weber, Ph.D., is a professor of management at St. Cloud State University.

**Paula S. Weber, Ph.D., is a professor of management at St. Cloud State University.

***Kenneth Schneider is a professor of marketing at St. Cloud State University.

****Bradley J. Sleeper is a professor of business law at St. Cloud State University.

References


### Appendix 1. Demographic Variables

<table>
<thead>
<tr>
<th>Between-Subjects Factors</th>
<th>Value Label</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>1 Female</td>
<td>372</td>
</tr>
<tr>
<td></td>
<td>2 Male</td>
<td>337</td>
</tr>
<tr>
<td>Country</td>
<td>1 U.S.</td>
<td>633</td>
</tr>
<tr>
<td></td>
<td>2 Other</td>
<td>76</td>
</tr>
</tbody>
</table>
Appendix 2. Excerpted Survey Instrument

Please use the following scale to respond to each item. Circle the letter or letters that best describe the extent to which you agree or disagree with the statement.

**SA - Strongly Agree      A – Agree        N - Neither Agree or Disagree**
**D - Disagree             SD - Strongly Disagree**

<table>
<thead>
<tr>
<th>Self Efficacy Toward Service (SETS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can have a positive impact on social problems.</td>
</tr>
<tr>
<td>I can help people with handicaps.</td>
</tr>
<tr>
<td>I have confidence in my ability to help others.</td>
</tr>
<tr>
<td>I can make a difference in my community.</td>
</tr>
<tr>
<td>Each of us can make a difference in the lives of the less fortunate.</td>
</tr>
</tbody>
</table>

**About You.** The following questions will be used to group students into categories. Your answers will not and cannot be used to identify you individually.

1. Are you: _____Female _____Male
2. What is your age? _____
3. During the past year or so, about how much money have you contributed to charitable or other non-profit organizations? $_____
4. During the past year or so, about how many hours have you volunteered in outreach or social service activities? _____hours
5. What is your home country? _____U.S. _____Other
6. How many years have you been a member of any organization that has outreach or social service as part of its mission? _____Years
7. During the past year or so, about how many times did you attend religious services? _____times
8. Please respond to the following statements about social involvement:

<table>
<thead>
<tr>
<th>Social Involvement (SI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Members of my family are involved in their communities.</td>
</tr>
<tr>
<td>My friends/peers are involved in their communities.</td>
</tr>
<tr>
<td>Members of my family volunteer to help those in need.</td>
</tr>
<tr>
<td>My friends/peers volunteer to help those in need.</td>
</tr>
</tbody>
</table>