



2016

Pre-college Factors Influencing College Students' Civic Attitudes: The Importance of Familial and Community Service Experiences

Barbara E. Moely

Vincent Ilustre

This article was originally published at:

<https://journals.sfu.ca/iarslce/index.php/journal/article/view/222/173>

Recommended Citation

Moely, B., & Ilustre, V. (2016). Pre-college factors influencing college students' civic attitudes: The importance of familial and community service experiences. *International Journal of Research on Service-Learning and Community Engagement*, 4(1), 255-271.

Pre-College Factors Influencing College Students' Civic Attitudes: The Importance of Familial and Community Service Experiences

Barbara E. Moely
Vincent Ilustre
Tulane University

Entering university students (N = 178) were surveyed in the fall of 2013 to learn about their attitudes toward college and civic engagement. As with students beginning study at the same university five to seven years earlier, participants felt positive about the institution's public service graduation requirement and indicated plans to engage in substantial service during college. Their civic attitudes were as or slightly more positive than those of students surveyed earlier, but they were less positive in their self-reported knowledge of the community. Students' reports of family orientation toward community service predicted their views of the graduation requirement, as well as their civic attitudes (i.e., civic responsibility, value placed on community service, and social justice). Replicating earlier research, students' pre-college community service, especially their reported enjoyment of service activities, predicted attitudes toward the graduation requirement and civic attitudes. A mediation model showed that the effects of family orientation on civic attitudes were partially mediated by students' involvement in service during secondary school years. The authors discuss the implications of these findings for K-12 and college programming.

Keywords: civic attitudes, pre-college service, family influences

This study focused on the potential influence of students' pre-college experiences in the family and in the community on their civic attitudes upon entering college. The research followed up on a larger study of students at Tulane University conducted in 2006, 2007, and 2008, the years following Hurricane Katrina. An additional aim of the research was to determine if positive attitudes toward a public service graduation requirement—exhibited in the earlier groups—would be demonstrated in a new group of students beginning study at the university in the fall of 2013.

Although college admissions offices are well aware of the importance of students' pre-college experiences, service-learning programming is often based on the assumption that students enter college with minimally formed attitudes related to civic engagement. Our previous research has shown that students display a wide variation in their attitudes and competencies for civic engagement at college entry. For instance, Moely & Ilustre (2011) found that students' pre-college community service predicted their college choices, expectations, and civic attitudes when they entered the institution. The present research attempted to replicate and extend this finding, taking into account not only pre-college service experiences but also the possible impact of family attitudes toward civic engagement on the development of students' civic attitudes at college entry.

Important increases in cognitive skills during adolescence provide individuals with a strong basis for growth in and refinement of their conceptualizations of civic engagement, citizenship, and the role of the individual as citizen (Baxter-Magolda, 2001; McIntosh, Hart, & Youniss, 2007; Steinberg, 2005). These changes make it possible for influences from the family and the young person's broadening social environment to impact conceptual and emotional development.

Considerable research on human development has demonstrated the influence of family on children's attitudes and motivations (e.g., Berk, 2001, 2013). Indeed, recent studies of youth civic development have identified important mechanisms through which families may influence young learners; in particular, parents may serve as models of attitudes and behaviors and share their conceptualizations of the world

through discussion and debate. Andolina, Jenkins, Cliff, and Keeter (2003) conducted two studies in which telephone interviews were carried out with more than 4,000 individuals 15 to 25 years of age who represented the national population relative to gender, race, education, and region. The researchers found that young adults whose parents acted as role models for civic behavior were more likely to volunteer, follow politics, vote, participate in boycotts, and sign petitions. Political discussions with parents were important precursors of civic involvement. Verba, Schlozman, and Brady (1995) analyzed data from telephone surveys of more than 15,000 adults, following up with 2,500 personal interviews of some of the same individuals, and created a model of intergenerational transmission of civic attitudes and behaviors. According to this model, parents' educational attainment, knowledge of political matters, and discussion of political issues at home were important predictors of their adult children's voluntary political participation, which included voting, working on a campaign, making contributions to candidates, contacting local officials, protesting, or working with others in the community on local problems, either informally or through community organizations. Similarly, McIntosh et al. (2007), using data from the 1996 National Household Education Survey, found evidence for the importance of parent-child discussions in the development of civic competence. They conducted interviews with both parents and their adolescent children—with a total of 3,779 families participating. Discussion of politics with parents predicted adolescents' (i.e., Grades 9-12) self-reported monitoring of news, political knowledge, ability to communicate views orally or in writing, and community service.

Students' school experiences represent another important influence on adolescents' civic views and engagement. Andolina et al. (2003) found that young adults were more likely to volunteer if their high schools had arranged community service opportunities for them, especially if those activities involved open discussions and encouragement of independent thinking. The researchers also concluded that "families, schools, and other groups wishing to influence young adults long after they have left the home or graduated from school can lay the groundwork for later engagement by encouraging positive attitudes early on" (p. 279). McIntosh et al. (2007) found that students' participation in organized activities at school was a significant predictor of their civic outcomes at in Grades 9 to 12. Youniss, McLellan, and Yates (1997) found consistency between young people's civic participation and involvement in organized activities, and their civic behaviors 15 or more years later. Amadeo, Torney-Purta, Lehmann, Husfeldt, and Nikolova (2002) emphasized the roles of both family and school-based experiences on civic knowledge of upper-secondary school students (ages 16-19 years) from 16 different countries (not including the United States). They found that democratic practices and civic activities in the classroom were important for students' civic education. Factors such as an open classroom climate for discussion and participation by students in school governance positively impacted students' civic knowledge (i.e., knowledge of democracy, citizenship concepts, social cohesion and diversity, and economic literacy).

Thus, both family and school appear to have notable impacts on the civic development of youth, although the research to date has not isolated all of the important features of the family or school setting that influence later civic attitudes and behaviors. The aim of the present study was to enhance our understanding of these influences by examining the possible impacts of parents as models of civic involvement, experiences with community service during the secondary school years, and the potential combined effects on students' civic attitudes. With data on both parent and school influences, we were able to explore possible interactions of family and school influences.

Data collection for this project was tied directly to our previous research on the development of civic attitudes, knowledge, and skills during the college years (Moely & Ilustre, 2011, 2013, 2014, 2016). As Tulane University and the city of New Orleans began to rebuild after Hurricane Katrina, the university established an innovative public service graduation requirement. The first class to which this requirement applied entered Tulane in the fall of 2006. At that time, little information was available about the immediate or long-term effects on students of a required service-learning/public service academic experience. Tulane's adoption of the requirement came about in response to the obvious and immediate needs of the community after the hurricane and flooding of August 2005, rather than on the basis of any research indicating how such a requirement would be received by university students. In order to learn about reactions to the requirement, the Center for Public Service at Tulane began to study students' civic

views, attitudes, and knowledge. Students beginning their studies at Tulane in 2006, 2007, and 2008 were surveyed soon after they entered the university. To determine how their attitudes changed or stabilized over time, the same students were surveyed again after two years of academic study, and then again after four years. Some of the major findings of this research included the following:

- Students felt positive about the public service graduation requirement, at college entry and after two and four years at the university (Moely & Ilustre, 2011, 2013, 2016).
- Students' civic attitudes, knowledge, and self-evaluated skills for community engagement exhibited notable stability over time (Moely & Ilustre, 2013, 2016).
- Graduating seniors reported that through their public service experiences, they had enhanced their civic/cultural perspectives, their leadership and social skills, and their cognitive/academic learning, while also developing plans for their future careers and life's work (Moely & Ilustre, 2016).
- Over time, students demonstrated increases in their valuing of community engagement, social justice attitudes, efforts to seek civic knowledge, and self-assessed knowledge of New Orleans and of current events (Moely & Ilustre, 2013, 2016).
- Students' civic attitude changes were due not simply to increases in age but to particular college experiences, including service-learning course work (Moely & Ilustre, 2013, 2014).

The present study partially replicated and extended this earlier research, focusing on pre-college service and parent influences on students' civic attitudes. Previously, we found that students' reports of their pre-college community service experiences predicted their views of the graduation requirement and their plans for completing it (Moely & Ilustre, 2011). In particular, students' enjoyment of pre-college community service was a strong predictor of attitudes at college entry. In addition, ratings of the impact of that service predicted views about the requirement, while the amount of time students reported engaging in such service predicted the amount of service they planned to engage in during college. In a survey of the same students after they had completed two years of college, we found that these indices of pre-college community service continued to predict students' perspectives and plans concerning the graduation requirement (Moely & Ilustre, 2013). One focus of the present research was to determine if students' views about the graduation requirement, and the relationships between pre-college service and attitudes about college service, would be replicated in a new group of students surveyed several years after the most dramatic effects of Katrina had lessened. We developed new questions for the present study concerning the possible influence of parents on students' views and the manner in which a family's service orientation might be related to both a student's pre-college service and his or her attitudes toward required service during college. The following research questions guided this study:

1. How do students entering Tulane University in 2013 compare with those who began their studies at the same institution in 2006-2008 regarding their views of the university's public service graduation requirement and their civic attitudes and knowledge?
2. Do experiences in the family influence students' views of the public service graduation requirement, their civic interests, and their civic attitudes at college entry?
3. Do pre-college service experiences influence students' views of the public service graduation requirement, their civic interests and their civic attitudes at college entry?
4. How are the influences of family and pre-college service related in their impacts? Specifically, is there evidence that family factors have indirect, as well as direct, effects on students' civic views, interests, and attitudes?

Method

Research Participants

The 178 students who completed the survey for this study constituted 11% of the 2013 entering class of 1,690 students. As shown in Table 1, the group tended to be female, White, and from states other than Louisiana. Only 16% of fathers and 20% of mothers had not completed at least a four-year college degree, and many of the parents held graduate degrees. Students themselves reported plans for advanced education, with most planning to continue their studies after receiving their undergraduate degrees. In comparison with the 670 students who were tested at college entry as part of the earlier longitudinal study, the students in the present study had higher high school GPAs ($p < .01$) and were more likely to come from states other than Louisiana ($p < .01$); they were similar in other demographics. Table 1 also summarizes data for the entire entering class of 2013 (Tulane University, 2013). Compared with these peers, the sample for the current study was somewhat more likely to be female ($p < .05$) and to have mothers possessing slightly less advanced education ($p < .05$).

Table 1. Characteristics of Each Group of Research Participants

Demographic Indices	2013 College Entry (N = 178)	2006-2008 College Entry (N = 670)	Entire 2013 Entering Class (N = 1,609)
Gender: % Female	67%	61%	59%
Race: % White	82%	78%	79%
% from Louisiana	15%	24%	12%
Fathers' Education: % Graduate Degrees	49%	50%	54%
Mothers' Education: % Graduate Degrees	40%	39%	48%
% Planning Graduate or Professional Degree	85%	88%	84%
% Attending Public High School	69%	69%	63%
High School GPA (4-point scale)	$M = 3.83$ ($SD = .23$)	$M = 3.69$ ($SD = .40$)	--
% Quite or Very Religious	24%	28%	--

Measures

To allow comparisons with the earlier study, our survey included several measures that were the same as those used in 2006-2008 (Moely & Ilustre, 2011). These measures included students' reported demographic and background characteristics; their views of the graduation requirement and plans for completing it; reasons for attending Tulane and their expectations for their college experience (Moely & Ilustre, 2013); civic attitudes (i.e., civic responsibility [Furco, 1999], value placed on community engagement [Moely & Ilustre, 2011], and social justice [Moely, Mercer, Ilustre, Miron, & McFarland (2002)]); and civic knowledge (i.e., knowledge of New Orleans culture and issues, seeking information about political/societal issues [Moely & Ilustre, 2011]). Internal consistency reliability for the scales with this new sample were adequate, ranging from $\alpha = .79$ for "seeks information" to $\alpha = .93$ for "knowledge of New Orleans culture and issues."

Students' involvement in community service prior to college was measured by asking about students' enjoyment of service, the extent to which they felt their service had had an impact in the community, and the amount of time they had spent in service activities (see Table 2).

Table 2. Measuring Students' Participation in and Gains from Community Service

Item	Mean (SD)	Correlations of Measures	
		Impact of Service	Hours of Service
"How much did you <u>enjoy</u> this service?" (1 = Not at all; 2 = It was OK; 3 = I liked it; 4 = I liked it very much)	3.44 (.79)	.52***	.39***
"To what extent do you feel that your work made an <u>impact</u> ?" (0= Not at all; 1 = Not sure; 2 = A slight amount; 3 = A considerable impact; 4 = A very important impact)	3.65 (.97)		.42***
" <u>Hours</u> of community service in past 12 months" (1 = 1-25 hours ... 3 = 51-75 hours ... 7 = More than 200 hours)	3.12 (1.98)		

Note. *** Correlations were all significant at $p < .001$.

We created new questions to assess students' views of the extent to which their parents were involved in service in the community and their family's general orientation toward service (see Table 3). Fathers' involvement in public or community service was rated lower than mothers' involvement. Correlations between parent ratings and the overall family rating were significant for each parent; ratings by mothers were especially predictive of the family's overall orientation toward public service. Ratings for parent service were generally low: The modal response for mothers' service (by 42% of the sample) was a rating point indicating that they engaged in service "once in a while." Regarding fathers, the most frequent rating (by 43% of the students) indicated that the fathers engaged in no service.

Table 3. Measures of Family Involvement in Public/Community Service

Survey Item	Mean (SD)	Correlations of Ratings	
		With Father Rating	With Family Rating
“How much has your mother been involved in public or community service during the past two years?” (1 = Not at all involved; 2 = Once in a while; 3 = Once a month; 4 = Twice a month; 5 = Every week; 6 = Daily)	2.62 (1.45)	.33***	.67***
“How much has your father been involved in public or community service during the past two years?” (Response choices as above.)	1.96 (1.18)		.47***
“Which of the following would best describe your family? (Check one.) <input type="checkbox"/> My family members are not interested in public service. [Coded 1] <input type="checkbox"/> My family members think public service is OK but are not very involved in it. [Coded 2] <input type="checkbox"/> My family members take part in service activities organized by formal groups (e.g., educational or religious organizations). [Coded 3] <input type="checkbox"/> My family members actively seek out public service opportunities [Coded 4]”	2.52 (.85)		

Note: *** Correlations were all significant at $p < .001$.

Ratings for involvement of mothers were higher than ratings of fathers' involvement, $F(1,148) = 22.81, p < .001$.

In an open-ended survey question, students were asked to describe ways in which their parents served the community. The activities that students identified most often were related to services to children through schools, clubs, or organizations (mentioned by 19% of mothers and 8% of fathers) and service associated with religious organizations (mentioned by 15% of mothers and 12% of fathers). Mothers also reported engaging in food-related service (11% mentioned food pantries, feeding the homeless, or Meals on Wheels). Other activities included health-related services, fundraising and financial aid, and roles as officers or board members for service organizations. Mothers' service activities were described in some form by 62% of respondents, while fathers' activities were described by only 31% of the students. Many students either failed to answer the question or indicated that they did not know about their parents' community service activities. Thus, there was consistency between ratings of parents' service involvement and responses to the open-ended questions, with each measure showing that students were aware of greater public service involvement by mothers than by fathers, and that they saw their parents as rather limited in service involvement.

Procedure

Soon after they arrived on campus in the fall of 2013, the entering students were invited by e-mail to take part in a survey about their views of the university's emphasis on public service and about their attitudes toward community engagement. The survey was made available on a website called Campus Labs (<http://www.campuslabs.com>), so that students could complete it at their convenience. The researchers

sent a reminder e-mail to students a few weeks after the initial invitation. Students who completed the survey were eligible to take part in a drawing for gift certificates of \$50 each; 10 such gift certificates were awarded.

Procedures for the study were approved by Tulane's institutional review board.

Results

The first research question concerned the similarity of views expressed by the 2013 group with those of students who had participated in earlier years. Comparisons were made between the two groups' views of the public service graduation requirement and students' plans for service, civic interests at the time of college entry, civic attitudes and knowledge, and pre-college service experiences.

Students' Views of the Public Service Requirement

We asked students to indicate their views of the university's public service requirement and their plans for engaging in service while enrolled at Tulane. Generally, the students responded very positively, with 71% indicating that public service experiences are a "good idea" for learning about academic subject matter. The 2013 sample was more positive about the requirement than were the students in the 2006-2008 sample (see Table 4). When asked about how much public service they planned to do, only 15% indicated that they would limit their involvement to simply meeting the requirement. The amount of service students planned to undertake was similar to that indicated by students in earlier years.

Table 4. Students' Views of the Public Service Requirement

Survey Question/Responses	2013 First-Year Students (N = 178)	2006-2008 First-Year Students (N = 670)
<u>Evaluation:</u> "Do you think that learning about academic subject matter through public service experiences is..."		
"A good idea"	71%	57%
"OK"	19%	31%
"No opinion"	5%	6%
"A bad idea"	5%	6%
<u>Plans:</u> "How much public service do you plan to do while here at Tulane?"		
"I plan to become very active in the community"	30%	27%
"More than the amount required if it seems beneficial"	55%	57%
"Just the amount that is required, no more"	15%	16%

Note. The 2013 sample was significantly different from the 2006-2008 group, according to a Chi-square test of frequencies, $\chi^2(3, 828) = 11.79, p < .01$. An analysis of variance of a score derived from the frequencies above also showed a group difference, at $p < .02$, with the 2013 sample showing stronger positive endorsement of public service than students did in the earlier survey. No group difference in students' plans was shown, using either Chi-square or analysis of variance tests.

We asked students whether they had been aware of the graduation requirement when they applied to the university. In the 2013 sample, 80% indicated such awareness. Their responses were similar to those of students entering in 2008 (71% were aware) but higher than responses from the 2006 (56%) and 2007 (54%) entering classes, $\chi^2(df=4) = 24.51, p < .001$. Awareness related significantly to both evaluation of and plans for the public service requirement, r 's = .33 and .34, both $p < .001$.

Students' Interests at College Entry

Following earlier procedures (Moely & Ilustre, 2013), we obtained summary variables to compare students' interests in civic, academic, and social aspects of college. These were based on students' responses to survey questions asking about their reasons for choosing Tulane and their expected gains during college. Students were most positive about the academic aspects of the college experience, showed moderate interest in the civic aspects, and expressed the least interest in social aspects. Means differed significantly, according to a repeated measures analysis of variance, $F(2, 145) = 82.92, p < .001$. Students in the 2013 sample were more positive about both academic and social interests at college entry than were the earlier participants, but there was no significant difference in civic interests (see Table 5). The 2013 respondents also reported stronger high school grades, with a mean score (on a 4-point scale) of 3.83 ($SD = .23$) compared to a mean of 3.69 ($SD = .40$) for the 2006-2008 group, $F(1, 824) = 18.51, p < .001$.

Table 5. Comparisons of Two Samples on Interests at College Entry, Civic Attitudes and Knowledge, and Pre-College Service

Measure	2013 Sample (<i>N</i> = 178) Mean (<i>SD</i>)	2006-2008 Sample (<i>N</i> = 670) Mean (<i>SD</i>)
Civic Interests at College Entry	<i>M</i> = 2.98 (<i>SD</i> = .59)	<i>M</i> = 2.96 (<i>SD</i> = .63)
Academic Interests at College Entry***	<i>M</i> = 3.44 (<i>SD</i> = .48)	<i>M</i> = 3.27 (<i>SD</i> = .43)
Social Interests at College Entry **	<i>M</i> = 2.85 (<i>SD</i> = .68)	<i>M</i> = 2.66 (<i>SD</i> = .65)
Civic Responsibility***	<i>M</i> = 3.30 (<i>SD</i> = .60)	<i>M</i> = 3.11 (<i>SD</i> = .48)
Valuing Community Engagement	<i>M</i> = 3.73 (<i>SD</i> = .76)	<i>M</i> = 3.62 (<i>SD</i> = .68)
Social Justice***	<i>M</i> = 3.98 (<i>SD</i> = .67)	<i>M</i> = 3.78 (<i>SD</i> = .56)
Seeks Information about Political/Societal Issues**	<i>M</i> = 3.20 (<i>SD</i> = .55)	<i>M</i> = 3.36 (<i>SD</i> = .55)
Knowledge of New Orleans Culture and Issues***	<i>M</i> = 2.60 (<i>SD</i> = .76)	<i>M</i> = 2.92 (<i>SD</i> = .73)

Enjoyment of Service** (4 point scale)	$M = 3.44$ ($SD = .79$)	$M = 3.24$ ($SD = .85$)
Impact of Service*** (4 point scale)	$M = 3.66$ ($SD = .97$)	$M = 3.03$ ($SD = .94$)
Hours of Pre-college Service (0-9 pt. scale)	$M = 3.12$ ($SD = 1.98$)	$M = 3.31$ ($SD = 1.83$)

** $p < .01$

*** $p < .001$, for comparisons of 2006-08 and 2013 groups, according to analyses of variance of each measure.

Students' Civic Attitudes, Interests, and Knowledge

Students in the 2013 sample obtained scores on civic attitude measures that were similar to or higher than those of students surveyed in earlier years (see Table 5). The 2013 students rated civic responsibility and social justice values more positively than did students surveyed earlier. The two groups did not differ in their reported level of civic interest at the time of college entry or in their views of the value of community engagement. On the other hand, the 2013 students were less positive about their own civic knowledge and reported less effort to seek information about political and social issues than those surveyed earlier.

Pre-College Service Experiences

The students in the 2013 sample reported increased involvement in service-learning or volunteer service activities with increasing age: While only 38% reported such service in Grades K to 4, 78% did so in Grades 5 to 8, and nearly all students (98%) engaged in community service during their secondary school years. Most (98%) had performed service as a volunteer activity, while 60% did so as a school requirement, 68% through a service organization (e.g., Boys or Girls Clubs), 41% through a religious organization, and 34% for a service-learning course. Comparisons with the 2006-2008 sample showed that students in the two groups reported spending about the same amount of time engaging in service activities, but those in the 2013 sample rated both their enjoyment and the impact of their service more positively than the 2006-2008 students did (see Table 5).

Predicting Students' Views from Family and Pre-College Service Experiences

The study's second and third research questions centered on identifying the possible predictive impact of students' experiences in the family and the community during the year prior to college enrollment on their civic attitudes after entering college. To investigate these questions, we conducted regression analyses to predict attitudes from three sets of variables: Step 1 controlled for gender and racial/ethnic (White vs. non-White) differences; step 2 included the three family measures: mother involvement in service, father involvement, and family orientation toward service; and Step 3 included three aspects of pre-college service: enjoyment and impact of service, and hours of service completed. Table 6 summarizes the predictions of students' reactions to the public service graduation requirement (evaluation and plans), while Table 7 summarizes predictions of students' civic attitudes: civic responsibility, valuing of community engagement and civic interests at college entry. For three additional scales, the regression analyses did not show effects related to either family or service: social justice, seeking information about political/social issues, and knowledge of New Orleans culture and issues. These scales were not considered further.

Women were more positive than men on all of the measures except civic interests. They demonstrated more positive views of the graduation requirement and more ambitious plans for

completing it, as well as stronger endorsement of civic responsibility and greater valuing of community engagement. Race/ethnicity did not add to the predictive value of any of the variables.

Overall, family orientation toward service predicted students' evaluations of the graduation requirement and their scores on measures of civic responsibility, valuing community engagement, and civic interests. Neither of the parent ratings alone predicted measures, most likely because they were correlated with the family orientation variable.

Students' prior experiences with community service were particularly significant predictors: Ratings of the extent to which students had enjoyed their prior service was a consistent predictor of their evaluations, plans, attitudes, and interests. Rated impact of pre-college service was related to the evaluation of the requirement and valuing of community engagement. Hours of service significantly predicted plans for future service and valuing of community engagement. The regression analyses are summarized in Tables 6 and 7.

Table 6. Predicting Students' Views at College Entry of the Public Service Graduation Requirement from Family and Pre-College Service Experiences

Dependent Variables:	Evaluation of the Graduation Requirement			Plans for Meeting the Requirement		
Predictors	<i>b</i>	<i>SE b</i>	<i>β</i>	<i>b</i>	<i>SE b</i>	<i>β</i>
Step 1: Personal Characteristics						
Gender (1 = Male, 2 = female)	.406	.146	.235**	.416	.111	.306***
Race (1 = non-White, 2 = White)	.186	.199	.079	.334	.151	.180*
Significance for Step 1 prediction:	Adjusted <i>R</i> ² = .046*			Adjusted <i>R</i> ² = .110***		
Step 2: Family Service						
Mother’s community service during past two years	-.007	.064	-.013	.085	.048	.188
Father’s community service during past two years	-.047	.062	-.067	.016	.047	.029
Family orientation toward service	.381	.115	.387**	.156	.086	.201
Change in prediction at Step 2:	<i>R</i> ² Change = .120**			<i>R</i> ² Change = .130***		
Step 3: Student’s Pre-college Service						
Enjoyment of prior service	.330	.094	.316**	.195	.072	.238**
Impact of prior service	.172	.074	.206*	.059	.057	.090
Hours of community service in past year	.016	.035	.046	.065	.027	.206*
Change in prediction at Step 3:	<i>R</i> ² Change = .187***			<i>R</i> ² Change = .143***		

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 7. Predicting Students' Civic Attitudes from Family and Pre-College Service Experiences

Dependent	Civic Responsibility	Valuing Community	Civic Interests at
-----------	----------------------	-------------------	--------------------

Variables:	Engagement						College Entry		
Predictors	<i>b</i>	<i>SE b</i>	<i>β</i>	<i>b</i>	<i>SE b</i>	<i>β</i>	<i>b</i>	<i>SE b</i>	<i>β</i>
Step 1: Personal Characteristics									
Gender (1 = male, 2 = female)	.310	.127	.232*	.485	.154	.286**	.168	.117	.128
Race (1 = non-White, 2 = White)	.062	.180	.032	.381	.207	.167	.144	.161	.079
Significance for Step 1 prediction:	Adjusted <i>R</i> ² = .036*			Adjusted <i>R</i> ² = .082**			Adjusted <i>R</i> ² = .006		
Step 2: Family Service									
Mother’s community service during past two years	.036	.051	.079	-.017	.060	-.030	-.041	.049	-.095
Father’s community service during past two years	-.026	.049	-.050	.017	.060	.025	-.042	.049	-.083
Family orientation toward Service	.333	.089	.439***	.434	.110	.451***	.353	.090	.479***
Change in prediction at Step 2:	<i>R</i> ² Change = .209***			<i>R</i> ² Change = .184***			<i>R</i> ² Change = .145***		
Step 3: Student’s Prior Service									
Enjoyment of prior service	.198	.079	.257*	.250	.095	.244**	.284	.075	.363***
Impact of prior service	.114	.065	.175	.175	.074	.209*	.083	.060	.128
Hours of community service in past year	.045	.029	.149	.071	.033	.183*	.030	.027	.097
Change in prediction at Step 3:	<i>R</i> ² Change = .174***			<i>R</i> ² Change = .201***			<i>R</i> ² Change = .198***		

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

Testing a Mediation Model

The final research question concerned relationships between two sets of predictors (i.e., family characteristics and pre-college service experiences) and entering students' views. We proposed a developmental model in which the family influences student attitudes through the mediating influence of pre-college service experiences. We considered this for each of the variables listed in Tables 6 and 7 but report here only the results of data analysis for students' evaluation of the graduation requirement.

In order to establish a mediating variable, four conditions must be met (Baron & Kenny, 1986; Moely & Gallini, 2003): First, there must be a significant relationship between the predictor A (in this case, family characteristics) and the potential mediator B (students' pre-college community service); second, there must be a significant relationship between B and the outcome C (students' evaluations of the graduation requirement); third, the relationship between A and C must be significant; and fourth, that relationship must be significantly diminished when the mediating variable (B) is entered into the

regression equation. Analyses showed evidence for these relationships. First, the regression analyses presented in Table 8 revealed that family characteristics (A) predicted each of three measures of students' pre-college community service (B). Second, the regression analyses summarized in Table 6 showed that the measures of pre-college service (B) predicted the outcome variable (C, evaluation of the requirement). Third, the relationship between A (family orientation) and the outcome variable C was significant (Table 6). Finally, the relationship between family orientation (A) and evaluation (C) was reduced when measures of pre-college service (B) were entered into the regression equation. The regression analysis summarized in Table 9 for the evaluation measure demonstrates this reduction in predictive value of the family orientation variable when pre-college service measures were included in the prediction model. It is important to note that the prediction of evaluations from family orientation was still significant after service variables were entered; however, the magnitude of the prediction was reduced. Analyses of scores for scales measuring civic responsibility, valuing of community engagement, and civic interests showed similar patterns.

Table 8. Predicting Students' Pre-College Service from Family Characteristics

Dependent Variables:	Enjoyment of Community Service			Impact of Community Service			Hours of Community Service		
Predictors	<i>b</i>	<i>SE b</i>	<i>β</i>	<i>b</i>	<i>SE b</i>	<i>β</i>	<i>b</i>	<i>SE b</i>	<i>β</i>
Step 1: Personal Characteristics									
Gender (1 = male, 2 = female)	.348	.140	.210*	.278	.177	.134	.279	.370	.065
Race (1 = non-White, 2 = White)	.221	.191	.098	.391	.242	.138	.618	.504	.106
Significance for Step 1 prediction:	Adjusted <i>R</i> ² = .038*			Adjusted <i>R</i> ² = .022			Adjusted <i>R</i> ² = .000		
Step 2: Family Service									
Mother's community service during past two years	.063	.061	.113	.026	.079	.037	.203	.156	.142
Father's community service during past two years	-.083	.060	-.126	.007	.077	.009	-.180	.152	-.105
Family orientation toward Service	.276	.111	.293*	.312	.143	.264*	.874	.282	.359**
Change in prediction at Step 2:	<i>R</i> ² Change = .114**			<i>R</i> ² *Change = .083**			<i>R</i> ² Change = .179***		

Note. Conclusion: Family orientation predicted students' pre-college involvement with and enjoyment of community service, supporting the first step of the mediation model.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 9. Testing for Mediation of Family Influence by Students' Pre-College Service Experiences for Students' Views of the Public Service Graduation Requirement

Dependent Variable: Predictors	Evaluation of the Graduation Requirement		
	<i>b</i>	<i>SE b</i>	β
Step 1: Gender and Family Orientation			
Gender (1 = Male, 2 = female)	.371	.124	.222**
Family orientation toward Service	.308	.070	.327***
Adjusted R^2 for Step 1 = .158***			
Step 2: Student's Pre-college Service			
Gender	.262	.116	.157*
Family orientation toward Service	.152	.072	.162*
Enjoyment of prior service	.365	.083	.358***
Impact of prior service	.055	.062	.069
Hours of community service in past year	.025	.032	.063
R^2 Change for Step 2 = .147***			

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

Discussion

We undertook this replication study with some concern. Would students in 2013 exhibit the same positive views of the public service graduation requirement as demonstrated by entering classes soon after Katrina had devastated New Orleans? Perhaps this new cohort would be uninterested in community involvement, since the city's needs for service were less obvious than they had been earlier. We were pleased and somewhat surprised to discover that the 2013 entering class was as positive, if not more positive, about the requirement than were students from earlier years. Most students entering in 2013 were aware that public service would be emphasized at the university, having learned about it from admissions materials and presentations as well as from information sources available online (e.g., see Pope, 2010; Saulny, 2006, or *U.S. News and World Report*, 2015.) Awards to the university, such as membership in the President's Higher Education Community Service Honor Roll (n.d.), also emphasized Tulane's community focus. Previous social psychological research (e.g., Stukas, Snyder, & Clary, 1999) has shown that requirements are not viewed negatively if they correspond to the beliefs and values held by individuals. Entering students knew there was a requirement and were optimistic about spending time in the community. Our longitudinal research has demonstrated that these positive attitudes are maintained

over time as students go about their studies and complete the requirement prior to graduation (Moely & Ilustre, 2013, 2016).

The students in the 2013 sample expressed civic interests similar to those shown by students entering in earlier years, but they were more positive about civic responsibility and social justice issues and more enthusiastic about their pre-college service experiences, suggesting a higher level of commitment to community engagement. These students did score lower on a scale regarding their efforts to seek information about political and social issues, but that may have been due to changes, over the past decade, in how people obtain information; questions on that scale did not emphasize the online sources of information often used today. The lack of effort to seek information does correspond to these students rating themselves as less well-informed about issues in the city of New Orleans than the earlier groups. However, it is also possible that these more engaged students had higher standards about what knowledge of community should include than did students in the earlier study.

The importance of family factors was apparent in several findings. First, family orientation was a strong predictor of students' attitudes, interests, and views of the graduation requirement. It also predicted all three measures of students' pre-college service. Mothers received higher ratings for service, and their ratings were more strongly correlated with the overall rating of family orientation toward service than were fathers' ratings. The parents provided models of community involvement through their service activities. It is possible that students were more aware of the service their mothers did since they often described mothers' contributions to schools and religious organizations, while seeming less informed about fathers' possible service activities. The family orientation measure appeared to be a composite of students' views of community involvement of mothers, fathers, and the students themselves. Mean scores were not high, indicating, at best, a moderate level of service involvement by family members. The importance of family factors was further demonstrated by the relationships shown in Figure 1: Not only were family factors directly related to students' attitudes, they also influenced the extent to which students were involved in service prior to college, which also contributed to the developing students' civic interests and attitudes.

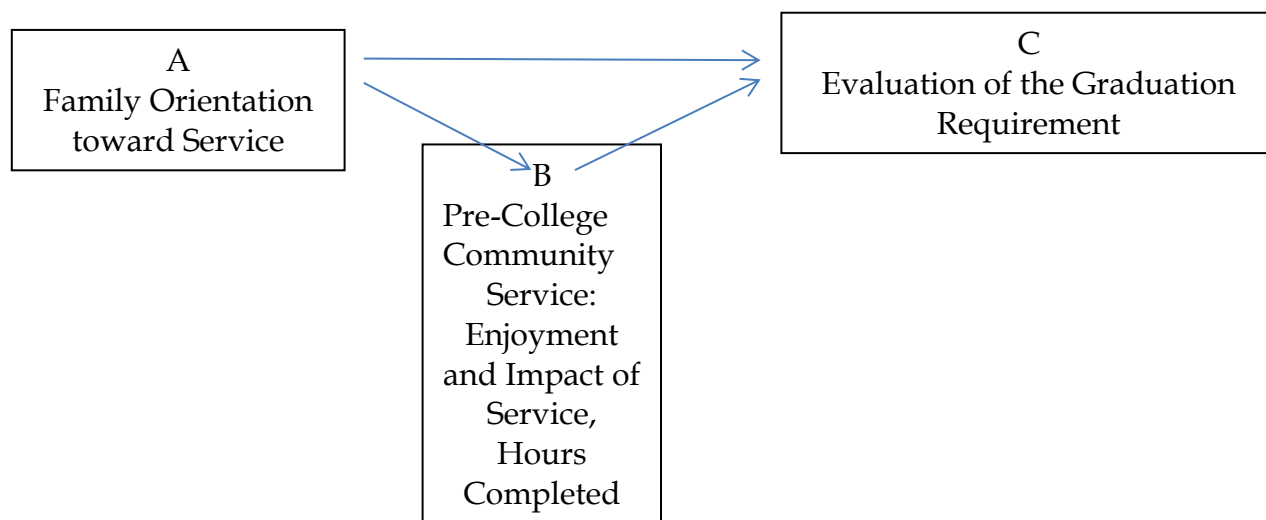


Figure 1. Predicting students' views of the public service graduation requirement from family orientation and pre-college service experiences. Students' ratings of the extent to which their families had been involved in community service (A) predicted students' involvement in pre-college service (B) (Table 8). This family orientation measure (A) also predicted attitudes at college entry about a public service graduation requirement (C) (Table 6). Students' service experiences (B) also predicted these attitudes (C) (Table 6). Analysis showed that the prediction of attitudes (C) by family orientation (A) was reduced when students' service experiences prior to college entry (B) were taken into account (Table 9). Partial mediation was shown: Family orientation predicted students' attitude toward a public service graduation

requirement directly and also indirectly, as that orientation led to students' involvement in the community prior to college.

For students entering the university between 2006 and 2008, pre-college community service had an impact on civic attitudes. The present study replicated and extended this finding. It was particularly notable that, in the present study, students' reported enjoyment of their service was the strongest and most consistent predictor of civic attitudes and interests. Students who had enjoyed their pre-college community service experiences were more positive about the graduation requirement and scored higher in relation to civic interests and civic attitudes. As in the earlier study, hours of service prior to college predicted plans for future involvement, and the impact ratings predicted evaluation of the requirement. These findings are consistent with those of Nicotera, Brewer, and Veeh (2015), whose research showed positive carryover from high school service to well-being among first-year undergraduate students.

An important limitation of the study was that all measures were reports by the student and thus might have reflected certain unspecified biases or misunderstandings. For example, students interested in civic engagement might have been biased toward seeing their parents as sharing those interests. The similarity between students' ratings of parents' involvement and their reports on the open-ended questions suggests some validity for the ratings. However, we do not know what parents themselves would have said about their community service; it is possible, for instance, that they were involved in service through their work settings in ways that were not obvious to their children. We view this research as a step toward learning about parent influences, one that can be furthered by more direct measures such as parent interviews or family observations. Another limitation concerns the generality of these findings. Research participants included students at a private university admitted selectively from a large number of applicants (Pope, 2010); thus, they may not represent college students in general. Again, this is a question for future research: How would students in other settings respond to a similar public service graduation requirement?

Conclusion

The findings of this study highlight the importance of high-quality community service for students at the elementary and secondary level. Service that students enjoy and see as impactful can have lasting effects for them, carrying over to college entry and beyond (Moely & Ilustre, 2011, 2013). Nicotera, Brewer, and DesMarais (2013) have shown the impacts of community action programs on high school students. As a result of their pre-college experiences, new college students bring varied experiences, interests, and values that affect how they respond to service-learning and other civic engagement opportunities. Service-learning programs at the college level should offer varied experiences ranging from a basic introduction to the community to opportunities requiring individualized and in-depth contributions. Students with little background in community service can benefit from a structured service-learning experience with hours, site, and activities provided by the program, along with education on community strengths and needs, what service-learning is, and what such a program aims to accomplish. Students who already have an extensive community service background may profit more from academic experiences such as internships and community-based research, which would allow them to exercise more autonomy, creativity, and leadership and thereby further develop their particular individual skills for the benefit of communities served. Indeed, well-planned and -implemented community engagement experiences during college can have lasting influences on graduates' civic attitudes, career choices, and community engagement long after college graduation (Keen & Hall, 2009; Vogelgesang, 2009; Vogelgesang, & Astin, 2000).

Author Note

Barbara E. Moely, Center for Public Service, Tulane University; Vincent Ilustre, Office of Advancement, Tulane University.

Correspondence

Correspondence regarding this article should be addressed to Barbara E. Moely, Research Affiliate, Center for Public Service, Alcee Fortier Hall, 6823 St. Charles Avenue, New Orleans, LA 70118. Phone: (504) 914-3322. E-mail: moely@tulane.edu

References

- Amadeo, J., Torney-Purta, J., Lehmann, R., Husfeldt, V., & Nikolova, R. (2002). *Civic knowledge and engagement: An IEA study of upper secondary students in sixteen countries*. Amsterdam: International Association for the Evaluation of Educational Achievement. Retrieved from http://www.iea.nl/fileadmin/user_upload/Publications/Electronic_versions/CIVED_Phase2_Upper_Secondary.pdf
- Andolina, M. W., Jenkins, K., Cliff, Z., & Keeter, S. (2003). Habits from home, lessons from school: Influences on youth civic engagement. *Political Science and Politics*, 2, 275-288.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182.
- Baxter-Magolda, M. (2001). *Making their way: Narratives for transforming higher education to promote self-development*. San Francisco: Jossey Bass.
- Berk, L. E. (2001). *Awakening children's minds: How parents and teachers can make a difference*. New York: Oxford University Press.
- Berk, L. E. (2013). *Child development*. (9th ed.). Boston: Pearson Education.
- Center for Public Service, Tulane University. (n.d.). Awards and recognition. Retrieved from <https://tulane.edu/cps/about/cps-awards.cfm>
- Cooperative Institutional Research Program. (2013). CIRP freshman survey, institutional profile reports: Tulane University. Los Angeles: UCLA, Higher Education Research Institute.
- Furco, A. (1999). Higher education service-learning survey. Retrieved from <http://digitalcommons.unomaha.edu/slceslgen/127/>
- Gallini, S., & Moely, B. E. (2003). Service learning and engagement, academic challenge, and retention. *Michigan Journal of Community Service Learning*, 10, 5-14.
- Keen, C., & Hall, K. (2009). Engaging with difference matters: Longitudinal student outcomes of co-curricular service-learning programs. *Journal of Higher Education*, 80(1), 59-79.
- McIntosh, H., Hart, D., & Youniss, J. (2007). The influence of family political discussion on youth civic development: Which parent qualities matter? *Political Science and Politics*, 40(3), 495-499.
- Moely, B. E., & Ilustre, V. (2011). University students' views of a public service graduation requirement. *Michigan Journal of Community Service Learning*, 17(2), 43-58.
- Moely, B. E., & Ilustre, V. (2013). Stability and change in the development of college students' civic attitudes, knowledge, and skills. *Michigan Journal of Community Service Learning*, 19(2), 21-35.
- Moely, B. E., & Ilustre, V. (2014). The impact of service-learning course characteristics on university students' learning outcomes. *Michigan Journal of Community Service Learning*, 21(1), 5-16.
- Moely, B. E., & Ilustre, V. (2016). Outcomes for students completing a university public service graduation requirement: Phase 3 of a longitudinal study. *Michigan Journal of Community Service Learning*, 22(2), 16-30.
- Moely, B. E., Mercer, S. H., Ilustre, V., Miron, D., & McFarland, M. (2002). Psychometric properties and correlates of the Civic Attitudes and Skills Questionnaire (CASQ): A measure of students' attitudes related to service learning. *Michigan Journal of Community Service Learning*, 8, 15-26.

- Nicotera, N., Brewer, S., & DesMarais, E. (2013). Developing the civic skills of public school youth: A mixed methods assessment. *International Journal of Research on Service-learning and Community Engagement*, 3(1). Retrieved from <http://journals.sfu.ca/iarslce/index.php/journal/search/search?simpleQuery=nicotera&searchField=query>
- Nicotera, N., Brewer, S., & Veeh, C. (2015). Civic activity and well-being among first-year college students. *International Journal of Research on Service-learning and Community Engagement*, 3(1). Retrieved from <http://journals.sfu.ca/iarslce/index.php/journal/search/search?simpleQuery=nicotera&searchField=query>
- Pope, J. (2010, October 3). Tulane University gets record 44,000 applications this year. *Times Picayune*. Retrieved from http://www.nola.com/education/index.ssf/2010/10/tulane_university_gets_record.html
- President's higher education community service honor roll (n.d.). Retrieved from <http://www.nationalservice.gov/special-initiatives/honor-roll>
- Saulny, S. (2006, September 6). In New Orleans, it's a cram course in public service 101. *New York Times*. Retrieved from <http://www.nytimes.com/2006/09/06/education/06education.html>
- Steinberg, L. (2005). Cognitive and affective development in adolescence. *Trends in Cognitive Sciences*, 9(2), 69-74.
- Stukas, A. A., Snyder, M., & Clary, E. G. (1999). The effects of "mandatory volunteerism" on intentions to volunteer. *Psychological Science*, 10(1), 59-64.
- Tulane University. (2013). *First-time full-time undergraduate enrollment: Freshman profile*. Retrieved from http://registrar.tulane.edu/enrollment_profiles/201330/2013_FTF_PROFILE.pdf
- U.S. News and World Report. (2015). Education rankings and advice. Service learning. Retrieved from <http://colleges.usnews.rankingsandreviews.com/best-colleges/rankings/serving-learning-programs>
- Verba, S., Schlozman, K. L., & Brady, H. E. (1995). *Voice and equality: Civic volunteerism in American politics*. Cambridge, MA: Harvard University Press.
- Vogelgesang, L. J. (2009). Civic engagement and service-learning: The challenge and promise of research. In B. Moely, S. Billig, & B. Holland (Eds.), *Creating our identities in service-learning and community engagement* (pp. 237-250). Charlotte, NC: Information Age Publishing.
- Vogelgesang, L. J., & Astin, A. W. (2000). Comparing the effects of community service and service learning. *Michigan Journal of Community Service Learning*, 7, 25-34.
- Youniss, J., McLellan, J. A., & Yates, M. (1997). What we know about engendering civic identity. *American Behavioral Scientist*, 40(5), 620-631.

