Developing Social Capital: The Effect of an Academic Service-Learning Component on the Civic Attitudes of College Students

Joshua Paul Duplantis
University of Southern Mississippi

Follow this and additional works at: https://aquila.usm.edu/dissertations

Recommended Citation
https://aquila.usm.edu/dissertations/652
DEVELOPING SOCIAL CAPITAL: THE EFFECT OF AN ACADEMIC SERVICE-LEARNING COMPONENT ON THE CIVIC ATTITUDES OF COLLEGE STUDENTS

by

Joshua Paul Duplantis

Abstract of a Dissertation Submitted to the Graduate School of The University of Southern Mississippi in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

May 2013
ABSTRACT

DEVELOPING SOCIAL CAPITAL: THE EFFECT OF AN ACADEMIC SERVICE-LEARNING COMPONENT ON THE CIVIC ATTITUDES OF COLLEGE STUDENTS

by Joshua Paul Duplantis

May 2013

Service-learning courses are credit-bearing educational experiences that deepen course content, meet identified community needs and use reflection to help students connect their service with the learning. These experiences give students an increased level of civic attitude and increased networks, which increases social and human capital. Research shows that the increase in capital developed through service-learning plays an important role in students’ job search success (D’Agostino, 2010). This heightened social capital is critical as the United States, specifically Mississippi, will deal with a projected increase in the need for college graduates who are prepared to navigate a job search and enter the workforce.

This study enhances the existing research by looking at a combination of civic attitudes and other social capital indicators pre- and post-service-learning experience with students at The University of Southern Mississippi (USM), a racially diverse institution.

Attitude was measured by using the Civic Attitudes and Skills Questionnaire (CASQ) developed by Moely, Mercer, Ilustre, Miron and McFarland (2002a) and the social capital scale developed by D’Agostino (2010)
that is used specifically to measure the impact of service-learning on social
capital. Findings revealed a statistically significant difference among the service-
learning students versus the non-service-learning students on the civic attitudes
score but not on the social capital score. Service-learning was found to mitigate
a slump in civic attitudes experienced by students not participating in service-
learning. The demographic variables of race, gender and class standing for civic
attitudes and social capital were also examined. The effect of race on civic
attitudes was significant. All other demographic data findings on both the civic
attitudes and social capital scales followed expected trends and provided insight
into the study, however, these findings were not statistically significant. The
study also found that there is a correlation between the two scales. When civic
attitudes increased, so did social capital, and vice-versa.

This study identifies the service-learning component as a viable treatment
to help students maintain a positive civic attitude and increase social capital.
COPYRIGHT BY

JOSHUA PAUL DUPLANTIS

2013
ACKNOWLEDGMENTS

I would like to acknowledge the patience, confidence, and support of my colleagues, family, and friends throughout my dissertation journey. Specifically, I’d like to recognize my wife, Elisabeth, for being so supportive and helpful through all of my graduate studies. I look forward to the next chapter of our lives.

A special thank you to my advisor, Dr. Chad Miller. I appreciate your willingness to assume the role of chair as changes were made within the committee structure. Your open, honest feedback and communication was vital to the successful completion of my dissertation.

To Dr. Cyndi Gaudet, Dr. Brian Richard, and Dr. Brent Hales, thank you all for your continuous improvement of my work. I’ve always appreciated your commitment to student learning. I am proud of my accomplishments over the past six years in the HCD program. Those accomplishments were made possible through your guidance.

Finally, thank you to Dr. Richard Conville. Thank you for being willing to serve on my committee along with your continuous support of my work and professional development. I am so proud to call you a colleague, a mentor, and most importantly, a friend.
TABLE OF CONTENTS

ABSTRACT .................................................................................. ii

ACKNOWLEDGMENTS ................................................................. iii

LIST OF TABLES ......................................................................... vii

LIST OF ILLUSTRATIONS .......................................................... x

CHAPTER

I. INTRODUCTION ........................................................................ 1

   Background
   Conceptual Underpinnings of the Study
   Statement of the Problem
   Purpose of the Study
   Hypotheses
   Limitations of the Study
   Definition of Terms
   Summary

II. REVIEW OF LITERATURE ...................................................... 21

   Human Capital
   Social Capital
   Social Capital, Networks, and Job Success
   Civic Attitudes and Social Capital
   Service-Learning
   Service-Learning and Civic Attitudes
   Gaps in the Research
   Summary

III. METHODOLOGY ................................................................. 62

   Hypotheses
   Design
   Population and Sample
   Instrument
   Data Collection
   Data Analysis
   Validity and Reliability
IV. ANALYSIS OF DATA ................................................................. 81
   Participants
   Civic Attitude and Social Capital Scores
   Civic Attitude Subscale Scores
   Social Capital Scale
   Factor Analysis
   Analysis of Hypotheses
   Summary

V. SUMMARY, DISCUSSION, AND RECOMMENDATIONS .......... 116
   Discussion
   Implications
   Future Research
   Limitations
   Conclusion

APPENDIXES .................................................................................. 136

REFERENCES .............................................................................. 147
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Service-Learning Courses at The University of Southern Mississippi</td>
<td>68</td>
</tr>
<tr>
<td>2.</td>
<td>Survey Questions Broken Down by Subscale</td>
<td>69</td>
</tr>
<tr>
<td>3.</td>
<td>Variables Related to Hypothesis</td>
<td>75</td>
</tr>
<tr>
<td>4.</td>
<td>Frequency of Pre- and Posttest Participants</td>
<td>83</td>
</tr>
<tr>
<td>5.</td>
<td>Percentage of Matched Pre- and Posttests by Demographic Variable</td>
<td>84</td>
</tr>
<tr>
<td>6.</td>
<td>Mean Scores for Civic Attitudes Scale</td>
<td>86</td>
</tr>
<tr>
<td>7.</td>
<td>Ranges of Civic Attitudes Scale</td>
<td>86</td>
</tr>
<tr>
<td>8.</td>
<td>Mean Scores for Leadership Scale</td>
<td>87</td>
</tr>
<tr>
<td>9.</td>
<td>Mean Scores for Leadership Scale by Demographic (n=105)</td>
<td>87</td>
</tr>
<tr>
<td>10.</td>
<td>Mean Scores for Values Scale</td>
<td>89</td>
</tr>
<tr>
<td>11.</td>
<td>Mean Scores for Values Scale by Demographic (n=105)</td>
<td>89</td>
</tr>
<tr>
<td>12.</td>
<td>Mean Scores for Interpersonal and Problem Solving Scale</td>
<td>90</td>
</tr>
<tr>
<td>13.</td>
<td>Mean Scores for Interpersonal and Problem Solving Scale by Demographic (n=105)</td>
<td>90</td>
</tr>
<tr>
<td>14.</td>
<td>Mean Scores for Civic Action Scale</td>
<td>92</td>
</tr>
<tr>
<td>15.</td>
<td>Mean Scores for Civic Action Scale by Demographic</td>
<td>92</td>
</tr>
<tr>
<td>16.</td>
<td>Mean Scores for Social Capital Scale</td>
<td>94</td>
</tr>
<tr>
<td>17.</td>
<td>Ranges of Social Capital Scale</td>
<td>94</td>
</tr>
<tr>
<td>18.</td>
<td>Mean Scores for Social Capital Scale by Demographic</td>
<td>95</td>
</tr>
<tr>
<td>19.</td>
<td>Cronbach’s Alpha</td>
<td>96</td>
</tr>
<tr>
<td>20.</td>
<td>Factor Loading for Civic Action Scale</td>
<td>97</td>
</tr>
<tr>
<td>21.</td>
<td>Factor Loading for Interpersonal and Problem Solving Skills Scale</td>
<td>97</td>
</tr>
<tr>
<td>22.</td>
<td>Factor Loading for Values Scale</td>
<td>98</td>
</tr>
</tbody>
</table>
23. Factor Loading for Leadership Scale......................................................... 99
24. Factor Loading for Social Capital Scale.................................................... 100
25. ANOVA on Pretest-Posttest Change for Civic Attitudes Scale............... 103
26. ANOVA on Pretest-Posttest Change for Social Capital Scale............... 104
27. ANOVA on Pretest-Posttest for Civic Attitudes Scale by Gender......... 106
28. ANOVA on Pretest-Posttest for Civic Attitudes Scale by Race.......... 107
29. ANOVA on Pretest-Posttest Civic Attitudes Scale by Classification...... 108
30. ANOVA on Pretest-Posttest for Social Capital Scale by Gender......... 110
31. ANOVA on Pretest-Posttest for Social Capital Scale by Race........... 111
32. ANOVA on Pretest-Posttest for Social Capital Scale by Classification......................................................... 112
33. Correlation between Civic Attitudes and Social Capital Scores ........ 113
LIST OF ILLUSTRATIONS

Figure

1. Conceptual Framework……………………………………………………………………………… 7
2. A Lens Model for Service-Learning Educators……………………………………… 47
3. Quasi Experimental Design…………………………………………………………………… 64
CHAPTER I
INTRODUCTION

Service-learning courses give students the opportunity to apply what they learn in the classroom in real-life community settings (Moely, Mercer, Illustre, Miron, and McFarland, 2002b). These real life experiences are shown to be indicators of human and social capital (Astin, 1996). The increased capital developed through service-learning plays a role in students’ job search success (D’Agostino, 2010). This heightened social capital, which leads to successful job searches, is critical as the United States, specifically Mississippi, will deal with a projected increase in the demand for college graduates (Crozby & Moncarz, 2006).

Much of the existing research on service-learning is focused on the pedagogy’s ability to better comprehend course content and meet identified community needs. Research has examined the relationship between service-learning and civic attitudes (Moely et al., 2002a, 2002b) and social capital (D’Agostino, 2010). This study enhances that research by looking at a combination of civic attitudes and other social capital indicators pre- and post-service-learning experience with students at a diverse institution, The University of Southern Mississippi.

Background

Human capital development is the process of developing skills and the ability of productive use to a person (Becker, 1964; Shultz, 1961). Human capital consists of the productivity- and income-enhancing skills, knowledge, experience, and health possessed by individuals; these resources result from such
investments as education and training (Becker, 1993). Human Capital has been referred to as the cornerstone of the American economy and a signaling device for organizations to assess people and their suitability for employment (Becker, 1993; Singer & Bruhns, 1991). Hershberg (1996) defined human capital as the education, skill level, and problem solving abilities that enable an individual to be a productive worker in the global economy of the 21st century. Human capital focuses on the economic behavior of individuals, especially on the way their accumulation of knowledge and skills enables them to increase their productivity and their earnings and in so doing, to increase the productivity and wealth of the societies in which they live (Becker, 1993). The underlying implication of a human capital perspective is that investment in knowledge and skills brings economic returns individually, and therefore, collectively (Schuller, 2000).

Human capital development is directly correlated with the concept of social capital (Coleman, 1988).

Social capital represents the “sum of actual and potential resources embedded within, available through, and derived from, the network of relationships possessed by that individual” (Nahapiet & Ghoshal, 1998, p. 243). Putnam (1993) defines social capital as a collection of assets including shared norms, values, beliefs, trust, networks, social relations, and institutions that facilitate cooperation and collective action for mutual benefits (p. 67). Social capital “comes about through changes in the relations among persons that facilitate action” (Coleman, 1988, p.100). Social capital can include many
variables, including trust in government institutions, civic attitudes and civic participation (Portes, 1998).

Coleman (1990) states, "like other forms of capital, social capital is productive, making possible the achievement of certain ends that would not be attainable in its absence" (p.102). Coleman (1998) further argues that an increase in social capital leads to an increase in human capital. However, unlike human capital, social capital does not reside within the individual but rather is embedded in the relationships among and between individuals. From this perspective, an individual’s network of relationships represents a key resource for the actors in the network. Social capital may take a variety of forms including obligations and expectations, information potential, norms and effective sanctions, etc. Extensive research (Brewer, 2003; Houston, 2006; Kennedy & Mellor, 2006; Nie & Erbring, 2000; Norris, 1996; Shah, 1998; Shah, Kwak, & Holbert, 2001) links positive civic attitudes to an increase in social capital. Research links both civic attitudes and social capital to job search success of college graduates (Astin, 1996; Becker, 1993; Kuh, 1999).

Many definitions and measures appear in the research measuring civic attitudes. Lehman, Heine, Markus, and Kitayama (1999) considered these measures of civic attitudes: trust in government institutions, positive attitudes toward immigrants, and support for women’s political rights. Janmaat (2008) conducted a civic attitudes study that included the variables of expected political participation, women’s rights, ethnic tolerance, national pride, and institutional trust. Some attitudes related to civic responsibility include the intention to serve
others, the belief that helping others is one’s social responsibility, and the tolerance and appreciation of human differences (Markus, Howard, & King, 1993). An expansive list of items or issues can be considered a civic attitude. Moely et al.’s (2002a, 2002b) research focused on civic attitudes with measures such as plans for future civic action, values, problem solving skills and leadership skills. Researchers consistently use civic attitudes to measure the development of human and social capital through formal education (Astin, 1996; Hershberg, 1996; Kuh, 1999; Shah, 1998). Civic attitudes develop human and social capital both inside and outside of the traditional higher education classroom (Hershberg, 1996; Shah, 1998). Social capital indicators used to develop scores in D’Agostino’s (2010) work relate to indicators of how students feel about connections used to enter the workplace. While most human and social capital is assumed to be developed inside the classroom, several researchers (Astin, 1996; Kuh, 1999) have focused on student learning outside of the classroom, including experiential learning.

Institutions of higher education are expected to provide students with opportunities to experience society and then reflect on their experiences as an integral part of their education. Colleges and universities have been challenged to graduate civic-minded students with sensitivity toward the needs of their communities and empowerment to create social change (Wingspread, 1993). Service-learning is widely accepted in higher education as an educational practice to strengthen the acquisition of course concepts and affect students attitudes regarding social problems, community issues, and civic action (Eyler &
Giles, 2000; Furco, 2003; Zlotskowski, 1999). Service-learning is receiving wide acceptance in higher education as an innovative educational practice that strengthens the acquisition of course concepts while affecting students’ attitudes regarding social problems, community issues, and civic action, thereby developing the human capital of students (Eyler & Giles, 1999; Yates & Youniss, 1996). Research demonstrates service-learning promotes a broader understanding of course context, offers additional skills learned in the field (Bringle & Hatcher, 1996), and yields a positive effect on a student’s civic attitudes (Moely et al., 2002b).

Empirical research about service-learning has examined intellectual and student outcomes, the development of citizen characteristics, and community building. However, the impact on social capital (D'Agostino, 2010) was minimally addressed. Several studies use civic attitudes as a key indicator of social capital (Bailey & Russell, 2010; Kennedy & Mellor, 2006; Pattie, 2003). Civic attitudes have been used to measure the effects of an academic service-learning experience (Moely et al., 2002a, 2002b; Young, Weber, & Weber, 2010; Waldstein & Reiher, 2001). Finally, a strong connection between service-learning and social capital has been identified in research (D'Agostino, 2010).

Conceptual Underpinnings of the Study

The renewed emphasis on service-learning and civic attitudes can be traced to a strong theoretical background rooted in the works of John Dewey (1916, 1938, 1997) and William James (1909) and the more recent work of Ernest Boyer (1990, 1994) and Paulo Freire (1970). Boyer (1990) argued that
the university should be responsive to community needs and to society: "What we urgently need today is a more inclusive view of what it means to be a scholar—a recognition that knowledge is acquired through research, through synthesis, through practice and through teaching" (p. 24). Service-learning is compatible with the renewed interest in developing the scholarship of engagement through collaborative work that is consistent with the mission of institutions (Boyer, 1990; Holland, 1997; Rice, 1996; Zlotkowski, 1996). Service-learning engages students in active, relevant, and collaborative learning and is an effective way to enhance student learning, student development, and commitment to future civic involvement (Markus, Howard, & King, 1993; Sax & Astin, 1997). Service-learning is a smart choice for institutions of higher education because it enhances student achievement of core educational outcomes (Markus et al., 1993; Osborne, Hammerich, & Hensley, 1998) and enhances faculty satisfaction with teaching (Howard, 1993). Increasing the role of community service as a means for civic education makes sense because it is seen as a socially and morally responsible choice (Harkavy, 1996). Thus, the implementation of service-learning has spread quickly across institutions of higher learning (Furco, 2003). Figure 1 represents the theoretical framework for this study, whereby academic service-learning leads to an increase in civic attitudes and social capital. The figure shows the exploration of service-learning as a developer of civic attitudes and social capital. The demographics of gender, class standing, and race are intervening variables in the research, with racial demographic being the variable that sets this research apart from other studies.
The shift to an economy based on knowledge has led to a demand for employees with a higher level of social capital (Grayson, 2004). A growing issue in the United States is the inability to produce enough quality college graduates. Mississippi is 45th in the United States in the number of college graduates produced. In addition, college graduates are entering the workforce lacking the necessary human (basic employment skills) and social capital, (social networking) thereby negatively impacting their ability to succeed in a competitive work environment (Brotherton, 2011; Denson & Zhang, 2010).

Job-seekers not only report they initially hear about their present jobs through informal ties, but that social contacts actively influence the hiring process (Jones & Azrin, 1973). The lack of social capital, specifically among college
graduates is affecting the ability of those graduates to perform in the entry-level workforce (Brotherton, 2011; Denson & Zhang, 2010). Findings reveal that receiving positive support from social networks is significantly related to job-seeking behavior, since it increases the knowledge of job opportunities and the intensity of the job search (Rife & Belcher, 1993; Stafford & Jackson, 1983; Wanberg Watt, & Rumsey, 1996). Social networks not only play an important role in the way job-seekers search for their jobs, but they may buffer individuals against the negative outcomes generally associated with unemployment by providing economic and emotional support (Gore, 1978; Ullah et al., 1985; Warr & Jackson, 1985). Having out-of-the-classroom learning experience has been identified as one of the most important indicators of job search success for college graduates (Astin, 1996; Becker, 1993; Kuh, 1999). Research by Becker (1993) focused on how the number of these experiences affects employable skills by providing human capital (internships) and social capital (contacts, including potential employers) (Neidobf, 2008). Terenzini and his colleagues (1996b) argue that classroom experiences and out-of-class experiences (institutional experiences) contribute to human capital development, such as the development of the generic skills and the acquisition of subject matter expertise.

According to the United States Bureau of Labor Statistics, statistics about college graduates paint a rosy picture of overall employment. However, the data describe college graduates as a whole (Crozby & Moncarz, 2006), and higher earnings are not guaranteed for all graduates. For every graduate who earns more than the median, another earns less. Many college graduates sometimes
have trouble finding work, especially if they are waiting for a particular type of job. Career prospects depend on many factors besides having a college degree. The local job market, the type of degree, the level of experience and skill, and many other considerations (such as networks) play a role in job-search success.

The United States Bureau of Labor Statistics indicates a decline in the country’s ability to produce college graduates as cited in Crozby & Moncarz, (2006). The United States has fallen to tenth place for the countries producing college graduates. Given the focus at the federal level to substantially improve the competitiveness of the nation’s workforce, states will likely want to ensure goals are aligned with the national goal of keeping up with producing enough capable college graduates. The United States’ goal is to get back into the top three college graduate producing countries by 2020 (Crozby & Moncarz, 2006). Mississippi is currently ranked 45th in the nation, only producing 0.9% of the nation’s college graduates. In addition to that, a large percentage of that 0.9% is leaving the state to find employment elsewhere (Crozby & Moncarz, 2006).

According to Dr. Barbara J. Logue, senior demographer for the Mississippi State Institutions of Higher Learning, the 2000 Census figures reveal that Mississippi’s net brain loss of young, single and highly educated residents was close to 5,000 people in the five-year period preceding the census (Miller, 2011). She says retaining these individuals and attracting an inward migration from other states is a difficult issue. "Mississippi still has a reputation of being backward and less educated. The image is still out there," she said. "The brain drain will continue because we have this image that isn't getting better" (Lofton,
In a Mississippi public broadcasting report, Rhonda Miller reports some graduates are leaving the state for job opportunities. Miller echoes Logue’s report blaming the perception of Mississippi as a significant reason for the continued brain drain (Lofton, 2006). According to the Bureau of Labor Statistics, Mississippi will need to produce an additional 73,786 graduates to meet the demands of the workforce in the year 2020 (Crozby & Moncarz, 2006). Incorporating civic engagement initiatives can assist in meeting these workforce needs (Jacoby, 2009).

Civic engagement measures have been used as indicators of a person’s willingness to live in a certain place (Astin, 1996; Putnam, 1993). Universities must focus on creating a sense of civic pride (Jacoby, 2009) and provide students with the social networks (D’Agostino, 2010) to keep the brightest students in the state to meet workforce demands. Civic outreach and public service is an overall justification of the role of higher education in society and represents a return on investment to taxpayers (Ehrlich, 2005).

Current research identifies academic service-learning as an increasingly popular way to increase social capital (Astin, 1993; D’Agostino, 2010; Pascarella & Terenzini, 1991). Academic service-learning is at the intersection of three powerful movements in higher education: the focus on active, engaged learning; the establishment and assessment of student learning outcomes; and the call of the renewal of the civic role in higher education (Jacoby, 2009). Service-learning is a civic engagement teaching pedagogy identified by Terenzini et al. (1996b) as a direct indicator of human capital.
The presence of service-learning programs is increasing at colleges and universities across the country (Stukas, Snyder, & Clary, 1999). According to Campus Compact (2007), 91% of U.S. higher education institutions have service-learning opportunities. The vast majority of service-learning initiatives operate in the institutional margins, supported by a group of passionate advocates (Jacoby, 2010). Furco (2002) identifies several problems with marginalized operations that include the issue of continued funding or funding being cut, breadth of internal support, and a lack of inclusion into institutional mission and goals. He recommends these following actions as potential solutions to institutionalizing the practice: measuring student learning outcomes, displaying the value of political implication of the “town and gown” relationship, and showing the value of service-learning as it relates to mainstream institutional priorities (p. 4).

This dissertation contributes to the body of knowledge regarding civic attitudes and the social capital of college students involved in academic service-learning by expanding the work of Moely et al. (2002a, 2002b) with the addition of social capital indicators (D’Agostino, 2010) in a more diverse setting. College students enrolled in academic service-learning courses at The University of Southern Mississippi were surveyed. USM was chosen because the university is racially diverse. The demographics of The University of Southern Mississippi include 60% Caucasian, 28.5% African American and 11.5% other. In contrast, Tulane University has over 83% Caucasians, 3% African Americans, and 14% other. This data makes The University of Southern Mississippi a logical choice to extend this research. The development of civic attitudes in college students is
important in higher education because of the emphasis on educating the whole student. Included in holistic development is the component of civic responsibility (American Council on Education, 1989). The subscales used gauge attitudes that will help students become lifelong engaged citizens, thereby developing human and social capital (Colby, Ehrlich, Beaumont, & Stephens, 2003). The emphasis on social capital in the service-learning literature is small, although there has been considerable emphasis on the impact of service-learning on student learning outcomes, the development of citizenship characteristics, and community building (D’Agostino, 2010). This research demonstrates the effect of service-learning on both civic attitudes and social capital. Researchers have noted that there is a scarcity of research on the effects of service-learning on community development (Cruz & Giles, 2000; Dorado & Giles, 2004; Driscoll, Holland, Gelmon, & Kerrigan, 1996). Campbell (2000), Dufour (2005), and Kahne et al. (2006) considered social capital as a potential outcome of service-learning programs.

Several schools with service-learning programs including Virginia Polytechnic Institute and State University (Blieszner & Artale, 2001), Providence College (Battistoni, 1997, Heinisch & Hartman, 2003) and Tulane University (Moely et al., 2002a, 2002b) measure service-learning outcomes using civic attitudes as a key indicator. However, Billig (2000) and Furco (2003) contend that research on the impact of specific service-learning curricula does not provide adequate information for administrators to determine if current instructional programs are effective in developing the targeted attitudes and skill sets in
students (Billig, 2000; Furco, 2010). This study adds to the research by using civic attitudes and social capital as key indicators of service-learning outcomes in evaluating academic service-learning at The University of Southern Mississippi.

The Division of Student Affairs at The University of Southern Mississippi became involved in the service-learning movement with the founding of the Office of Community Service-Learning (OCSL) on its campus in 1992 as the Volunteer Resource Center (The University of Southern Mississippi, 2012). The mission of The University of Southern Mississippi is to cultivate intellectual development and creativity through the generation, dissemination, application, and preservation of knowledge (University of Southern Mississippi, 2012). Each year, USM documents an average of 50,000 hours of community service by students. Nearly one quarter of those hours are logged by students enrolled in service-learning classes (University of Southern Mississippi, 2012).

The academic service-learning program began in 2000 when The University of Southern Mississippi became one of six universities across the country selected to partner with Eastern Michigan University in a Fund for the Improvement of Post-Secondary Education (FIPSE)-funded project to provide professional development for university faculty through academic service-learning fellowships. Of the 52,000 student volunteer hours documented by the USM in the past academic year (2011-2012), 16,137 were completed by service-learners. The number of faculty members who teach or have taught service-learning reached over eighty-five faculty members in academic year 2011-2012 (www.usm.edu/ocsl). Service-learning classes provide a significant percentage
of the overall community service carried out by USM students. According to Eyler and Giles (1999) and Furco (2003), there is a need to record learning outcomes of service-learning beyond the number of hours and agencies served. The impact of the service-learning experience on the student is not known at The University of Southern Mississippi. Many schools shy away from measuring these outcomes because the ability to generalize service-learning research findings is very low due to the idiosyncratic nature of service-learning as a teaching/learning model (Furco, 2003). Furco (2003) states that the sheer number of variables involved with service-learning makes replication of results difficult. Every school service-learning program and its associated variables are different, every project and its associated variables are different, and every community and its associated variables are different. Most studies focus on the deeper comprehension of course content that is associated with service-learning (Kielsmeier, 2010; Molee, Henry, Sessa, & McKinney-Prupis, 2010; Sherman & Macdonald, 2009). Other studies focus heavily on the benefit gained by the community partner (Chupp & Joseph, 2010; Davidson, Jimenez, Onifade, Hankins, 2010,). A limited number of studies focus on the association of service-learning components with the civic attitudes of college students (Moely et al., 2002b). Studies that have examined this relationship have provided a basis for this research (Battistoni, 1997; Blieszner & Artale, 2001; Heinisch & Hartman, 2003).

Purpose of the Study
This study is designed to determine if a sample of service-learning courses at The University of Southern Mississippi are affecting student civic attitudes and skills therefore developing human and social capital. Civic attitudes and social capital are important for graduates as they navigate successful job searches. USM will benefit from examining the impact of the service-learning pedagogy on civic attitudes and social capital to enhance student job search capabilities. The following hypotheses will be tested with data collected for the study.

**Hypotheses**

**H1** Academic service-learning will have a positive effect on a student civic attitudes score as compared to students in non-service-learning courses (Astin, 1997; Moely et al., 2002a, 2002b).

**H2** Academic service-learning will have a positive effect on a student social capital score as compared to students in non-service-learning courses (Egerton, 2002)

**H3** The moderating values of gender, race and class standing will have a significant effect on students' civic attitudes scores ($p > .05$) (Green, 2003; Moely et al., 2002a, 2002b).

A. Female students will have a higher ($< p .05$) civic attitudes score than male students (Moely et al., 2002a, 2002b).

B. Non-white students will have a higher ($< p .05$) civic attitudes score than white students (Green, 2003).
C. Underclassmen (freshmen, sophomores) will have a higher (<p .05) civic attitudes score than upperclassmen (juniors, seniors) (Moely et al., 2002a, 2002b).

H4 The moderating values of gender, race, and class standing will have a significant effect on student social capital scores (p > .05).

A. Female students will have a higher(<p .05) social capital score than male students (D'Agostino, 2010; Egerton, 2002).

B. Non-white students will have a higher (<p .05) social capital score than white students (D'Agostino, 2010; Egerton, 2002).

C. Underclassmen (freshmen, sophomores) will have a higher (<p .05) social capital score than upperclassmen (juniors, seniors) (D'Agostino, 2010; Dunham & Wilson, 2007).

H5 There will be a significant correlation (<p .05) between the civic attitudes (Moely et al., 2002a, 2002b) and social capital scores (D'Agostino, 2010) as developed by academic service-learning.

Limitations of the Study

This study was restricted by the following limitations:

1. The study was conducted with students enrolled in classes at one four-year public institution in the southeast region of the United States.

2. The study was limited to only those civic attitudes factors addressed in the specific survey.

3. The study was limited to students at one four-year institution. Each instructor approaches service-learning differently, thereby placing a limitation on
data collected due to the different experiences of the students. In addition, the measurement of the service-learning component varies across classes. Some courses have a requirement ranging from 10 to 30 hours. Other courses are using service-learning on a project basis, requiring students to complete a project without a predetermined hour requirement.

4. Students are assumed to have some level of civic attitudes and human capital before they participate in this study. This varies from student to student.

Definition of Terms

*Civic attitudes* - Perception of a broad array of civic issues ranging from trust in government institutions to national pride. For this study, civic attitudes will be defined using the categories of the CASQ developed by Dr. Barbara Moely, professor emeritus at Tulane University. Those categories include civic action, interpersonal and problem solving skills, values and, leadership skills, (Moely et al., 2002a, 2002b). The scales reflect three of the goals described by Stukas et al. (1999): Interpersonal and problem-solving skills, values, and leadership skills, are aspects of *self-enhancement*; social justice attitudes and diversity attitudes are components of Stukas et al.’s (1999) *understanding of self and world*; and a scale measuring plans for civic action reflects *value-expression*.

*Civic Attitudes and Skills Questionnaire (CASQ)* - This instrument is a questionnaire through which college students indicate attitudes and skills that may be affected by a service-learning experience (Moely et al., 2002a, 2002b).
Class standing - Class standing refers to the undergraduate university ranking of underclassmen (freshmen and sophomores) or upperclassmen (juniors and seniors) (Corts & Stoner, 2011).

College major - This term refers to a student’s major area of study (Corts & Stoner, 2011).

Community-based learning - Community-based learning is a credit-bearing service activity associated with an academic course without the course connection and reflection process of academic service-learning (Zlotskowski, 1999).

Human capital - Human capital is productivity-enhancing and income-enhancing skills, knowledge, experience, and health possessed by individuals; these resources result from such investments as education and training (Becker, 1993).

Reflection - The consideration of life events from a variety of perspectives with the intent of gaining insight into the true nature of things. Reflection develops self-awareness and simultaneously increases a person’s cognition and affection (Ardelt, 2003).

Service-learning - Service-learning is a credit-bearing educational experience in which students participate in an organized service activity that meets identified community needs and reflect on the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of civic responsibility (Bringle & Hatcher, 1996).
**Social capital** - Social capital is the aggregate of actual or potential resources that are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintances and recognition—in other words, to membership in a group—providing each of its members with the backing of the collectively owned capital, a "credential" that entitles them to credit, in various senses of the word" (Bourdieu, 1986, p. 248).

**Volunteerism:** The word volunteerism is used to designate voluntary participation in community-service projects. Participating more than once a month is considered a high level of volunteerism and less than once a month is considered a low level of volunteerism (Drane, 2001).

**Summary**

Empirical research links service-learning to civic attitudes and human and social capital (Battistoni, 1997; Blieszner & Artale, 2001; Heinishch & Hartman, 2003; Moely et al., 2002a, 2002b; Waldstein & Reiher, 2001; Young et al., 2010). However, many leading experts in service-learning (Eyler and Giles, 1999; Furco, 2003; Zlotskowski, 1999) call for more of this type research in the ever growing academic discipline. This specific study will replicate the work of Moely and her colleagues (2002a, 2002b) in which she suggested that the work be done a campus more racially diverse than Tulane.

Studies have examined the effects of service-learning on civic attitudes (Moely et al., 2002a & 2002b) and the effects of service-learning on social capital (Stephenson, 2010; D’Agostino, 2010). This study will enhance that body of research by looking at the effects of service-learning on both civic attitudes and
social capital collectively. In order to provide a frame in which to conduct this study, Chapter II includes a review of literature including works in human and social capital, civic attitudes and service-learning.
CHAPTER II

REVIEW OF LITERATURE

The purpose of this literature review is to examine the theoretical foundations for human capital, civic attitudes and service-learning. The goal is to examine these topics to gain an understanding of how participation in academic service-learning can affect civic attitudes and develop social and human capital. The review of human capital is grounded in a theoretical foundation supported by Becker (1964, 1993) and Shultz (1961). Becker and Shultz provided a foundation for much of the human capital research. The discussion of social capital focuses on the work of three prominent theorists including Bourdeiu (1986), Coleman (1988), and Putnam (1993). The concept of social capital is then discussed as it relates to higher education and workforce entry. The review of civic attitudes examines the connection between civic attitudes as it related to human and social capital. Due to the broad range of these characteristics, Moely et al.’s (2002) construct of civic attitudes is the lens through which this research will focus. The literature review concludes with an in depth discussion on academic service-learning and how it is utilized in higher education. Key research from Giles and Eyler (1994), Bringle and Hatcher (1996), and Zlotskowski (1999) are utilized to examine service-learning and its effect on the civic attitudes of college students.

Human Capital

Becker (1964) defined human capital as something that cannot be taken from one’s self. Human capital consists of the productivity-enhancing and
income-enhancing skills, knowledge, experience, and health possessed by individuals; these resources result from such investments as education and training (Becker, 1993). Schultz (1961) was one of the first researchers to write in depth about human capital, its worth and societal implication. He stated that, although it is obvious that people acquire useful skills and knowledge, it is not obvious that these skills and knowledge are a form of capital. Furthermore, Singer and Bruhns (1991) defined human capital as a signaling device. A high level of human capital is a signal to organizations that job applicants deserve to be hired because of their accumulated job-relevant knowledge. In addition, Hershberg (1996) defined human capital as the education, skill level, and problem solving abilities that enable an individual to be a productive worker in the global economy of the 21st century. The focus of this proposed study will be on the Hershberg definition because of the emphasis on the role of education in developing human capital.

**Human Capital Theory**


of the acquired and useful abilities of all the inhabitants or members of the society. The acquisition of such talents, by the maintenance of the acquirer during his education, study, or apprenticeship, always costs a real expense, which is a capital fixed and realized, as it were, in his person. Those talents, as they make a part of his fortune, so do they likewise that of the society to which he belongs. The improved dexterity of
a workman may be considered in the same light as a machine or instrument of trade which facilitates and abridges labor, and which, though it costs a certain expense, repays that expense with a profit (1776, p.17).

Mincer (1958) maintained that training and skills affect an individual's personal income both formally and informally. He analyzed formal education, work experience, and number of weeks worked in determining human capital. Schultz (1961) examined the following elements to further the research on human capital: (a) health facilities and services, broadly conceived to include all expenditures that affect life expectancy, strength, and stamina and the vigor and vitality of people; (b) on-the-job training, including old-style apprenticeship organized by firms; (c) formally organized education at the elementary, secondary, and higher levels; (d) studies of adults who are not organized by firms, including extension programs, notably in agriculture; and (e) migration of individuals and families to find further job opportunities. In addition to the elements of human capital defined by Mincer (1958) and Schultz (1961), education level is constantly used as a measurement of a person's human capital (Becker, 1975, Hershberg, 1996; Sweetland, 1996).

**Human Capital in Education**

The concept of human capital is based in the education and economic fields, with claims that, the higher the education, the greater the economic returns to society (Sweetland, 1996). Education level is used constantly in studies attempting to measure human capital and its effects on such things as economic growth (Hanushek & Kimko, 2000; Hershberg, 1996). Much of human
capital research has focused on the use of postsecondary educational options and examining the returns (Becker, 1975; Mincer, 1958; Schultz 1961). Hershberg’s (1996) research closely examines the relationship between higher education and human capital and suggests that higher education does increase human capital. These connections set the stage to then assess the development of human capital at institutions of higher education. In addition, the concept of social capital which is closely related to human capital (Bhandari & Yasunobu, 2009; Coleman, 1988) has been used in the research to further examine the benefits of formal education (Brewer, 2003; Wingspread, 1996).

Social Capital

The roots of social capital can be traced back to the nineteenth-century sociologist Emile Durkheim (1895) when he introduced the collective representation or social solidarity. One of the first formal definitions was offered by Pierre Bourdieu (1986). He defined social capital as “a durable network of more or less institutionalized relationships of mutual acquaintance and recognition – or in other words, to membership in a group, which provided each of its members with the backing of the collectivity-owned capital” (Flora & Flora, 2008, p. 118). It is a highly appealing and potentially promising concept. Much like the term human capital, the potential value of using the term social capital can be understood only when it is properly defined (Woolcock, 1998). The whole notion of social capital is centered on social relationships, and its major elements include social networks, civic engagement, norms of reciprocity, and generalized trust. Broadly speaking, it is defined as a collective asset in the form of shared
norms, values, beliefs, trust, networks, social relations, and institutions that facilitate cooperation and collective action for mutual benefits (Putnam, 1993). Social capital is a complex concept having different dimensions, types, and levels of measurement. A good example of social capital is displayed in Amish communities coming together to help build each other’s barns. For most, doing so is simply the right thing to do. Others have argued that these social norms put pressure on them to help. In some communities, these social norms can be more powerful than laws (Morgan, 2002). The idea of social capital should be used in the analysis of other communities and community environments because members who are able to develop social capital are much more likely to be successful in their participation, learning, self-efficacy, and, ultimately, contribution to the community. “Much of this capital is embedded within networks of mutual acquaintance” (Losada, 2004 p. 243). Furthermore, according to Adler and Kwon (2002), “The core intuition guiding social capital research is that the goodwill that others have toward us is a valuable resource” (p. 18). This value results from the information, influence, and solidarity ensuing from the goodwill (Sandefur & Laumann, 1998). These ties include both internal (bonding) and external (bridging) ties, and the distinction between these two types of networks is often of theoretical value (Adler & Kwon, 2002). The literature reveals a variety of definitions, with different scholars sometimes using social capital to mean different things. Social capital is often regarded as including aspects of social networks and/or social trust (Wang & Graddy, 2008). Hanifan (1916) was one of the first to mention the term social capital in reference to social cohesion and
personal investment in the community. In defining the concept, he contrasted social capital with material goods:

I do not refer to real estate, or to personal property or to cold cash, but rather to that in life which tends to make these tangible substances count for most in the daily lives of people, namely, goodwill, fellowship, mutual sympathy and social intercourse among a group of individuals and families who make up a social unit ...If he may come into contact with his neighbor, and they with other neighbors, there will be an accumulation of social capital, which may immediately satisfy his social needs and which may bear a social potentiality sufficient to the substantial improvement of living conditions in the whole community. The community as a whole will benefit by the cooperation of all its parts, while the individual will find in his associations the advantages of the help, the sympathy, and the fellowship of his neighbors. (p. 130-131)

However, according to Bhandari and Yasunobu (2009), social capital did not appear in academic and policy discussion until the 1990s.

Most discussions of social capital are guided by the research of three theorists who set the stage for its study: Bourdieu (1986), Coleman (1988), and Putnam (1993). According to Halpern (2004), the first of the major contributors to social capital was Bourdieu, who was critical of the dominance of economics and its accompanying theoretical frame of reference in both the policy spheres and in the social sciences. Bourdieu argued that this conceptual lens was limiting to the point of not acknowledging that there were a number of capitals operating in the
world: economic, cultural, symbolic, and social. He defined social capital as the “aggregate of actual or potential resources that are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintances and recognition—in other words, to membership in a group—providing each of its members with the backing of the collectively owned capital, a ‘credential’ that entitles them to credit, in various senses of the word” (Bourdieu, 1986, p. 248). According to Bordieu (1986), these social network ties were of a specific type: “relationships that are at once necessary and elective, implying durable obligations subjectively felt (feelings of gratitude, respect, friendship, etc.)” (p. 250). In this view of social capital, individuals gain resources from positive and trusting ties with others in their social network.

According to Adams and Roncevic (2003), Bourdieu’s (1986) aim in conceptualizing different forms of capital that were fungible was to try to explain “the mechanisms of preservation of the social stratification system and the legitimization of dominant class reproduction strategy” (p. 159). He was trying to understand how the dominant class in society so successfully reproduces itself because it clearly involves more than just the inheritance of money. In fact, in trying to understand this phenomenon, it seems incomprehensible not to include the resources that are gained from persons embedded in the social networks of the powerful and wealthy. Although Bourdieu returned to the concept of social capital throughout his work, he never fully developed the concept or employed it in systematic empirical explorations (Adams & Roncevic, 2003). However, he is credited with the first systematic analysis of social capital (Portes, 1998).
An alternative view was posited by Coleman (1988), who defined social capital in a more positive manner, describing social networks as systems of trust that lead to advantageous behaviors or outcomes within the network. Though advantages accumulated in groups are often based on similar classifications (class, gender, race), the accumulation of social capital is viewed as needed for the group to advance in a positive manner. Social capital explains the success of some and not others in the attainment of common goals. Individuals who successfully acquire and use social capital are able to develop and sustain social relationships that generate beneficial outcomes through norms and trust.

According to Schuller, Baron, and Field (2000), although Bourdieu (1986) and Coleman (1988) indicated that social capital is a significant source of educational advantage, several critical differences occur in their conceptualizations of the term. First, Coleman enlarged the scope of social capital from the ruling and intellectual elites addressed in Bourdieu’s work to include non-elites. Second, Coleman moved beyond the circular argument of Bourdieu and others, who posited that the rich and powerful remain rich and powerful because they consort with the rich and powerful, by explicitly articulating the causal connection between social capital and availability of resources. Bourdieu (1973) wrote that three types of capital—economic, cultural, and social—worked together to influence an individual’s disposition. Bourdieu’s concept of social capital was intended to explain the persistence of a social group’s access to resources and has been used extensively in educational research to explain differences in schools based on class, gender, and ethnicity.
(Dika & Singh, 2002). However, according to Teachman, Paasch, and Carver (1997), Coleman argued that a wealth of social capital could offset low levels of other forms of capital. This argument would be strengthened by the earlier example of the Amish community in that their social capital in some cases (barn building) can make up for a lack of financial capital.

A third difference in the concepts of social capital posited by Bourdieu (1986) and Coleman (1988) is that Coleman further articulated the mechanisms by which social networks function and, thus, allow resources to flow. Fourth, whereas Bourdieu saw the creation of social capital as intentional, Coleman argued it was largely unintentional, developing from activities that were created for other purposes. Coleman believed that unintentional nature of social capital helped explain why there was “little or no direct investment in social capital” (Coleman, 1990, p. 312). Finally, a fifth difference, as several scholars have noted (Adam & Roncevic, 2003; Cusack, 1999) lies in Coleman’s conception of social capital expanding the potential beneficiaries of resources from individuals (egocentric) to groups, organizations, institutions, or societies.

One example of this expanded notion provided by Coleman (1988) is interfamily relationships in which parents of different families have strong associations and friendships with each other to monitor each other’s children, thus providing a network of support. From this perspective, Coleman analyzed the effects of social capital in two different contexts: its effects on school dropout rates and its effects on families and the community outside the families. In both cases, the more social capital available to the students, the lower the drop-
The more social capital available within the family and community, the stronger the formation of human capital. In his study, Coleman found drop-out rates were significantly lower in Catholic high schools compared to other private and public high schools. The Catholic high schools had embedded elements of social capital that were significantly more evident than the other schools.

Another good example is local community organizations that recruit people in the community believed to have a good deal of social capital for the benefit of the organization.

Putnam (1993) contributed to the scholarly debate surrounding social capital and his work helped to propel social capital to a more prominent position in the world of policy and in conversations among the general population (Halpern, 2004; Schuller, Baron, & Field, 2003). Putnam’s first major work that introduced his thinking on social capital examined differences in regional governments in Italy and found that the size and type of the regional civic community (i.e., level and type of participation at voluntary associational level and amount of trust between strangers in a region) were powerful explanatory variables in understanding why northern Italy had more efficient and effective government (Putnam, 1993). Nahapiet and Ghoshal (1998) stated that the central proposition of social capital theory is that networks of relationships constitute a valuable resource for the conduct of social affairs. Putnam (1993) argued that two factors contribute to a healthy polity by encouraging cooperation: civic engagement and social capital. Putnam demonstrated that social capital makes citizens happier and healthier, reduces crime, makes government more
responsive and honest, and improves economic productivity. Putnam is clearly one of the leading researchers on the subject and has inspired a great deal of research by others who employ his conceptualization of social capital, but his work is not without critics. One of the primary critiques is that his overall argument is circular. Social capital is argued as both a cause and an effect of civic engagement. As Portes (1998) contended, because Putnam presents social capital as the “property of communities and nations rather than individuals, social capital is simultaneously a cause and an effect” (p. 19).

Researchers have indicated that social capital assumes such a large conceptual space that it can be defined and measured in very different ways. For example, Halpern (2004) wrote, “even among the politicians and scholars who use the term, there is often confusion about what social capital is, or how it should be measured” (p. 1). Halpern argued that this confusion is due, at least in part, by the use of multiple definitions and measurements. Others have called for greater clarity regarding the composition of social capital (Anheier & Kendall, 2001; Portes, 1998). This lack of clarity has led to the use of social capital in such disparate ways that many studies are not comparable. Not only is social capital a concept that is challenging to measure as Schuller, et al. (2000) noted, it has suffered through very different measures by different researchers who conceived of the concept differently. For example, some have conceptualized social capital as the number or density of voluntary organizations in an area (Portney & Berry, 1997), others have used a measure of generalized trust, and a few have developed more complex multiple measures (Putnam, 1993). As
multiple definitions and measures of social capital potentially diminish the clarity of what it is, what affects it, and what effect it has on society, there seems to be an acceptable tradeoff to limiting this new concept to a single definition or measure. However, awareness of this issue places an additional emphasis on researchers to clearly state what they consider social capital to be and how they will be measuring it.

Social capital is seen as the source of civic engagement and its existence is found in the measures of civic engagement. Putnam never empirically separates the concept of social capital from civic engagement. However, in Putnam’s discussion of social capital, he clearly conceptualizes a distinction between the two concepts.

Putnam (2000) contends:

People who have active and trusting connections with others whether family members, friends, or fellow bowlers develop or maintain character traits that are good for the rest of society. Joiners become more tolerant, less cynical, and more empathetic to the misfortunes of others. When people lack connections to others, they are unable to test the veracity of their own views, whether in the give-and-take of casual conversation or in more formal deliberation. (p. 288-289)

In other words, social capital represents the web of relationships an individual has and the underlying mechanisms that are created by having positive social relationships with others.
Human and Social Capital

Becker (1964) implied that human capital has grown at a much faster rate than nonhuman capital and is a cornerstone of the American economy. Physical capital is tangible and can be seen while human capital has been regarded as being less tangible (such as an individual’s skills and competencies). Social capital is less tangible than human capital due to its existence in the relationships between people (Coleman, 1988). Social capital goes beyond the individual and has allowed researchers to examine the value of relationships in communities. Social capital is important and different in measurement than human capital (Bhandari & Yasunobu, 2009). If human capital (skills and knowledge) is not available or shared, then social capital cannot be built.

Social Capital, Networks and Job Success

Lin’s (2001) work identifies three components of social capital including: (1) structure – embeddedness (position in the structure/network), (2) opportunity – accessibility through social networks, (3) action – use. Lin defines social capital as the resources embedded in social networks that are accessed and used by actors for actions (2001, p. 24). Thus, social capital has two key components: (1) Resources are embedded in social relations rather than in individuals. With this element, Lin (2001) parallels social capital with human capital, (i.e., an investment by individuals in interpersonal relationships that can be useful in markets); (2) Actors’ access and use of resources, reflecting that ego is cognitively aware of the presence or resources in existing relations and makes a choice to evoke those resources. Lin (2001) emphasized that ego is not aware of
those relationships that are absent from its cognitive map: “Only when the individual is aware of their presence, and of what resources they possess or can access, can the individual capitalize such ties and resources” (p. 53). However, the effort at investment and mobilization is constrained by the extent of resource availability and heterogeneity in social structures in which actors find themselves. Actors are further constrained by their particular position in hierarchical structure and their position in the network.

Lin (2001) identified two levels at which profit is accrued: individual or group. On the individual level, the focus is on how individuals invest in (access) social relations, and how individuals capture (mobilize) their embedded resources in the relations to generate a return for purposive or instrumental actions, such as getting a better job (how individuals use the resources). Social networking in job finding processes has been described as planning and managing social contacts and cultivating personal relationships in order to get a job. Evidence shows that informal ties play a major role in the location of job openings and the placement of unemployed persons (Forse & Parodi, 2009; Silliker, 1993). Data from surveys carried out by Jones and Azrin (1973) and Granovetter (1973) indicate that most job leads come from social contacts. As Forse & Parodi (1997) pointed out, among people with the same educational qualifications, those who are in a better position to use their social capital (information or recommendations from contact networks) are likely to find better jobs.
Research by Villar, Juan, Corominas, & Capell (2000) examined the relationship between the use of formal and informal contacts and employment outcomes specifically with regard to recent college graduates. They found a significant relationship between the use of formal and informal contacts in relation to income, job satisfaction, and the job qualifications relationship. They found that higher wages, more job satisfaction, and a closer relationship between job and university degrees were more likely to be associated with the use of social ties in gaining employment. Maria D’Agostino’s (2006) dissertation from Rutgers University built on previous research by Lin (2001) and Villar and his colleagues (2000). More specifically, D’Agostino’s research used Lin’s (2001) construct of social capital and focused on the effects of academic service-learning on the social capital of college students. The study examined two groups of Rutgers graduates, a service-learning and non-service-learning group where she found that social capital is an outcome of service-learning. The study found that service-learning is a significant predictor of networks when analyzing the service-learning group in terms of the service-learning influence, which according to Lin (2001), will lead students to greater job search success.

Civic Attitudes and Social Capital

By developing social networks and building social capital, mechanisms are present that promote civic engagement. Several studies have identified civic attitudes as a key indicator of social capital (Nie & Erbring, 2000; Norris, 1996; Shah, 1998; Shah et al., 2001). Brewer (2003) examined the link between public sector employment and civic attitudes. He used social trust, social altruism,
equality, humanitarianism, and civic participation to define civic attitudes. The first five have rather soft connections to social capital, however the sixth, civic participation, was a concrete behavioral variable that was directly related to social capital (Brewer, 2003). Kennedy and Mellor (2006) directly link civic attitudes in Australian high school students to the development of their social capital. Civic attitudes are crystallized forms of historical human interaction; they pass on norms and values and condition present relationships (Kennedy & Mellor, 2006). The development of civic attitudes is evident in service participation. Community service performed at institutions of higher education has manifested itself in campus-based volunteer programs and service-learning courses. Students today have the opportunity to provide service to the community through participation in extracurricular volunteer service programs or academic courses that incorporate a component of service (Rhoads, 1998).

Civic Attitudes

Civic attitudes are a nebulous concept that can include certain specific measures to gauge a person’s overall attitudes toward civic life. Although an increase in civic attitudes is often an intended outcome used to measure human and social capital (e.g., Lakin & Mahoney, 2006; Mabry, 1998; Moely et al., 2002a), it is not easily defined. According to Jones, Eddy, Coats, Parsons, & Connell (2002), a person’s civic attitude is the sense of personal responsibility individuals should feel to uphold their obligations as part of any community. Lakin and Mahoney (2006) note it involves placing a high value on the well-being of other people.
Although many definitions are offered, the central idea is the understanding of the importance of being involved in one’s community and the desire to be a part of the change that the individual wishes to see happen. Lehman and his colleagues (1999) considered the following measures of civic attitudes: trust in government institutions, positive attitudes toward immigrants, and support for women’s political rights. Janmaat (2008) conducted a civic attitudes study that included the variables of expected political participation, women’s rights, ethnic tolerance, national pride, and institutional trust.

Some attitudes related to civic responsibility include the intention to serve others, the belief that helping others is one’s social responsibility, and the tolerance and appreciation of human differences (Markus, Howard, & King, 1993). There is an expansive list of items or issues that can be considered a civic attitude.

For the purposes of this proposed research, civic attitudes will be defined using the categories of the civic attitudes and skills developed by Moely (2002a, & 2002b). Those categories include civic action, interpersonal and problem solving skills, leadership skills and values (Moely et al., 2002a & 2002b).

Civic Action

John Dewey (1916) first linked experiences in a school community with the development of capacities for democratic living and civic action. Not only have students contributed to society with volunteer hours, many scholars attribute their civic action experiences to positive gains in development, including the development of identity, moral character, initiative, self-efficacy, and agency.
Forty years after Dewey, Erickson (1965) contended that identity was situated in both the core of the individual and in the heart of the culture surrounding the individual. His work focused on not only how civic action affected an individual’s later life, but the life of society itself (Erickson, 1965).

**Leadership Skills**

Research suggests (Miller, 1997; Morgan, 2002; Morgan & Streb, 1999) that leadership skills in the design of any civic-related project can be a key factor that predicts success. Some (Melchior, Kavfold, & Edwards, 1998; Morgan, 2002) even use this as a key measure of whether the service and civic programs are of the appropriate quality. Moely et al. (2002a) argue that leadership skills are sharpened in the service-learning pedagogy because the students are provided real world opportunities to use those skills. This argument is consistent with the original works of Dewey (1916), who argued that it was through such experiential learning that the students would develop the skills needed to participate in a democracy.

**Values**

As Boyer and Hechinger (1981) observed,

The aim is not only to prepare the young for productive careers, but to enable them to live lives of dignity and purpose; not only to generate new knowledge, but to channel that knowledge to humane ends; not merely to increase participation at the polls, but to help shape a citizenry that can weigh decisions wisely and more effectively promote the public good. (p. 60)
Value systems in college students directly influence their civic attitude and overall development (Dalton & Petrie, 1997; Kuh, 1999). Astin (1993) stated that experiential education had a strong influence on a student’s values and civic attitudes: “Student values, beliefs, and aspirations tend to change as experiences grow” (p. 398).

**Problem Solving Skills**

Eyler and Giles (1999) measured skills that would be useful in civic endeavors (interpersonal relations, social/political awareness, leadership, problem solving, and logical thinking), values related to civic engagement, and the likelihood of action and involvement in community issues. Based on their work, community members who had participated in those civic endeavors consistently rated problem solving as one of the most useful tools in their experience. Astin (1997) confirms this with college students, as his research showed a heightened level of problem solving skills by students who participated in community service or service-learning. Students are faced with real work challenges that require critical thinking to solve the issues at hand. These measures were created to gauge student learning in different academic settings at Tulane University, including a service-learning experience.

**Service-Learning**

Colleges and universities were challenged to graduate civic-minded students with sensitivity toward the needs of their communities and empowerment to create social change (Wingspread, 1993). Institutions of higher education were called to provide students with opportunities to experience
society and then reflect on their experiences as an integral part of their education. These social experiences were to be provided through firsthand exposure to the community. The search for an agreed-upon definition of service-learning can be difficult. Giles and Eyler (1994) found 147 different definitions for service-learning. According to Bringle and Hatcher (1996), service-learning is a credit-bearing educational experience in which students participate in an organized service activity that meets identified community needs and reflect on the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of civic responsibility. Moreover, service-learning is defined by Payne (1999) as “a method of teaching through which students apply newly acquired academic skills and knowledge to address real-life needs in their own communities” (p. 48). This method of learning has been shown to have numerous positive effects on student participants and the academic process overall. Green (2003) highlighted how students tend to perceive their service as having a greater impact on them personally rather than on the individuals actually receiving assistance. Furthermore, Jacoby (1996) emphasized the structured components of service-learning along with the prerequisite of reflection and reciprocity. Service-learning, according to Jacoby, is a form of experiential education in which students engage in activities that address human and community needs together with structured opportunities intentionally designed to promote student learning and development. Reflection and reciprocity are key concepts of service-learning. Finally, Delve, Mintz, & Steward (1990) defined service-learning as the
process of integrating academic instruction with public service, a collaborative effort whereby students apply their classroom learning to inform and understand an individual or community in terms of their needs, concerns, history, and culture. Reciprocal learning results when the server (student) is educated and develops a deeper sense of civic responsibility and the served (community) is empowered (Delve et al., 1990).

Academic service-learning should be properly distinguished from community service-learning. Howard (1993) stated that service-learning is a pedagogical model; it is first and foremost a teaching methodology. Second, an intentional effort is made to use community-based learning on behalf of academic learning and to use academic learning to inform community service. This effort presupposes that academic service-learning will not happen unless concerted effort is made to make use of community-based learning and strategically bridge it with academic learning. Third, the two kinds of learning—experiential and academic—are integrated and strengthen one another. Finally, the community-service experiences must be relevant to the academic course of study (Howard, 1993).

The Commission on National and Community Service (1993) set guidelines to assist in defining service-learning. A service-learning program provides educational experiences

1. Under which students learn and develop through active participation in thoughtfully organized service experiences that meet actual community
needs and that are coordinated in collaboration with school and community;
2. that are integrated into the students’ academic curriculum or provides structured time for a student to think, talk, or write about what the students did and saw during the actual service activity;
3. that provides a student with the opportunities to use newly-acquired skills and knowledge in real-life situations in their own communities; and
4. that enhances what is taught in school by extending the student learning beyond the classroom and into the community and helps to foster the development of a sense of a caring for others. (p. 15)

**Historical background**

The origins of service-learning can be found in the Morrill Act of 1862, which established the land grant institutions. The focus of land grant institutions was to serve the public good through service (Reber, 1916). These land grant institutions developed educational outreach programs that provided an early model for service-learning. Service bureaus were a part of land grant institutions, helping with such activities as “offering technical information on community problems, inciting public interest and when necessary, helping the community to organize for action” (Reber, 1916, p. 183).

The reflection component of service-learning can be linked to the educational philosopher John Dewey, who, in his 1933 book *How We Think*, discussed both reflective thinking and reflective activity and their ability to aid in learning. This recognition of reflection as a key component of learning helped to
establish it as an important aspect of service-learning. Furthermore, Eyler and Giles (1999) noted Dewey’s “principles of experience, inquiry and reflection as the key elements of a theory of knowing in service-learning” (p. 36). The term service-learning first appeared in 1967 and was described as “the combination of conscious educational growth with the accomplishment of certain tasks that met genuine human needs” (Titlebaum, Williamson, Daprano, Baer, & Brahler, 2004, p. 5). In 1969, the Atlanta Service-Learning Conference was sponsored by the Southern Regional Education Board; the U.S. Department of Housing, Education and Welfare; and the Peace Corps, among other organizations. In 1971, the National Students Volunteer Program was created and began publishing a journal that promoted the linking of service and learning. Several government-sponsored service initiatives were started in the 1970s, including the California Conservation Corps and the Young Adult Conservation Corps (Titlebaum et al., 2004).

National policy has recently furthered service initiatives, causing the use of service-learning to increase. President George H. W. Bush and President Bill Clinton both implemented a vast array of civic programs in the 1990s. The National and Community Service Act of 1990 was developed during the first Bush administration. Upon its enactment, it was considered to be the most significant legislation supporting service-learning programs that had ever been passed (Conrad & Hedin, 1991). During the Clinton administration, fiscal support for community-service programs was increased. The National Service Trust Act of 1993 was passed during President Clinton’s tenure. That administration
established the AmeriCorps program, which provides scholarship to students engaged in service with the community (Rhoads, 1998). In his 2002 State of the Union address, President George W. Bush announced the creation of the USA Freedom Corps. Chaired by the President, USA Freedom Corps was a coordinating council that worked to strengthen the culture of service and helped find opportunities for every American to serve.

More recently, the Edward M. Kennedy Service Act was signed into law by President Barack Obama. This legislation will help create new opportunities for millions of Americans at all stages of their lives, from improving service-learning in schools to creating an army of 250,000 volunteers a year dedicated to addressing the nation's toughest problems and from connecting working Americans to a variety of part-time service opportunities to better using the skills and experience of retirees and baby boomers. This legislation will help tap the genius of U.S. faith-based and community organizations and it will find the most innovative ideas for addressing common challenges and helping those ideas grow (Obama, Public Address, 2009).

In addition to public policy, a number of organizations have pushed the idea of service-learning. Guided by Harvard president Derek Bok, Campus Compact was established in 1985 by a group of university presidents who maintained the idea that community service is crucial to holistic student development and learning (Antonio, Astin, & Cress, 2000; Zlotkowski, 1996). Currently, Campus Compact is considered the nation’s leading service-learning advocacy organization, having grown to include 1,100 college and university
presidents, representing more than a quarter of all American higher education institutions, including over six million students.

Benefits of Service-Learning

Service-learning courses give students the opportunity to apply what they learn in the classroom in real-life community settings (Moely et al., 2002b). Research has shown that students participating in service-learning tend to score higher on exams than students who have not been involved in a service-learning activity (Strage, 2000). In addition to positive academic outcomes, students participating in service-learning develop better personal and interpersonal skills. Studies report better interpersonal engagement, including problem solving and leadership skills (Gallini & Moely, 2003; Moely et al., 2002a & 2002b). Additionally, the service-learning component has been shown to enhance faculty-student interaction, which tends to advance students’ educational integration processes (McKay & Estrella, 2008).

To gain relatively accurate information pertaining to the perceptions of students participating in service-learning, it is common for the course component to use reflection, which combines commentary and self-evaluation related to the service experience (Moely et al., 2002a). The main goal of this reflection process is to foster a greater understanding of the academic ideologies behind the course teachings as it relates to the service activity (Hatcher, Bringle, & Muthiah, 2004). In addition, students’ reflections on their service have been used to guide students in developing deeper cultural awareness and self-awareness (Cone & Harris, 1996). Overall, reflections are deemed extremely valuable to the learning
experience, with classes requiring service but not including reflection showing lower rates of learning when compared to service-learning classes that included a service reflection element (Godar, 2000).

Generally, females participate in civic engagement activities more often than do males and, overall, tend to exhibit more positive outcomes as a result of service-learning course components (Eyler & Giles, 1999). A study by Nichols and Monard (2001) that focused on gerontology courses implementing a relevant service-learning component found that females tended to benefit most when their service involved one-on-one relationship building while males seemed to benefit most when their service was directly related to future occupational goals. This study found the same correlation with females in relation to younger students, highlighting a recommendation for socially oriented service when dealing with younger females (Nichols & Monard, 2001).

**Characteristics of Service-Learning**

Programs and classes involved in community service-learning are differentiated from other educational courses by the fact that community service-learning courses benefit equally the student and those they are serving (Simons & Cleary, 2006). Research by Green (2003) found some students believed that community service actually had a greater impact on them than on those for which they were providing service. These students prominently cited the educational value of civic engagement and an altered point of view as beneficial consequences of service-learning. The lens model developed by Cone and Harris (1996) lays out a spiral learning process. The model places the service
experience at the center of the cycle, acting as the lens through which students see the world. Before students go into the service experience, they are shaped by their own experiences and preparation in the classroom. The academic course should then provide them with needed theoretical and practical knowledge and an experience. After that experience, they reflect on what they have done and seen, usually in the form of academic responses and journals. Academic responses integrate the theoretical knowledge from the classroom with the student’s experiences. The journal provides the students with an opportunity to examine the service experience in terms of their own understanding (Cone & Harris, 1996).

![Figure 2. A Lens Model for Service-Learning Educators.](image)

As shown by the figure 2, an essential part of a service-learning experience is the reflection component. Students are asked to reflect on their
service experience in a way that deepens their connection to the course content. Eyler and Giles (1999) identified reflection as the tool that forms the connection between the affective and the cognitive. Reflection allows the students to conceptualize the service activity and apply that activity with course concepts to gain a broader understanding of the service site. In many ways, instructors can use reflection in class to foster a deeper understanding of the academic principles behind the coursework (Hatcher et al., 2004). Reflection is used to develop students’ self-awareness and civic and social attitudes (Eyler & Giles, 1999). Reflection can be conducted in many modes, such as written, oral, and electronic, but written journals continue to be one of the more popular forms of reflection. A common method of guiding reflections is having students respond to instructors’ prompts related to the service experience and the objectives of the course (Moely et al., 2002b). Oral reflection can be effective because students can exchange ideas and learn to view things from different perspectives (Cone & Harris, 1996).

Several studies have shown that the success of service-learning can be attributed to the reflection component. Classes that have included service but lacked reflection have shown lower rates of learning compared to classes that included reflection (Eyler & Giles, 1999; Godar, 2000). The same research has shown that reflection increases retrained learning (Eyler & Giles, 1999; Godar, 2000). Effective service-learning courses focus on the experience of the students. As Dewey (1938/1997) stated, “Everything depends on the quality of the experience as every experience lives on in further experiences” (p. 19).
Thus, students can have a negative experience at a service site if the service-learning component is not well planned (Moely et al., 2002a & 2002b). Service-learning projects that are of high quality will provide a more beneficial student experience than regular classes (Eyler & Giles, 1999).

**Institutionalizing Service-Learning**

Higher education’s original purpose was to serve the public good. Service-learning provides a great means to achieve that purpose. Service-learning programs that are successful not only claim adherence to the institution’s mission but exploit it. The service-learning program should be perceived as paramount in aiding the institution to achieve its mission (Zlotkowski, 1996). In addition, the program must have enough support from faculty and administrators. Zlotkowski (1996) suggested that a core group of faculty and administrators committed to the educational concept of service-learning champion its cause on campus. A dynamic leader in an institution can provide the impetus for service-learning growth when he or she is willing to act as an advocate and program visionary. Another component is the academic integrity of the service-learning program. Including service in an academic course does not necessarily qualify that course as service-learning. The importance of this academic integrity is evident in the fact that over two-thirds of institutions participating in Campus Compact now house their service-learning programs in academic affairs rather than student affairs.

While the program being relevant to the institution’s mission, having ample faculty support, and achieving academic veracity are all key components
in an institution’s effort to create an effective service-learning program, the one crucial element that many college and universities continually fail to implement is the recognition of service-learning efforts in the promotion and tenure process. Until faculty can see how service-learning achievements are recognized and rewarded, the successful institutionalization of service-learning programs will remain incomplete (Zlotkowski, 1996). Nevertheless, many colleges and universities have created excellent models of service-learning on their campuses. For institutions planning to implement service-learning, these programs provide outstanding examples.

The University of Pennsylvania has become one of the national leaders in the service-learning movement. It established the Center for Community Partnerships to help the university function as a civic-, socially-, and morally-engaged institution and to aid in fulfilling its educational mission. The university has instituted curriculum reform with the aim of improving teaching and learning through participation in community-action research. Service-learning has played a major role in the process of realizing sustained scholarly and societal progress (Harkavy & Benson, 1998). The following examples of institutional offices or centers were chosen to show a broad range of the size and the scope of operations managing civic engagement.

The Office of Service-Learning (OSL) at Tulane University provides a broad range of services to faculty, students, and community partners participating in service-learning. Each OSL program coordinator is responsible for eight to nine courses (with a total of approximately 120 students) per
semester. Service-learning is a relatively recent development at Tulane, with numerous faculty members beginning their first experience with service-learning each semester. Program coordinators consult with faculty members as they develop service-learning courses and work with community agency representatives to plan service activities that will complement the faculty members’ course goals while providing a useful service to the agency. The OSL staff members arrange training sessions and on-site orientations; monitor students’ service activities throughout the semester; and communicate regularly with students, faculty, and community site representatives so that any developing difficulties can be addressed quickly. To help students make connections between the course and service experiences, the program coordinators organize reflection sessions at the OSL and collaborate with faculty members, upon request, to facilitate classroom reflection sessions. Most program coordinators are recent college graduates who have had extensive experience working in community agencies and are highly committed to the program goals, thus keeping the support level for all constituents high (Moely et al., 2002a).

Colorado State University has a service-learning program called the Service Integration Project. In this program, students are required to spend five hours participating in community service for each hour of credit they receive for the course. The purpose of this requirement is for the student to use knowledge from the course in connection with their community service and to offer evaluation and reflection of the service experiences (McKay & Estrella, 2008).
Bates College has developed a center for service-learning that promotes service-learning on campus. It is sensitive to the academic thrust of the college and builds on the philosophy and history of traditional American education. The center is especially focused on faculty needs. The Center’s staff works with faculty so that faculty members realize the potential to strengthen student understanding of course content via service-learning. The program planners recognized the research agenda of the college and faculty, so it facilitates this process whenever possible (Zlotkowski, 1996).

The University of Southern Mississippi has implemented a service-learning program for over 10 years. This program began in 2000 when The University of Southern Mississippi, through the Office of Community Service-Learning, became one of six universities across the country selected to partner with Eastern Michigan University in a FIPSE-funded project to provide professional development for university faculty through academic service-learning fellowships. The grant provided funding for faculty release time for a faculty liaison to teach a service-learning seminar each spring semester. In addition, faculty members enrolled in the seminar were released from teaching one course.

Following the completion of the FIPSE-funded project at the end of the 2002-2003 academic year, The University of Southern Mississippi continued to fund the program through collaboration between Academic Affairs and Student Affairs. Funding has been provided each year through support from both the Provost’s Office and the Office of the Vice President for Student Affairs. This
support has allowed the Service-Learning Faculty Fellows program to continue expanding service-learning on The University of Southern Mississippi campus and in the southeast Mississippi region. To date, the Service-Learning Faculty Fellows program has 85 faculty members distributed among five colleges at USM’s Hattiesburg and Gulf Park campuses, as well as at Mississippi Gulf Coast Community College (The University of Southern Mississippi, 2012).

Measuring the Impact of Service-Learning

Several studies and methods have been used to determine the impact of service-learning on college students. This section will review three other studies that focused on trying to measure similar outcomes as this research. The studies all examine the benefits of an academic service-learning component. For the purpose of this research, the Civic Attitudes and Skills Questionnaire (Moely, 2002a; 200b) and social capital scale (D’Agostino, 2010) will be used as the instruments for this study and will be discussed later, while the model below shows alternative ways to measure the effects of service-learning.

Mabry (1998) examined the variations in the outcomes of service-learning. Previous studies had reported positive civic outcomes, enhanced moral development, and improvement in social responsibility, yet little was known about the methods or practices that contribute to these positive outcomes. Mabry’s study was conducted in the fall of 1997 and used 23 service-learning courses with a pretest-posttest design. Participation was voluntary but strongly encouraged. All students had the option to drop after they learned about the service-learning components. The variables for the pre-course survey were
personal social values and civic attitudes. The dependent variables for the post-course survey included the subscales above as well as the course impact on civic attitudes and academic benefit of service-learning subscales (Mabry, 1998). The study concluded that the amount of time spent in service-learning activities, the time spent with beneficiaries, and reflection impacted the outcomes, suggesting that students need to spend at least 15 hours per semester in the service in order to have enough exposure to the beneficiaries to obtain favorable outcomes. The reflection process had the most benefit for students. Both written and oral reflection was noted as having a positive impact on academic learning and personal growth. This study offered a good review of the types of independent and dependent variables that are similar to those being considered for this proposed research.

The Volunteer Functions Inventory (VFI). Clary and his colleagues (1998) developed an instrument to examine the motivations that underlie volunteer behavior. They identified five potential functions that were served by volunteering: values, understanding, social, career, protective, and enhancement. Bringle, Phillips, and Hudson (2004) summarized each of these subscales and their functions:

1. Values: The degree to which volunteering expresses altruistic and humanitarian concern for others;
2. Understanding: The degree to which volunteering provides opportunities for new learning experiences and to use knowledge, skills and abilities;
3. Social: The degree to which volunteering allows the person to be with friends and receive the recognition of others;

4. Career: The degree to which volunteering allows the person to avoid guilt and better cope with personal problems; and

5. Enhancement: The degree to which volunteering promotes an individual’s sense of personal growth and positive feelings (p. 36).

Clary and his colleagues (1998) conducted six studies with the VFI. The study most relevant for this proposed research used an entry-level psychology course over two semesters to assess the test-retest reliability of the study. Students with service experiences were asked to respond to items by indicating how important each of the items was to volunteering, and those with no previous volunteer experience were asked to respond to the items by indicating how important each item would be to volunteering. The researchers confirmed that all six aforementioned factors were present and coefficient alphas for the subscales ranged from 0.82 to 0.85, indicating good reliability. The following semester, the authors surveyed students in the same course and confirmed the test-retest reliability, indicating that students were being affected by the service-learning experience according to the VFI results.

Community Services Attitudes Scale (CSAS). Shiarella, McCarthy, and Tucker (2000) developed an instrument that was based on Schwartz’s (1977) model of helping behaviors. Shiarella and her colleagues (2000) reported that Schwartz’s model consisted of four sequential phases in the helping process: (a) the activation step, indicating perception of a need to respond; (b) the obligation
step, arising from a sense of moral obligation to respond; (c) the defense step, assessing potential responses; and (d) the response step, engaging in helping behavior. While Schwartz described and referred to helping as a one-time event, these authors indicated that it is more of an ongoing process (Shiarella et al., 2000). Shiarella and her colleagues presented the development and validation of the CSAS to measure the attitudes of college students toward community service. A component analysis was used to explore the psychometric properties of CSAS. The research was conducted with 233 students in business, communication, education, and psychology classes. As the authors predicted, no significant relationships were found between age, race, or college rank and any of the subscales. However, a slight difference was found for gender, in that females in the sample consistently scored higher on all subscales than males (Shiarella et al., 2000). As the authors had predicted, a student’s academic major, previous community-service experience, and the amount of time spent in previous service experience showed positive relationships to factors measured by most of the subscales (Shiarella et al., 2000). Bringle (2004) suggested that the CSAS has the ability to explore and measure changes in students’ perceptions of, attraction to, and changes and outcomes resulting from a service-learning experience.

Service-Learning and Civic Attitudes

Moely and her colleagues (2002b) noted that students who participated in service-learning courses were more likely to maintain positive civic attitudes over the course of a semester than those who did not participate in service-learning.
courses. Students who participated in service-learning opportunities stated “self-expansion” as a prime motivator for their participation (Brody & Wright, 2004 p.17). As far as reasons for how students can be effective and successful in developing more positive civic attitudes through a service-learning experience (within the larger field of community service-learning as a whole), students cited setting goals, setting realistic expectations and time frames, establishing clear support systems, ensuring prior experience and skills, and facilitating personal investment in the actual project (Brody & Wright, 2004). In addition, Moely, Furco, and Reed (2008) found that students involved in community-service-learning “changed the way [they] think about societal problems” and “learned to appreciate different cultures” (p. 2). Furthermore, students indicated that in community service-learning, they “studied more diligently and intensively than [they] typically had before” and “changed [their] plans for [their] career and life’s work” (Moely et al., p. 4).

While the focus of service-learning is to promote a deeper understanding of course content, these other outcomes are critical to creating engaged citizens. Research by Simons and Cleary (2006) revealed that after only one semester, students in a service-learning course showed significant improvements in political awareness and diversity, as well as community self-efficacy. Students cited the benefits of helping other people, feeling personal satisfaction, improving the community, improving society as a whole, enhancing their academic endeavors, and fulfilling civic or social responsibilities as reasons they participated in service-
learning (Astin, 1996). Those additional outcomes make a strong case for establishing service-learning at colleges; however, such data are rarely collected.

Predisposing factors of students who participate in service-learning courses include leadership ability, a strong desire to help in community-action programs, outside involvement in religious programs or activities, and less materialistic tendencies (Astin, 1996). Ideas such as civic engagement and a novel point of view are often quoted as beneficial results by students who have engaged in community service-learning courses. With regard to higher education in particular, students’ commitment to community service, dedication to helping others, and concerns over the civic life of their communities have been shown in past research to increase during their college years, particularly as a result of participation in particular activities. Pascarella and Terenzini (2005) supported these findings in their summary of recent studies showing that community service involvement has statistically significant, positive effects on civic engagement attitudes and values. Indeed, past studies in higher education have attested to student growth in the following areas after community involvement: importance attached to community action, humanistic values, altruism, and sense of civic responsibility (Kuh, 1999; Myers-Lipton, 1998; Sax & Astin, 1997). Involvement in on-campus demonstrations and volunteerism, in particular, in conjunction with other activities was shown to positively influence students’ beliefs that they can effect change in a community (Astin, 1993). Specifically, Astin (1993) concluded that community service participation increases students’ self-efficacy by reducing their feelings that they are “helpless to do anything about society’s problems” (p.
The commitment to future community involvement has been shown to be a benefit of civic involvement because students that participate in community service are four times more likely than their noninvolved peers to volunteer in following semesters and years (Astin, 1993; Sax & Astin, 1997). Studies in youth civic engagement have reinforced the findings linking involvement in community service and exposure to social problems during adolescence to long-term commitment to civic engagement (Hart, Donnelly, Youniss, & Atkins, 2007).

Students enrolled at institutions of higher education have the opportunity to transform their social interests into advocacy through personal connections with the community (Weeks, 1998). Through community-service activities, young people become more prepared to serve civically in the future through exposure to organizations, resources, and skill sets necessary to become an active citizen. Therefore, community service activities present valuable opportunities to practice democratic skills that have been predictive of civic and political engagement in adulthood (Flanagan, Gill, & Gallay, 2005). Finally, a recent longitudinal cohort study that tracked high school students’ development twice per year from sophomore to senior year concluded that community service taught students to be “responsible contributors to the maintenance and betterment of society . . . and to better understand the workings of government” (McLelland & Youniss, 2003, p. 47).

Gaps in the Research

According to Bringle and Hatcher’s (1996) definition, service-learning promotes a deeper understanding of course content. Most service-learning
faculty and practitioners argue that service-learning produces a better citizen in addition to the deeper understanding of course content. The difficult part for researchers is determining how to measure the development of a good citizen. In this research, the relationship between civic attitudes, social capital and service-learning at The University of Southern Mississippi will be evaluated. There is an ever-growing body of research that links academic service-learning to specific issues. Althaus (2007) researched the impact that service-learning has on leadership development programs. How whiteness and other racial issues affect service-learning was examined by Green (2003), who found that Caucasian students at predominately white institutions were affected more by service-learning because in many cases, student were exposed to racially and socioeconomically different people. Sedlak (2003) examined the association between service-learning and a student’s critical thinking skills. D’Agostino (2006, 2010) examined service-learning’s effect on social capital while Moely (2002a) examined its relation to her definition of civic attitudes.

This research will seek to further promote the work of Moely and her colleagues (2002 a & 2002b) and D’Agostino (2010) by expanding use of the CASQ with the addition of a social capital scale to another university campus to determine the extent of the impact of service-learning.

Summary

Through this examination of existing research, a strong link between human and social capital and civic attitudes was identified. More specifically, the pedagogy of academic service-learning in higher education plays a large role in
the development of civic attitudes (Kuh, 1999; Moely, 2002a; 2002b; Sax & Astin, 1997) and thus, the development of human and social capital (Hershberg, 1999; Wingspread, 1996). These connections make the case to examine service-learning and non-service-learning students at a diverse university (i.e., USM) to determine the extent of how the pedagogy affects the civic attitudes of college students and either increases or decreases their level of human and social capital.
CHAPTER III

METHODOLOGY

This study’s purpose is to determine the effect of an academic service-learning component on student civic attitudes and social capital at The University of Southern Mississippi. Using a quasi-experimental design survey questionnaires were used to collect the data. Questionnaires are an effective method used to collect information regarding a sample’s characteristics, experiences, and opinions, enabling the findings from survey questionnaires to be generalized to the larger population (Gall, Gall, & Borg, 1996). In this study, survey questionnaires were used to elicit data regarding the civic attitudes and social capital of students’ enrolled in courses at The University of Southern Mississippi with and without an academic service-learning component.

Empirical research by Furco (2003) and Moely et al. (2002a, 2002b) identify the need to further explore the benefits of academic service-learning in higher education by gauging the effect that service-learning has on civic attitudes and social capital (Putnam, 1993; Wingspread, 1996; D’Agostino, 2010). This argument presents the opportunity for examining the following research objectives by measuring the civic attitudes and social capital of students at The University of Southern Mississippi using the Civic Attitudes and Skills Questionnaire (Moely 2002a, 2002b) with the addition of a social capital scale (D’Agostino, 2010). Specifically, this study was designed to explore the following hypotheses.
Hypotheses

H1  Academic service-learning will have a positive effect on a student’s civic attitudes score as compared to students in non-service-learning courses (Moely 2002a, 2002b; Astin, 1997).

H2  Academic service-learning will have an effect on a student’s social capital score as compared to students in non-service-learning courses (Egerton, 2002).

H3  The moderating values of gender, race, and class standing will have a positive effect on students’ civic attitudes scores ($p > .05$) (Moely et al., 2002a, 2002b; Green, 2003).

A. Female students will have a higher ($< p .05$) civic attitudes score than male students (Moely et al., 2002a, 2002b).

B. Non-white students will have a higher ($< p .05$) civic attitudes score than white students (Green, 2003).

C. Underclassmen (freshmen, sophomores) will have a higher ($< p .05$) civic attitudes score than upperclassmen (juniors, seniors) (Moely et al., 2002a, 2002b).

H4  The moderating values of gender, race, and class standing will have a significant effect on students’ social capital scores ($p > .05$).

A. Female students will have a higher($< p .05$) social capital score than male students (Egerton, 2002; D’Agostino, 2010).

B. Non-white students will have a higher ($< p .05$) social capital score than white students (Egerton, 2002, D’Agostino, 2010).
C. Underclassmen (freshmen, sophomores) will have a higher (< \( p \) .05) social capital score than upperclassmen (juniors, seniors) (Dunham & Wilson, 2007; D’Agostino, 2010).

H5 There will be a significant correlation (< \( p \) .05) between the civic attitudes (Moely et al., 2002a, 2002b) and social capital scores (D’Agostino, 2010).

Design

The study was designed to compare the civic attitudes and social capital of students enrolled in courses with an academic service-learning component against students who were in courses without service-learning. The method follows the guidelines of a quasi-experimental design that uses non-equivalent groups and pretest/posttest design (Gall, Gall, & Borg, 1999; Shadish, Cook, & Campbell, 2002).

Figure 3. Quasi-Experimental Design

In quasi-experiments, the counterfactual inference most often depends on a nonequivalent comparison group. Comparison groups provide data about “counterfactual inference, that is, about what would have happened in the absence of treatment” (Shadish, et al., 2002, p. 159). In this study, the counterfactual inference would stem from being in a course without a service-learning component. The nonequivalent comparison group was chosen to have maximum pre- and posttest similarity to the treatment group (Shadish et al.,
To properly measure the impact of the service-learning experience on the civic attitudes and social capital of students, student attitudes must be measured before and after the service-learning experience. Students not enrolled in service-learning courses were also given a pretest and posttest. The pretest/posttest process is used to measure the attitudinal change of service-learning students and non-service-learning students so that the results can be compared and the researcher can determine whether an attitudinal change can be attributed to the service-learning component. Attitudinal change was established with a pretest to establish baseline attitudes and a posttest, with the results of the two tests being compared to measure any changes (Gall et al., 1999). Shadish et al. (2002) suggested that there are three "basic requirements for all causal relationships: that cause precedes effect that causes covary with effect and that alternative explanations for the causal relationship are implausible" (p. 6). As a fourth requirement applied to the design of empirical studies, Shadish et al. (2002) stressed the importance of using comparison groups. This design feature, when implemented with random assignment or a well-designed quasi-experimental study, creates a counterfactual condition (Lewis, 1973) that allows us to answer the question, "What would have happened if individuals had not been participants in the given intervention? (p.23)" Applying these four basic requirements to the central question of this study provides a framework for the present review:

- Temporal ordering: Participation in an academic service-learning should precede enhanced social capital and civic attitudes.
• Observable difference: Academic service-learning courses should result in a measurable increase in civic attitudes and social capital.

• Design: A comparison group that will not participate in the academic service-learning should not have the same magnitude of effect.

• Internal validity: Alternative explanations for the enhancement of social capital and civic attitudes are not plausible, or at least less plausible.

Population and Sample

This study included both undergraduate and graduate students enrolled in service-learning and non-service-learning courses during the fall semester of the 2012-2013 academic year. The population size was determined by size of the academic courses used in the research. The sample size included 105 participants with matched pre- and posttest scores. Further explanation of data collection is explained in Chapter IV. According to sample size formulas presented by Bartlett, Kotrlik and Higgins (2001), a total of 95 surveys must be completed to make an inference about the student population at USM. The University of Southern Mississippi does not indicate the inclusion of a service-learning component upon class registration; therefore, most students were introduced to the pedagogy after they enrolled in the class.

All participants were 18 years old or older. Any minors enrolled in the courses included in the study were asked to not complete the
questionnaire. Students took the survey voluntarily without regard to whether they had participated in service-learning in previous coursework.

It was not possible to randomly select students to be in treatment and control groups. Students involved in courses taught by faculty members who have been trained to implement service-learning were selected by the researcher. Those same faculty members were asked to allow research in other courses that do not contain a service-learning component. The random assignment to treatment and control groups needed for a pure experimental design was not achievable; therefore, the study will be defined as a quasi-experimental design (Gall et al., 1999).

The students selected for participation represent broad ranges in age, race, and socioeconomic class. They represent the following academic colleges: (a) College of Business, (b) College of Arts and Letters, and (c) College of Health. The number of service-learning classes offered at The University of Southern Mississippi varies each semester. Table 1 represents the number of service-learning courses, the number of faculty teaching those courses, students enrolled, and hours served from Fall 2009 through Fall 2012.
Table 1

*Service-Learning Courses at The University of Southern Mississippi*

<table>
<thead>
<tr>
<th></th>
<th>Fall 2009</th>
<th>Spring 2010</th>
<th>Fall 2010</th>
<th>Spring 2011</th>
<th>Fall 2011</th>
<th>Spring 2012</th>
<th>Fall 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Courses taught</td>
<td>14</td>
<td>20</td>
<td>26</td>
<td>21</td>
<td>19</td>
<td>16</td>
<td>23</td>
</tr>
<tr>
<td>2. Students</td>
<td>602</td>
<td>644</td>
<td>950</td>
<td>614</td>
<td>939</td>
<td>580</td>
<td>853</td>
</tr>
<tr>
<td>3. Hours served</td>
<td>5,880</td>
<td>4,205</td>
<td>9,343</td>
<td>7,452</td>
<td>5,407</td>
<td>6,985</td>
<td>8553</td>
</tr>
<tr>
<td>4. Faculty involved</td>
<td>11</td>
<td>17</td>
<td>21</td>
<td>16</td>
<td>18</td>
<td>13</td>
<td>18</td>
</tr>
</tbody>
</table>

Instrument

The survey instrument was based on the work of Moely et al. (2002a) and D'Agostino (2010). In order to obtain the desired accuracy, validity, and reliability for measurement, this study follows the common practice of starting with tested reported items in the literature (Moely et al., 2002a, 2002b; D'Agostino, 2010). The primary data-gathering tool is the Civic Attitudes and Skills Questionnaire (CASQ), which was developed as a measurement tool to ascertain the impact service-learning has on the civic attitudes of students who participate in service-learning programs. Subscales used on the CASQ used in this research include the following: civic action, interpersonal and problem solving skills, leadership skills, and values. A subscale to measure social capital increase was added from research measuring the impact of service-learning on social capital (D'Agostino, 2010). D'Agostino's scale measuring informal network ties was added to the instrument as the indicator of social capital.
The following table represents those scales along with the specific questions used as an indicator of its respective variable.

Table 2

Survey Questions Broken Down by Subscale

<table>
<thead>
<tr>
<th>Scale</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Civic action</td>
<td>I plan to do some volunteer work.</td>
</tr>
<tr>
<td></td>
<td>I plan to become involved in my community.</td>
</tr>
<tr>
<td></td>
<td>I plan to participate in a community action program.</td>
</tr>
<tr>
<td></td>
<td>I plan to become an active member of my community.</td>
</tr>
<tr>
<td></td>
<td>In the future, I plan to participate in a community service organization.</td>
</tr>
<tr>
<td></td>
<td>I plan to help others who are in difficulty.</td>
</tr>
<tr>
<td></td>
<td>I am committed to making a positive difference.</td>
</tr>
<tr>
<td></td>
<td>I plan to be involved in programs to clean up the environment.</td>
</tr>
<tr>
<td>2. Leadership</td>
<td>I am a better follower than a leader.</td>
</tr>
<tr>
<td></td>
<td>I am a good leader</td>
</tr>
<tr>
<td></td>
<td>I have the ability to lead a group of people.</td>
</tr>
<tr>
<td></td>
<td>I would rather have somebody else take the lead in formulating a solution.</td>
</tr>
<tr>
<td></td>
<td>I feel that I can make a difference in the world.</td>
</tr>
</tbody>
</table>
Table 2 (continued).

<table>
<thead>
<tr>
<th>Scale</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Values</td>
<td>It is important for me to learn what is being taught in this course. I dislike most of the work in this course I like what I am learning in this course. I think that I will be able to use what I am learning in their class in other classes later on. I think that what we are learning in this course is valuable I think that what I am learning in this course is useful for me to know. It is important for me to really understand the materials covered in this class My coursework is relevant to everyday life. I am satisfied with opportunities the university provides for students to become leaders. I am satisfied with opportunities the university provides for community involvement. I am satisfied with the opportunities the university provides for career preparation.</td>
</tr>
<tr>
<td>4. Interpersonal and Problem Solving Skills</td>
<td>I can listen to others people’s opinions. I can work cooperatively with a group of people. I can think logically in solving problems. I can communicate well with others. I can successfully resolve conflicts with others I can easily get along with people. I try to find effective ways of solving problems. When trying to understand the position of others, I try to place myself in their position. I find it easy to make friends. I can think analytically in solving problems. I try to place myself in the place of others in trying to assess their current situation. I tend to solve problems by talking them out.</td>
</tr>
</tbody>
</table>
Table 2 (continued).

5. Social capital

<table>
<thead>
<tr>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the last twelve months, I have contributed my time as a volunteer (e.g., at a nonprofit agency)</td>
</tr>
<tr>
<td>In the last twelve months, I have served on a committee of a local club or organization.</td>
</tr>
<tr>
<td>In the last twelve months, I have attended a public meeting about town or school affairs.</td>
</tr>
<tr>
<td>In the last twelve months, I have participated in protest, marches, boycotts or other social or political demonstrations.</td>
</tr>
<tr>
<td>If I were looking for a job, I would ask a friend for a job opportunity.</td>
</tr>
<tr>
<td>If I were looking for a job, I would ask a relative for a job opportunity.</td>
</tr>
<tr>
<td>If I were looking for a job, I would use the newspaper classifieds.</td>
</tr>
</tbody>
</table>

The survey is two pages in length, printed on the back and front of a single page. The front page contains the liability release and agreement for participation in the research statements. Demographic data including gender, race, and classification was collected and coded by the researcher. For example, freshmen were coded as one, sophomores as two, and so on. Gender was dichotomized. The survey contained 43 items to be assessed by a five-point Likert scale. The range with codes are as follows:

(1) Strongly disagree, (2) somewhat disagree, (3) neither disagree nor agree, (4) somewhat agree and (5) strongly agree. Pretest and posttest surveys were matched using unique survey identification numbers to assure no identifiable information was collected.

Attempts were taken to reduce acquiescence response set bias:

“Respondents are quickly bored when they encounter too many questions with
the same format, and they may superficially scan for answers they think apply, to end the ordeal quickly” (Folz, 1996, p.89). This is a frequent problem for Likert-type scale surveys, and it is recommended to construct questions with explicit response choices (Singleton, Straits, & Straits, 1993). This study uses a survey with numerous Likert-type statements.

Data Collection

Students were given the pretest survey in the first two weeks of class in the Fall 2012 semester before they began the service-learning component of their course. The posttest was given in the last two weeks of the Fall 2012 semester and after the service-learning component was complete. Unique survey identification codes were used to match the pretest and the posttest. The survey used the demographic data collected to form the code. For example, a Caucasian female born in March of 1992 who is in her senior year will be identified as 03219924.

The pretest survey was proctored by the researcher and given to the students during allotted class time. Directions were given to the students verbally, and students were given as much time as necessary to complete the survey. The researcher read the IRB disclaimer and verbally told the students that participation in the research was completely voluntary with no negative effect on student grades due to non-participation. The posttest was also proctored by the researcher during allotted class time, and as in the pretest, directions were given to the students verbally, and the students were given as much time as necessary to complete the survey.
Data Analysis

This analysis follows the quasi-experimental design that uses comparison groups and pretests defined by Shadish, Cook and Campbell (2002). The following figure is a graphic display of the design. In all the analyses, the data were treated as intervals. A semantic differential scale with numerical forms (Rosenthal & Rosnow, 1991) argues that an interval scale should be adopted in this survey. Likert-type scales with five categories were very commonly analyzed with interval procedures via Likert summation scoring or factor scoring in contemporary social science (D'Agostino, 2010; Dunham & Wilson, 2007).

The Likert scale data were recorded in SPSS statistical software. The first step was to aggregate the scores of each question into its respective scale. For example, the response for the question, “I have the ability to lead a group of people” was categorized in the leadership skills scale. This was repeated throughout the questions so that each respondent had a mean score for each one of the five scales. Once the scores were calculated for each scale, pretest surveys were matched with posttest surveys by the researcher. The unique code created by the demographic data was examined per course number and test scores were matched for pre- and posttests. Files were then merged so that each case had a score for each individual pretest item and pretest scale in addition to a score for each posttest item and posttest scale. Additional variables were created for the difference in the two main constructs. For example, a student with a mean score of 3.5 on the pretest for civic attitudes and a 4.0 on the posttest had a civic attitude increase of .50.
First, descriptive statistics including central tendency and standard deviation (if appropriate) were calculated for all dependent, independent, and control variables. Second, factor analysis (principal component analysis) was performed to assess the homogeneity of the scales. Cronbach’s alpha was used to test reliability. Factor analysis attempts to identify underlying variables, or factors, that explain the pattern of correlations within a set of observed variables. Factor analysis is often used in data reduction to identify a small number of factors that explain most of the variance observed in a much larger number of manifest variables. Third, correlations were conducted to show the basic relations among the variables. Correlation analysis produces a “measure of association that not only indicates the strength and direction of the relationship, but provides a measure of how accurate the regression equation is in predicting the relationship” (Alm, 1999, p. 249). Then, using the factor scores, analysis of variances were conducted to find the relationship between the dependent and independent variables shown in the Table 3.
Table 3

Variables Related to Hypotheses

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Dependent</th>
<th>Independent</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Service-learning or non-service-learning</td>
<td>All CASQ items</td>
</tr>
<tr>
<td>H2</td>
<td>Sex, gender, classification</td>
<td>All CASQ items</td>
</tr>
<tr>
<td>H3</td>
<td>Service-learning or non-service-learning</td>
<td>All social capital items</td>
</tr>
<tr>
<td>H4</td>
<td>Sex, gender, classification</td>
<td>All social capital items</td>
</tr>
<tr>
<td>H5</td>
<td>Service-learning or non-service-learning</td>
<td>All CASQ and social capital items</td>
</tr>
</tbody>
</table>

Once the demographic data were examined and scales tested with factor analysis and reliability measures, the entire scales with all participants were examined determining change from pre- to posttest. According to Field (2009), this test is used when there are two experimental conditions (pre- and post test) and the same participants (students) take part in both conditions of the experiment. Factor analysis computes the difference between the two variables for each case, and tests to see if the average difference is significantly different from zero on a dependent variable are significantly different among groups. Hypothesis 1, stating academic service-learning will have a positive effect on a student’s civic attitudes score as compared to students in non-service-learning, was examined using the civic attitudes scales on the instrument. A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship
between the groups (service-learning and non-service-learning) and the change in their pre- and posttest scores for civic attitudes. Hypothesis 2, stating that academic service-learning will have a positive effect on a student’s social capital score as compared to students in non-service-learning courses, was examined using the social capital indicators on the instrument. A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship between the groups (service-learning and non-service-learning) and the change in their pre- and posttest scores for social capital. Hypothesis 3, stating that the moderating values of gender, race and class standing will have a significant effect on students’ civic attitude scores was examined using civic attitude subscales and demographic data. A two-way analysis of variance (Two-way ANOVA) was conducted to examine the hypothesis. With a two-way ANOVA, each participant has scores on three variables: two factors (gender and service-learning) and a dependent variable (change in civic attitudes score). Each factor divides cases into two or more levels, while the dependent variable describes cases on a quantitative dimension. Hypothesis 4, stating that the moderating values of gender, race and class standing will have a significant effect on students’ social capital scores will use the social capital scale with demographics and follow the same analysis with the two-way ANOVA as hypothesis 3. Hypothesis 5 states that there will be a significant correlation between the civic attitudes and social capital scores as developed by academic service-learning. All instrument scales were used to evaluate this hypothesis. Correlation analysis was used to determine the extent of correlation in the civic attitudes and social capital scales.
Correlation assesses the degree that quantitative variables are linearly related in a sample. A significance test evaluates whether there is a linear relationship between the two variables in the population.

Validity and Reliability

Reliability is a term that refers to whether an instrument measures consistently over time and populations (Gall et al., 1999). Reliability analysis allows the study of measurement scale properties and the individual items in the scale. The procedure calculates the number of commonly used measures of scale and how individual scale items relate to each other within the scale (SPSS, Version 8.0). The dimensionality of each subscale was used using the principle component factor analysis. In addition, reliability analysis was run on each construct. Factor analysis is a statistical procedure used to determine meaningful clusters of shared variance (Rummel, 1970).

Questions representing the subscales of the questionnaire were not separated to reduce the impact on validity and reliability, although altering the scale diminishes the use of previously calculated internal consistency derived from previous studies. Therefore, it is necessary to perform validity tests on the instrument. One form of reliability is internal consistency reliability, which refers to the examination of individual test items (Gall et al., 1999). Cronbach’s alpha test is a model of internal consistency reliability and is based on inter-item correlation (SPSS, Version 8.0). It measures a test’s internal consistency based on the extent to which a participant who answers a question in one way will respond to other questions in the same manner (Gall et al., 1999). While the original works
of Moely and her colleagues (2002a, 2002b) provided justification for the internal validity of the actual instrument, the external validity is more difficult to achieve. Each service-learning class has its own identity. Service-learning students represent various courses and academic colleges.

A threat to internal validity known as selection occurs when differences in conditions among the characteristics of the respondents can affect survey results (Shadish et al., 2002). Selection bias is often addressed by randomization (Shadish et al., 2002). However, due to the nature of the study, the CASQ with social capital scale instrument was not random in its selection of respondents. It also did not ask respondents for information such as educational backgrounds, nor did it determine a pre-existing level of civic attitudes or social capital existent in participants. With such abstract measure, only the indicators of civic attitudes and social capital measured by the specific questions in the survey were used.

Two threats to construct validity became apparent. Firstly, the instrument may have presented an inadequate explication of constructs that could have affected the self-reported scores. According to Shadish et al. (2002), these situations can lead to incorrect inferences about operation and construct. Future use of the instrument should contain a clearer definition of civic attitudes and social capital in order to place the proper context for the survey questions. Secondly, the self-reported scores from the survey could have possibly been inflated to make the respondents’ competency levels appear to be higher than they actually are.
Faculty members approach their service-learning components slightly differently; therefore, every student will not have exactly the same experience. When selecting courses for the study, only courses that hold to the definition of service-learning proposed by Bringle and Hatcher (1999) will be considered. Thus, each course used in the research will have a service-learning option that meets an identified community need and a reflection component to assist students in broadening their comprehension of the course content.

External validity is affected due to the issue of being able to generalize research results. Generalizing results to broader populations is limited. In addition, the variables associated with the definition of civic attitudes used for this study is limited as noted in Chapter II. These two factors limit the ability to generalize results beyond the campus in which the study was conducted.

The study is subject to an issue outlined by Shadish et al. (2002) where the subject may have reactivity to the experimental situation. Participant responses may reflect not just treatment and measures but also participants' perceptions of the experimental situation and, are part of the treatment construct actually tested. A rigorous study was conducted to establish the reliability and validity of the tool (Moely et al., 2002a). To establish the validity of the CASQ, two sets of college students were given the survey at the beginning of the semester during two different academic years. Significant inter-CASQ correlations were found between the leadership skills scale and interpersonal scale, problem-solving scale and leadership skills scale. The civic action scale showed a positive correlation with all other CASQ scales. The mean scores on
the size scales of the CASQ were then checked for correlation with the already-established measurement scales. All score averages were found to be stable in test-retest of students in both control and experimental groups. Chapter IV contains a presentation of data collected in this research, reliability measures for the scale, and analysis of the data collected in the research that will examine the hypotheses presented in this chapter.
CHAPTER IV
ANALYSIS OF DATA

This study was designed to determine if a sample of service-learning courses at The University of Southern Mississippi are affecting student civic attitudes and social capital. Using a pre- and post-course survey design, the study examined if the service-learning instructional design is having a positive effect on students’ values; civic action; and interpersonal, problem solving, and leadership skills, which according to Moely et al. (2002a, 2002b), defines civic attitudes, and social capital as defined by D’Agostino (2010).

Survey data were used to explore the civic attitudes and social capital of service-learning (SL) students and non-service-learning students in relation to demographic variables; the data were analyzed using cross tabulation procedures. First, a description of the sample is given regarding demographic characteristics and civic attitude and social capital scores. Then, the results from the data analyses are described in the sections on civic attitudes and social capital.

This chapter will present the demographic data representing the entire survey broken down by subscales, mean scores, and demographic variables. Furthermore, factor analysis for each subscale is provided with Cronbach’s alpha scores. Analysis of variance was then tested to examine the extent of pre- to posttest change in both the civic attitudes and social capital scales. T tests were run to determine the significance of change from pre- to posttest for all participants. The paired samples T test compared the means of two variables. It
computes the difference between the two variables for each case, and tests to see if the average difference is significantly different from zero. Analysis of variance tests (ANOVAs) were run to test the significance of each hypothesis. An ANOVA is an analysis of the variation present in an experiment. It is a test of the hypothesis that the variation in an experiment is no greater than that due to normal variation of individuals' characteristics and error in their measurement. Finally, correlation analysis was run to determine the correlation between civic attitudes and social capital.

Participants

The data collected consisted of 172 students who took the CASQ with social capital scale pre-test and 136 that took the CASQ with social capital scale (post-test). That represents a 20.9% decrease in respondents. According to national data from the United States Department of Education (2012, withdrawal rate for college courses can range from approximately 7% on the low end to over 30% percent for some courses (www.ed.gov). Not all of that decrease can be attributed to withdrawals. Some students were absent during the date of the posttest. While the researcher was successful in getting surveys from some of the absent students, not all that were still enrolled were available for posttest. The research included both courses that included an academic service-learning component and courses without service-learning. Table 4:1 represents the breakdown of participants defined by the service-learning component.
Table 4

Frequency of Pre- and Posttest Participants

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service-Learning</td>
<td>136</td>
<td>110</td>
</tr>
<tr>
<td>Non-Service-Learning</td>
<td>35</td>
<td>26</td>
</tr>
</tbody>
</table>

Data was then matched combining each participant’s pretest score with his or her posttest score. A unique identification code was established using course number, month and year of birth, gender, race and classification. Since those demographics remain constant, pre- and posttests could be matched. The maximum amount of usable matches was 136, which was the total number of posttests collected. Seventeen (12.5%) of those posttests were eliminated because of insufficient data, meaning the respondent failed to fill in a portion of their unique identification code and/or demographic data. Fourteen (10%) cases were removed because of an identical unique identification code with another participant. For example, there were two Caucasian females in the course, Curriculum and Instruction 411, who were born in the same month of the same year, both with the same classification. As these codes were identical, the pre- and posttest could not be matched. Of the potential 136, 12.5% (n = 17) were eliminated for missing data while 10.2% (n = 14) were eliminated for identical
codes. Therefore, the final sample size of matched pre- and posttest cases was 105.

Of the 105, there were 74 (70.5%) females and 34 (29.5%) males. The racial makeup of the sample size consisted of 74 (70.5) identifying themselves as Caucasian, 30 (28.5%) identified as African American, and 1 (1.0%) identified as Asian/Pacific Islander. The item pertaining to class standing revealed 20 (19.0%) participants were in their first year, while 8 (7.6%) were in their second year, 12 (11.4%) were in their third year, 64 (61%) were in their fourth year, and 1 (1.0%) was in graduate school.

Table 5

*Percentage of Matched Pre- and Posttests by Demographic Variable*

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n</th>
<th>% of n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>105</td>
<td>100.00%</td>
</tr>
<tr>
<td>Male</td>
<td>31</td>
<td>29.5%</td>
</tr>
<tr>
<td>Female</td>
<td>74</td>
<td>70.5%</td>
</tr>
<tr>
<td>Class Year</td>
<td>105</td>
<td>100.00%</td>
</tr>
<tr>
<td>Freshman</td>
<td>20</td>
<td>19.0%</td>
</tr>
<tr>
<td>Sophomore</td>
<td>8</td>
<td>7.6%</td>
</tr>
<tr>
<td>Junior</td>
<td>12</td>
<td>11.4%</td>
</tr>
<tr>
<td>Senior</td>
<td>64</td>
<td>61%</td>
</tr>
<tr>
<td>Graduate student</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Race</td>
<td>105</td>
<td>100.00%</td>
</tr>
<tr>
<td>Caucasian</td>
<td>74</td>
<td>70.5%</td>
</tr>
<tr>
<td>African American</td>
<td>30</td>
<td>28.5%</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>1</td>
<td>1.00%</td>
</tr>
</tbody>
</table>
This demographic distribution correlates well with the demographic breakdown of the institution where the research was conducted. The University of Southern Mississippi’s student body is 60.9% Caucasian, 28.5% African American, 2.7% Hispanic, 1.2% Asian/Pacific Islander, and 6.7% other (The University of Southern Mississippi, 2012). As seen in Table 5, demographics of the surveyed population are similar to the institution. The percentage of African Americans (28.5%) is exactly the same. As a campus, The University of Southern Mississippi has 62.2% females and 37.8% males. Participants in this research are 70.5% female and 29.5% male. According to Eyler and Giles (1999), service-learning is more prevalent in upper-level courses with the main reason being that upper-level courses are more often smaller in size and more inclined to incorporate experiential learning techniques such as service-learning.

Of the 23 service-learning courses conducted at The University of Southern Mississippi in the fall of 2012, 15 (65.2%) were 300 or 400 level courses, while 8 (34.7%) were at the 100-200 level. The participants in this study represented this distribution. Of the participants, 73.4% were upperclassmen and 26.6% were underclassmen. This evidence shows that the population sampled for this research is representative of the population of the university.

Civic Attitude and Social Capital Scores

There were 105 participants who answered the pretest questions in the civic attitude scale and had civic attitude scores. The average score for all participants’ pretest civic attitudes scores was 4.0601. Forty (38.1%) scored between 3.00 and 3.99 while 65 (61.9.9%) scored 4.00 or over.
The average score for all participants’ posttest civic attitudes scores was 4.0196. Forty-seven (44.8%) scored between 3.00 and 3.99 while 58 (55.2%) scored between 4.00 and 4.99 (Tables 6 & 7).

Table 6

*Mean Scores for Civic Attitudes Scale*

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Civic Attitude Score</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>4.0601</td>
<td>4.0196</td>
</tr>
<tr>
<td>N</td>
<td>105</td>
<td>105</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>.32765</td>
<td>.46390</td>
</tr>
</tbody>
</table>

Table 7

*Ranges of Civic Attitude Scale*

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range</td>
<td>N</td>
<td>% of N</td>
</tr>
<tr>
<td>3.00 – 3.99</td>
<td>40</td>
<td>38.1%</td>
</tr>
<tr>
<td>4.00 – 5.00</td>
<td>65</td>
<td>61.9%</td>
</tr>
<tr>
<td>Range</td>
<td>N</td>
<td>% of N</td>
</tr>
<tr>
<td>3.00 – 3.99</td>
<td>47</td>
<td>44.8%</td>
</tr>
<tr>
<td>4.00 – 5.00</td>
<td>58</td>
<td>55.2%</td>
</tr>
</tbody>
</table>

Note. Ranges from 1.00-2.99 not included due to lack of scores in that range.

Civic Attitude Subscale Scores

This section explains the associations of civic attitude scores in relation to each of the civic attitudes subscales including the leadership subscale, the values subscale, the interpersonal and problem solving skills subscale, and the
civic action subscale. Each of these sections is further broken down into the demographic variables of gender, class year, and race.

Leadership Subscale

The leadership subscale consists of five survey items. The mean score for the pretest was 3.6343 and the posttest mean was 3.6324. Table 8 shows those mean scores, while Table 9 shows mean scores per demographic variable.

Table 8

Mean Scores for Leadership Scale

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th></th>
<th>Posttest</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average Leadership Score</td>
<td></td>
<td>Average Leadership Score</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>N</td>
<td>Std. Deviation</td>
<td>Mean</td>
<td>N</td>
</tr>
<tr>
<td>3.6343</td>
<td>105</td>
<td>.34913</td>
<td>3.6324</td>
<td>105</td>
</tr>
</tbody>
</table>

Table 9

Mean Scores for Leadership Scale by Demographic ($n = 105$)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Pretest</th>
<th></th>
<th>Posttest</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>N</td>
<td>Std. Dev.</td>
<td>Mean</td>
</tr>
<tr>
<td>Male</td>
<td>3.5097</td>
<td>31</td>
<td>.34191</td>
<td>3.5355</td>
</tr>
<tr>
<td>Female</td>
<td>3.6865</td>
<td>74</td>
<td>.34096</td>
<td>3.6730</td>
</tr>
</tbody>
</table>
Table 9 (continued).

<table>
<thead>
<tr>
<th>Class Year</th>
<th>Pretest</th>
<th></th>
<th>Posttest</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>N</td>
<td>St. Dev.</td>
<td>Mean</td>
</tr>
<tr>
<td>Freshman</td>
<td>3.7200</td>
<td>20</td>
<td>.43237</td>
<td>3.6700</td>
</tr>
<tr>
<td>Sophomore</td>
<td>3.6750</td>
<td>8</td>
<td>.30119</td>
<td>3.6250</td>
</tr>
<tr>
<td>Junior</td>
<td>3.5000</td>
<td>12</td>
<td>.23355</td>
<td>3.7000</td>
</tr>
<tr>
<td>Senior</td>
<td>3.6344</td>
<td>64</td>
<td>.34097</td>
<td>3.6063</td>
</tr>
<tr>
<td>Grad student</td>
<td>3.2000</td>
<td>1</td>
<td>.0</td>
<td>3.8000</td>
</tr>
<tr>
<td>Caucasian</td>
<td>3.6027</td>
<td>74</td>
<td>.34955</td>
<td>3.6432</td>
</tr>
<tr>
<td>African American</td>
<td>3.7200</td>
<td>30</td>
<td>.34281</td>
<td>3.6067</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>3.4</td>
<td>1</td>
<td>.53886</td>
<td>3.6000</td>
</tr>
</tbody>
</table>

Values Subscale

The values subscale consists of 11 survey items. The mean score for the pretest was 4.0533 and the posttest mean was 3.8848. Table 10 shows those mean scores and Table 11 shows mean scores by demographic variable.
Table 10

*Mean Scores for Values Scale*

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average Values Score</td>
<td>Average Values Score</td>
</tr>
<tr>
<td>Mean</td>
<td>4.0628</td>
<td>3.9199</td>
</tr>
<tr>
<td>N</td>
<td>105</td>
<td>105</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>.44830</td>
<td>.57475</td>
</tr>
</tbody>
</table>

Table 11

*Mean Scores for Values Scale by Demographic (n=105)*

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>n</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>3.9355</td>
<td>31</td>
</tr>
<tr>
<td>Female</td>
<td>4.1027</td>
<td>74</td>
</tr>
<tr>
<td>Class Year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freshman</td>
<td>3.9900</td>
<td>20</td>
</tr>
<tr>
<td>Sophomore</td>
<td>3.9375</td>
<td>8</td>
</tr>
<tr>
<td>Junior</td>
<td>4.0833</td>
<td>12</td>
</tr>
<tr>
<td>Senior</td>
<td>4.0797</td>
<td>64</td>
</tr>
<tr>
<td>Graduate student</td>
<td>4.2000</td>
<td>1</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>4.0432</td>
<td>74</td>
</tr>
<tr>
<td>African American</td>
<td>4.1133</td>
<td>30</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>3.000</td>
<td>1</td>
</tr>
</tbody>
</table>
Interpersonal and Problem Solving Skills Subscale

The interpersonal and problem solving subscale consists of 11 survey items. The mean score for the pretest was 4.3411 and the posttest mean was 4.3719. Table 4:9 shows those mean scores and Table 4:10 shows mean scores per demographic variable.

Table 12

Mean Scores for Interpersonal and Problem Solving Scale

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal and problem solving score</td>
<td>Mean</td>
<td>N</td>
</tr>
<tr>
<td>Mean</td>
<td>4.3286</td>
<td>105</td>
</tr>
</tbody>
</table>

Table 13

Mean Scores for Interpersonal and Problem Solving Scale by Demographic 

(n=105)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>n</td>
</tr>
<tr>
<td>Female</td>
<td>4.3592</td>
<td>74</td>
</tr>
<tr>
<td>Class Year</td>
<td>Pretest</td>
<td>Posttest</td>
</tr>
<tr>
<td>--------------</td>
<td>---------</td>
<td>----------</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>Mean</td>
</tr>
<tr>
<td>Freshman</td>
<td>4.3917</td>
<td>4.4708</td>
</tr>
<tr>
<td>Sophomore</td>
<td>4.1563</td>
<td>4.3125</td>
</tr>
<tr>
<td>Junior</td>
<td>4.2500</td>
<td>4.3333</td>
</tr>
<tr>
<td>Senior</td>
<td>4.3464</td>
<td>4.2370</td>
</tr>
<tr>
<td>Graduate</td>
<td>4.2500</td>
<td>4.6667</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>4.3390</td>
<td>4.3311</td>
</tr>
<tr>
<td>African</td>
<td>4.2972</td>
<td>4.2361</td>
</tr>
<tr>
<td>Asian/Pacific</td>
<td>4.5000</td>
<td>4.1667</td>
</tr>
</tbody>
</table>

**Civic Action Subscale**

The civic action subscale consists of 12 survey items. Table 14 shows those mean scores, and Table 15 shows mean scores per demographic variable.
Table 14

*Mean Scores for Civic Action Scale*

<table>
<thead>
<tr>
<th>Civic Action score</th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>N</td>
<td>Std. Deviation</td>
</tr>
<tr>
<td>4.2012</td>
<td>105</td>
<td>.59229</td>
</tr>
</tbody>
</table>

Table 15

*Mean Scores for Civic Action Scale by Demographic (n=105)*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>n</td>
</tr>
<tr>
<td>Male</td>
<td>4.0766</td>
<td>31</td>
</tr>
<tr>
<td>Female</td>
<td>4.2534</td>
<td>74</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Class Year</th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>n</td>
</tr>
<tr>
<td>Freshman</td>
<td>4.4750</td>
<td>20</td>
</tr>
<tr>
<td>Sophomore</td>
<td>4.2344</td>
<td>8</td>
</tr>
<tr>
<td>Junior</td>
<td>4.0625</td>
<td>12</td>
</tr>
<tr>
<td>Senior</td>
<td>4.1445</td>
<td>64</td>
</tr>
<tr>
<td>Graduate student</td>
<td>3.75</td>
<td>1</td>
</tr>
</tbody>
</table>
Table 15 (continued).

<table>
<thead>
<tr>
<th>Race</th>
<th>Pretest Mean</th>
<th>Pretest n</th>
<th>Pretest Std. Dev.</th>
<th>Posttest Mean</th>
<th>Posttest n</th>
<th>Posttest Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian</td>
<td>4.2010</td>
<td>74</td>
<td>.58660</td>
<td>4.2432</td>
<td>74</td>
<td>.58260</td>
</tr>
<tr>
<td>African American</td>
<td>4.2375</td>
<td>30</td>
<td>.59211</td>
<td>4.2167</td>
<td>30</td>
<td>.78161</td>
</tr>
<tr>
<td>Asian/ Pacific Islander</td>
<td>3.1250</td>
<td>1</td>
<td>0</td>
<td>4.0000</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

**Social Capital Scale**

The average score for all participants’ pretest social capital scores was 3.1088. Eight (7.6%) scored between 1.00 and 1.99, 36 (34.3%) scored between 2.00 and 2.99, 47 (44.8%) scored between 3.00 and 3.99, and 14 (13.3%) scored 4.00 or over on social capital.

The average score for all participants’ posttest social capital scores was 3.2340. Five (4.8%) scored between 1.00 and 1.99, 38 (29.5%) scored between 2.00 and 2.99, 53 (50.5%) scored between 3.00 and 3.99, and 16 (15.2%) scored 4.00 or over on social capital. Table 16 shows the mean score for all participants, Table 17 shows the ranges of those scores, and Table 18 shows the mean scores by demographic.
Table 16

*Mean Scores for Social Capital Scale*

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th></th>
<th>Posttest</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average Social Capital Score</td>
<td>Average Social Capital Score</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>3.1088</td>
<td>Mean</td>
<td>3.2340</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>105</td>
<td>N</td>
<td>105</td>
<td></td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>.75555</td>
<td>Std. Dev.</td>
<td>.73437</td>
<td></td>
</tr>
</tbody>
</table>

Table 17

*Ranges of Social Capital Scale*

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th></th>
<th>Posttest</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Range</td>
<td>N</td>
<td>% of N</td>
<td>Range</td>
<td>N</td>
</tr>
<tr>
<td>1.00 – 1.99</td>
<td>8</td>
<td>7.6%</td>
<td>1.00 – 1.99</td>
<td>5</td>
</tr>
<tr>
<td>2.00 – 2.99</td>
<td>36</td>
<td>34.3%</td>
<td>2.00 – 2.99</td>
<td>38</td>
</tr>
<tr>
<td>3.00 – 3.99</td>
<td>47</td>
<td>44.8%</td>
<td>3.00 – 3.99</td>
<td>53</td>
</tr>
<tr>
<td>4.00 – 5.00</td>
<td>14</td>
<td>13.3%</td>
<td>4.00 – 5.00</td>
<td>16</td>
</tr>
</tbody>
</table>
Table 18

*Mean Scores for Social Capital Scale by Demographic (n=105)*

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th></th>
<th></th>
<th>Posttest</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>n</td>
<td>Std. Dev.</td>
<td>Mean</td>
<td>n</td>
<td>Std. Dev.</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>3.0968</td>
<td>31</td>
<td>.80592</td>
<td>3.0829</td>
<td>31</td>
<td>.79091</td>
</tr>
<tr>
<td>Female</td>
<td>3.1139</td>
<td>74</td>
<td>.73909</td>
<td>3.2973</td>
<td>74</td>
<td>.70533</td>
</tr>
<tr>
<td><strong>Class Year</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freshman</td>
<td>3.4000</td>
<td>20</td>
<td>.74822</td>
<td>3.2429</td>
<td>20</td>
<td>.62028</td>
</tr>
<tr>
<td>Sophomore</td>
<td>3.3036</td>
<td>8</td>
<td>.74988</td>
<td>3.5536</td>
<td>8</td>
<td>.52036</td>
</tr>
<tr>
<td>Junior</td>
<td>2.9524</td>
<td>12</td>
<td>.53913</td>
<td>3.2262</td>
<td>12</td>
<td>.75214</td>
</tr>
<tr>
<td>Senior</td>
<td>3.0335</td>
<td>64</td>
<td>.78153</td>
<td>3.1964</td>
<td>64</td>
<td>.79376</td>
</tr>
<tr>
<td>Graduate student</td>
<td>3.1088</td>
<td>1</td>
<td>0</td>
<td>3.2340</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>3.0927</td>
<td>74</td>
<td>.74866</td>
<td>3.2143</td>
<td>74</td>
<td>.74822</td>
</tr>
<tr>
<td>African American</td>
<td>3.1714</td>
<td>30</td>
<td>.78462</td>
<td>3.2810</td>
<td>30</td>
<td>.72211</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>3.1088</td>
<td>1</td>
<td>0</td>
<td>3.2340</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

**Factor Analysis**

The dimensionality of each subscale used the principle component factor analysis. In addition, reliability analysis was run on each construct. Factor analysis is a statistical procedure used to determine meaningful clusters of shared variance (Rummel, 1970). Communalities are the sum of the squared factor loadings for all factors for a given variable. The communality measures the percent of variance in a given variable explained by all the factors jointly, and
may be interpreted as the reliability of the indicator. Communalities range from 0 to 1. Zero means that the common factors do not explain any variance, and 1 means the common factors explain all the variance (Osborne & Costello, 2005). According to Velicer and Fava (1998), item communalities are considered high if they are all 0.8 or greater. According to Velicer and Fava (1998), an item with communality of less than 0.4 may not be related to the other items. Cronbach’s alpha will generally increase as the inter-correlations among test items increase, and is thus known as an internal consistency estimate of reliability of test scores. Because inter-correlations among test items are maximized when all items measure the same construct, Cronbach’s alpha is widely believed to indirectly indicate the degree to which a set of items measures a single uni-dimensional latent construct. However, the average inter-correlation among test items is affected by skew just like any other average. As a result, alpha is most appropriately used when the items measure different substantive areas within a single construct (Cronbach, 1951). A commonly accepted rule of thumb for describing internal consistency using Cronbach’s alpha is displayed in Table 19.

Table 19

Cronbach’s Alpha

<table>
<thead>
<tr>
<th>Cronbach’s Alpha</th>
<th>Internal Consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\alpha \geq 0.9$</td>
<td>Excellent</td>
</tr>
<tr>
<td>$0.8 \leq \alpha &lt; 0.9$</td>
<td>Good</td>
</tr>
<tr>
<td>$0.7 \leq \alpha &lt; 0.8$</td>
<td>Acceptable</td>
</tr>
<tr>
<td>$0.6 \leq \alpha &lt; 0.7$</td>
<td>Questionable</td>
</tr>
<tr>
<td>$0.5 \leq \alpha &lt; 0.6$</td>
<td>Poor</td>
</tr>
</tbody>
</table>
### Table 20
*Factor Loading for Civic Action Scale*

<table>
<thead>
<tr>
<th>Factor</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the future, I plan to participate in a community service organization</td>
<td>.788</td>
</tr>
<tr>
<td>I plan to become involved in my community</td>
<td>.702</td>
</tr>
<tr>
<td>I plan to help others who are in difficulty</td>
<td>.652</td>
</tr>
<tr>
<td>I plan to do some volunteer work</td>
<td>.756</td>
</tr>
<tr>
<td>I plan to become an active member in my community</td>
<td>.821</td>
</tr>
<tr>
<td>I am committed to making a positive difference</td>
<td>.467</td>
</tr>
<tr>
<td>I plan to become involved in programs to help clean up the environment</td>
<td>.632</td>
</tr>
<tr>
<td>I plan to participate in a community action program</td>
<td>.849</td>
</tr>
</tbody>
</table>

The factor analysis for the perimeter control construct confirmed a viable index as the measures were one-dimensional and explained 64% of the variance. The Cronbach’s alpha for this construct was .860, which is considered good internal consistency (Table 19).

### Table 21
*Factor Loading for Interpersonal and Problem Solving Skills Scale*

<table>
<thead>
<tr>
<th>Factor</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can listen to other people’s opinions</td>
<td>.476</td>
</tr>
<tr>
<td>When trying to understand the position of others, I try to place myself in their position</td>
<td>.458</td>
</tr>
</tbody>
</table>
The factor analysis for the perimeter control construct confirmed a viable index as the measures were one-dimensional and explained 60% of the variance. The Cronbach’s alpha for this construct was .726, which is considered acceptable internal consistency (Table 19).

Table 22

*Factor Loading for Values Scale*

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>I think what we are learning in this course is valuable.</td>
<td>.743</td>
</tr>
<tr>
<td>I think that I will be able to use what I am learning in this class in other classes later on.</td>
<td>.698</td>
</tr>
</tbody>
</table>
Table 22 (continued).

<table>
<thead>
<tr>
<th>Factor Loading</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>.319</td>
<td>I am satisfied with the opportunities the university provides for students to become leaders.</td>
</tr>
<tr>
<td>.793</td>
<td>It is important for me to learn what is being taught in this course.</td>
</tr>
<tr>
<td>.569</td>
<td>I dislike most of the work in this course.</td>
</tr>
<tr>
<td>.910</td>
<td>I think that what I am learning in this course is useful for me to know.</td>
</tr>
<tr>
<td>.845</td>
<td>It is important for me to really understand the materials covered in this class.</td>
</tr>
<tr>
<td>.693</td>
<td>My coursework is relevant to everyday life.</td>
</tr>
<tr>
<td>.448</td>
<td>I am satisfied with the opportunities the university provides for community involvement.</td>
</tr>
<tr>
<td>.432</td>
<td>I am satisfied with the opportunities the university provides for career prep.</td>
</tr>
</tbody>
</table>

The factor analysis for the perimeter control construct confirmed a viable index as the measures were one-dimensional and explained 62% of the variance. The Cronbach’s alpha for this construct was .729, which is considered acceptable (Table 19).

Table 23

Factor Loading for Leadership Scale

<table>
<thead>
<tr>
<th>Factor Loading</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>.707</td>
<td>I am a better follower than a leader.</td>
</tr>
<tr>
<td>.848</td>
<td>I am a good leader.</td>
</tr>
<tr>
<td>.718</td>
<td>I have the ability to lead a group of people.</td>
</tr>
</tbody>
</table>
Table 23 (continued).

<table>
<thead>
<tr>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would rather have somebody else take the lead in formulating a solution.</td>
</tr>
<tr>
<td>I feel like I can make a difference in the world.</td>
</tr>
</tbody>
</table>

The factor analysis for the perimeter control construct confirmed a viable index as the measures were one-dimensional and explained 68% of the variance. The Cronbach's alpha for this construct was .763, which is considered acceptable internal consistency (Table 19).

Table 24

*Factor Loading for Social Capital Scale*

<table>
<thead>
<tr>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the last 12 months, I have participated in protest marches, boycotts or other social or political demonstrations.</td>
</tr>
<tr>
<td>In the last 12 months, I have served on a committee of a local club or organization.</td>
</tr>
<tr>
<td>If I was looking for a job, I would ask a friend for a job opportunity.</td>
</tr>
<tr>
<td>If I was looking for a job, I would use the newspaper classified.</td>
</tr>
<tr>
<td>In the last 12 months, I have attended a public meeting about town or school affairs.</td>
</tr>
<tr>
<td>If I was looking for a job, I would ask a relative for a job opportunity</td>
</tr>
<tr>
<td>In the last 12 months, I have contributed my time as a volunteer</td>
</tr>
</tbody>
</table>
The factor analysis for the perimeter control construct confirmed a viable index as the measures were one-dimensional and explained 70% of the variance. The Cronbach’s alpha for this construct was .612, which is considered poor. This scale was considered poor on previous research. D’Agostino (2010) states that the poor consistency was due to the fact that many students participating in the research had varying levels of thoughts about workforce entry or jobs since many still had one or more years of college remaining.

Analysis of Hypotheses

The following section will discuss the hypothesis using SPSS to determine significance level and whether or not the hypothesis will be accepted or rejected.

The following hypotheses will be examined:

H1 Academic service-learning will have a positive effect on a student’s civic attitudes score as compared to students in non-service-learning courses (Astin, 1997; Moely et al., 2002a, 2002b).

H2 Academic service-learning will have a positive effect on a student’s social capital score as compared to students in non-service-learning courses (Egerton, 2002).

H3 The moderating values of gender, race and class standing will have a significant effect on students’ civic attitudes scores \((p > .05)\) (Green, 2003; Moely et al., 2002a, 2002b).

A. Female students will have a higher \((< p .05)\) civic attitudes score than male students (Moely et al., 2002a, 2002b).
B. Non-white students will have a higher \(< p .05\) civic attitudes score than white students (Green, 2003).

C. Underclassmen (freshmen, sophomores) will have a higher \(< p .05\) civic attitudes score than upperclassmen (juniors, seniors) (Moely et al., 2002a, 2002b).

H4 The moderating values of gender, race, and class standing will have a significant effect on students’ social capital scores \((p > .05)\).

A. Female students will have a higher \(< p .05\) social capital score than male students (D’Agostino, 2010; Egerton, 2002).

B. Non-white students will have a higher \(< p .05\) social capital score than white students (D’Agostino, 2010; Egerton, 2002).

C. Underclassmen (freshmen, sophomores) will have a higher \(< p .05\) social capital score than upperclassmen (juniors, seniors) (Dunham & Wilson, 2007; D’Agostino, 2010).

H5 There will be a significant correlation \(< p .05\) between the civic attitudes (Moely et al., 2002a, 2002b) and social capital scores (D’Agostino, 2010) as developed by academic service-learning.

Hypothesis 1. The purpose of this research was to determine the effect of the service-learning component on the civic attitudes scores of college students. Mean data was collected to determine the increase or decrease in scores between groups. The non-service-learning group did show a much sharper decline than the service-learning group on the scale. The service-learning group decreased .3% while the non-service-learning group decreased 4.2%. A one-
way analysis of variance (ANOVA) was conducted to evaluate the relationship between the groups (service-learning and non-service-learning) and the change in their pre- and posttest scores for civic attitudes. The ANOVA was significant, $F(1,103)=3.974, p=.05)$. The strength of relationship between the service-learning treatment and the change in civic attitudes scores was strong.

Table 25

ANOVA on Pretest-Posttest Change for Civic Attitudes

<table>
<thead>
<tr>
<th></th>
<th>Service-Learning (n=83)</th>
<th></th>
<th>Non-Service-Learning (n=22)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pretest</td>
<td>Posttest</td>
<td>Pretest</td>
</tr>
<tr>
<td>Civic Attitudes</td>
<td>4.0554</td>
<td>.31820</td>
<td>4.0630</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Significant at the <.05 level

A significant relationship was found between service-learning course and change in civic attitudes. As shown in Table 25, with a $p$ value of .049, the experience variable is positively statistically significant at the $p < .05$ level. Therefore, the null hypothesis in this case is rejected.

**Hypothesis 2.** This hypothesis was to determine the effect of the service-learning component on the social capital scores of college students. Mean data was collected to determine the increase or decrease in score between groups.
The service-learning group showed an increase in social capital scores while the non-service-learning group showed a very slight decline. The service-learning group increased 5.5% while the non-service-learning group decreased .2%. A one-way analysis of variance was conducted to evaluate the relationship between the groups (service-learning and non-service-learning) and the change in their pre- and posttest scores for social capital. The ANOVA was not found to be significant, $F(1, 103) = .388, p = .23$.

Table 26

ANOVA on Pretest-Posttest Change for Social Capital Scale

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th>Posttest</th>
<th>ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service-Learning (n=83)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Capital</td>
<td>$M$</td>
<td>$SD$</td>
<td>$M$</td>
</tr>
<tr>
<td></td>
<td>3.1205</td>
<td>.74414</td>
<td>3.2943</td>
</tr>
<tr>
<td>Non-Service-Learning (n=22)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Capital</td>
<td>$M$</td>
<td>$SD$</td>
<td>$M$</td>
</tr>
<tr>
<td></td>
<td>3.0649</td>
<td>.81379</td>
<td>3.0065</td>
</tr>
</tbody>
</table>

The service-learning group showed greater performance than the non-service-learning group as suggested by literature. However, a significant relationship was not found between service-learning course and increased social capital. As shown in Table 26, with a $p$ value of .23, the experience variable is not statistically significant at the $p < .05$ level. Therefore, the null hypothesis in this case is not rejected.
Hypothesis 3. This research was to determine if moderating values of gender, race and class standing will have a significant effect on students’ civic attitude scores. Hypothesis 3A examined the difference between the mean responses by gender from pretest to posttest on the civic attitudes scale further examined by their enrollment in either a service-learning or a non-service-learning course. The survey group had a significantly higher number of females. In total, pre- and posttest, there were 74 (70.5%) female responses and 31 (29.5%) male responses. The results of the civic attitudes scores by gender are shown in Table 27. The mean score for service-learning females had a pre- to posttest decrease of .02, while service-learning males showed an increase of .12. Scores for female non-service-learning participants decreased by .16, while non-service-learning males decreased by .25. A two-way analysis of variance (two-way ANOVA) was conducted to examine the hypothesis. With a two-way ANOVA, each participant has scores on three variables: two factors (gender and service-learning) and a dependent variable (change in civic attitudes score). Each factor divides cases into two or more levels, while the dependent variable describes cases on a quantitative dimension. F tests are performed on the main effects for the two factors and the interaction between the two factors (Green & Salkind, 2008). The ANOVA revealed a non-significant interaction between scores and gender (F (3,101)=1.354, p=.432).
Table 27

ANOVA on Pre- or Posttest for Civic Attitudes Scales by Gender

<table>
<thead>
<tr>
<th></th>
<th>Female (n=69)</th>
<th>Male (n=14)</th>
<th>Two Way ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service-Learning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-post change</td>
<td>-.02</td>
<td>.12</td>
<td>F: 1.354</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Sig: .432</td>
</tr>
<tr>
<td>Non-Service-Learning</td>
<td>-.16</td>
<td>-.25</td>
<td></td>
</tr>
</tbody>
</table>

There was a non-significant relationship found between males and females in service-learning courses and increased civic attitudes. As shown in Table 27, with a p value of .432, the experience variable is not statistically significant at the p < .05 level. Therefore, the null hypothesis in this case is not rejected.

Hypothesis 3B examined the difference between the mean responses by race from pretest to posttest on the civic attitudes scale further examined by their enrollment in either service-learning or a non-service-learning course. The category of race was grouped to a binary variable with white being one group and non-white being the other. Seventy-one (67.6%) respondents identified as white, while 31 (32.4%) identified as non-white. The mean score for service-learning whites had a pre- to posttest decrease of .02 while service-learning non-whites had an increase of .08. Scores for non-service-learning whites decreased by .07, while non-service-learning non-whites decreased by .50. A two-way
analysis of variance (Two-way ANOVA) was conducted to examine the hypothesis. The ANOVA was found to be significant for race ($F(3,101) = 6.263, p = .032$).

Table 28

**ANOVA on Pre- or Posttest for Civic Attitudes Scores by Race**

<table>
<thead>
<tr>
<th></th>
<th>White (n=60)</th>
<th>Non-White (n=23)</th>
<th>Two Way ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Service-Learning</strong></td>
<td>Pre-post change</td>
<td>Pre-post change</td>
<td>$F$</td>
</tr>
<tr>
<td></td>
<td>-.02</td>
<td>.08</td>
<td>6.263</td>
</tr>
<tr>
<td><strong>Non-Service-Learning</strong></td>
<td>Pre-post change</td>
<td>Pre-post change</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-.07</td>
<td>-.50</td>
<td></td>
</tr>
</tbody>
</table>

Note. Relationship significant at the $p < .05$ level.

As shown in Table 28, with a $p$ value of .032, the demographic variable is statistically significant at the $p < .05$ level. Therefore, the null hypothesis in this case is rejected.

Hypothesis 3C examined the difference between the mean responses by class standing from pretest to posttest on the civic attitudes scale further examined by their enrollment in either service-learning or a non-service-learning course. The category of class standing was grouped to a binary variable with freshmen and sophomores grouped into a category representing underclassmen, while juniors and seniors were grouped into a category representing upperclassmen. The one case representing a graduate student was grouped with upperclassmen. Of the 105 completed cases, 28 (26.7%) of respondents
identified as underclassmen, while 77 (73.3%) identified as upperclassmen. The mean score for service-learning underclassmen had a pre- to posttest increase of .05, while service-learning underclassmen showed a decrease of .01. Scores for non-service-learning upperclassmen decreased by .23, while there were no results due to the lack of a non-service-learning underclassman participant. Due to the lack of the non-service-learning underclassman case, the control group was not used in the analysis. An ANOVA was conducted to evaluate the significance of the pre- to posttest scores of service-learning underclassmen compared to service-learning upperclassmen.

Table 29

ANOVA on Pre-and Posttest for Civic Attitudes Scale by Classification

<table>
<thead>
<tr>
<th></th>
<th>Underclassmen (n =28)</th>
<th>Upperclassmen (n=55)</th>
<th>ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service-Learning</td>
<td>Pre-post change -.02</td>
<td>Pre-post change .08</td>
<td>F 2.691  Sig .09</td>
</tr>
</tbody>
</table>

There was a non-significant relationship found between underclassmen and upperclassmen in both service-learning course and increased civic attitudes. As shown in Table 29, with a p value of .09, the classification variable is not statistically significant at the p < .05 level. Therefore, the null hypothesis in this case is not rejected.

**Hypothesis 4.** This hypothesis states that moderating values of gender, race and class standing will have a significant effect on students’ social capital scores. Hypothesis 4A dealt with the difference between the mean responses by
gender from pretest to posttest on the social capital scale further examined by their enrollment in either service-learning or a non-service-learning course. The survey group had a significantly higher number of females. In total, pre- and posttest, there were 74 (79.5%) female responses and 31 (29.5%) male responses. The results of the social capital scores by gender are shown in Table 30. The mean score for service-learning females had a pre- to posttest increase of .18, while service-learning males showed an increase of .14. Scores for female non-service-learning participants increased by .22, while non-service-learning males decreased by .14. A two-way analysis of variance (Two-way ANOVA) was conducted to examine the hypothesis. With a two-way ANOVA, each participant has scores on three variables: two factors (gender and service-learning) and a dependent variable (change in social capital score). Each factor divides cases into two or more levels, while the dependent variable describes cases on a quantitative dimension. $F$ tests are performed on the main effects for the two factors and the interaction between the two factors (Green & Salkind, 2008). The ANOVA revealed a non-significant interaction between scores and gender $F (3,101)=.813, p=.482)$. 

Table 30

ANOVA on Pretest and Posttest for Social Capital Scale by Gender

<table>
<thead>
<tr>
<th></th>
<th>Female (n=69)</th>
<th>Male (n=14)</th>
<th>Two Way ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service-Learning</td>
<td>Pre-post change</td>
<td>.18</td>
<td>Pre-post change</td>
</tr>
<tr>
<td>Non-Service-Learning</td>
<td>Pre-post change</td>
<td>.22</td>
<td>Pre-post change</td>
</tr>
</tbody>
</table>

There was a non-significant relationship found between males and females in both service-learning course and increased social capital. As shown in Table 30, with a \( p \) value of .482, the gender variable is not statistically significant at the \( p < .05 \) level. Therefore, the null hypothesis in this case is not rejected. In this case, the scores are contrary to previous research showing that males involved in service-learning had a slightly positive increase while female scores decreased, albeit at a non-significant level. Hypothesis 4B examined the difference between the mean responses by race from pretest to posttest on the social capital scale further examined by their enrollment in either service-learning or a non-service-learning course. The category of race was grouped to a binary variable, with white being one group and non-white being the other. Seventy-four (70.5\%) respondents identified as white, while 31 (29.5\%) identified as non-white. The mean score for service-learning whites had a pre- to posttest increase of .15, while service-learning non-whites showed an increase of .24. Scores for white non-service-learning participants increased by .01, while non-white non-
service-learning participants decreased by .18. The ANOVA revealed a non-
significant interaction between scores and race \( F(3,101) = .637, p = .49 \).  

Table 31

*ANOVA on Pretest and Posttest for Social Capital Scales by Race*

<table>
<thead>
<tr>
<th></th>
<th>White (n=60)</th>
<th>Non-White (n=23)</th>
<th>Two Way ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service-Learning</td>
<td>Pre-post change</td>
<td>.15</td>
<td>.24</td>
</tr>
<tr>
<td>Non-Service-Learning</td>
<td>Pre-post change</td>
<td>.01</td>
<td>-.18</td>
</tr>
</tbody>
</table>

There was a non-significant relationship found between whites and non-
whites in both service-learning course and increased social capital. As shown in 
Table 31, with a \( p \) value of .49, the race variable is not statistically significant at 
the \( p < .05 \) level. Therefore, the null hypothesis in this case is not rejected.

Hypothesis 4C examined the difference between the mean responses by 
class standing from pretest to posttest on the social capital scale further 
examined by their enrollment in either service-learning or a non-service-learning 
course. The category of class standing was grouped to a binary variable, with 
freshmen and sophomores grouped into a category representing underclassmen, 
while juniors and seniors were grouped into a category representing 
upperclassmen. The one case of a graduate student was grouped with 
upperclassmen. Twenty-eight (26.7\%) respondents identified as underclassmen, 
while 77 (73.3\%) identified as upperclassmen. The mean score for service-
learning underclassmen had a pre- to posttest decrease of .04, while service-learning upperclassmen showed an increase of .28. Scores for upperclassmen non-service-learning participants decreased by .06, while there were no underclassmen non-service-learning participants. Due to the lack of the non-service-learning underclassman case, the control group was not used in the analysis. An ANOVA was conducted to evaluate the significance of the pre- to posttest scores of service-learning underclassmen compared to service-learning upperclassmen. The ANOVA found a non-significant interaction between scores and race ($F(2, 102) = .688, p = .08$)

Table 32

**ANOVA on Pretest and Posttest for Social Capital Scales by Classification**

<table>
<thead>
<tr>
<th></th>
<th>Underclassmen (n=.28)</th>
<th>Upperclassmen (n=55)</th>
<th>ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service-Learning</td>
<td>Pre-post change -.02</td>
<td>Pre-post change .08</td>
<td>$F$</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$p$</td>
</tr>
</tbody>
</table>

There was a non-significant relationship was found between underclassmen and upperclassmen in both service-learning course and increased social capital. As shown in Table 32, with a $p$ value of .08, the classification variable is not statistically significant at the $p < .05$ level. Therefore, the null hypothesis in this case is not rejected.

**Hypothesis 5.** This hypothesis states that there will be a significant correlation ($< p .05$) between the civic attitudes (Moely et al., 2002a, 2002b) and social capital scores (D’Agostino, 2010) as developed by academic service-
learning. Correlation analysis was used to determine the extent of correlation in the civic attitudes and social capital scales. Correlation assesses the degree that quantitative variables are linearly related in a sample. A significance test evaluates whether there is a linear relationship between the two variables in the population. The Spearman correlation coefficient was conducted to determine the strength of the relationship between two variables (civic attitudes and social capital).

Table 33

*Correlation Between Civic Attitudes and Social Capital Scores*

<table>
<thead>
<tr>
<th></th>
<th>Civic Attitude Difference</th>
<th>Social Capital Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spearman's rho</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civic Attitude Difference</td>
<td>Correlation Coefficient</td>
<td>Sig. (2-tailed)</td>
</tr>
<tr>
<td></td>
<td>1.000</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>.254**</td>
<td></td>
</tr>
<tr>
<td>Social Capital Difference</td>
<td>Correlation Coefficient</td>
<td>Sig. (2-tailed)</td>
</tr>
<tr>
<td></td>
<td>.254**</td>
<td>.009</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

Note. Correlation is significant at the 0.01 level (2-tailed).

The Spearman’s rho correlation coefficient was calculated for the relationship between the increase in each scale and a weak positive correlation was found (rho (103) = .254, p <.01). Note that degree of freedom given in parenthesis is 103. The output indicates an N of 105. For a correlation, the degree of freedom is N-2. According to Cronk (2008), correlations greater than
0.7 are considered strong. Correlations less than 0.3 are considered weak. Correlations between 0.3 and 0.7 are considered moderate. As shown in Table 33, with a \( p \) value of .009, the classification variable is statistically significant at the \( p < .01 \) level. Therefore, the null hypothesis in this case is rejected.

**Summary**

This chapter summarized the statistical results of this research. Surveys were administered by the researcher in person in various service-learning and non-service-learning classes. Pretests were given in the first two weeks of the Fall 2012 semester and posttests were given in the last two weeks of the Fall 2012 semester. The survey consisted of students among varying demographics. This study examined the relationship between civic attitude and social capital and the intervention of a service-learning component. It examined the relationship between the demographics of gender, race, and classification on each of those main constructs. The data indicated a positive relationship between having a service-learning component and an increased level of civic attitudes. There was no significant relationship between gender and classification on civic attitudes. Data did reveal a significant relationship between race and service-learning. Non-white students enrolled in service-learning showed a slight increase in civic attitude score while the non-white students in non-service-learning experienced a sharp decline. The data did not reveal a significantly positive relationship between social capital and service-learning. The relationship between the demographic variables and social capital scores followed trends of previous research; however, none of the data revealed any statistical significance. Finally,
the correlation between the two scales was determined to be significant, but at a minimal level, meaning that an increase or decrease in civic attitudes was correlated to an increase or decrease in social capital. Chapter V will discuss the implications of the study results and provide recommendations for future research.
CHAPTER V
SUMMARY, DISCUSSION, AND RECOMMENDATIONS

Service-learning has been touted as a pedagogical technique for increasing academic learning as well as enhancing civic outcomes, such as the constructs measured in this research. Service-learning courses occur when faculty members use curricula that assist in meeting community need while deepening the comprehension of the course content for students (Bringle & Hatcher, 1999; Moely et al., 2002b). These experiences have led to a growing body of research that examines service-learning’s effect on classroom grades and many other factors such as leadership skills, job search success, and overall student engagement (Astin, 1993; D’agostino, 2010).

The existing research on service-learning is focused on the pedagogy’s ability to better comprehend course content and meet identified community need. Research has examined the relationship between service-learning and civic attitudes (Moely et al., 2002a, 2002b) and social capital (D’Agostino, 2010). This study explores a combination of civic attitudes and other social capital indicators pre- and post-service-learning experience with students at The University of Southern Mississippi. The findings bring new knowledge to the field, as the research was conducted at an institution that has a much more diverse racial and socioeconomic demographic than prior studies.

Discussion

The findings of this study provide insight to many questions concerning service-learning. Some of the results were expected, while others were a
surprise to the researcher. The research found a correlation between the
concepts of civic attitudes and social capital. As civic attitudes increase, so does
social capital and vice versa. This section discusses some of the conclusions
from the study and offers the researcher's insights into explanation of the results.

The study concludes that students at the racially diverse University of
Southern Mississippi had levels of civic attitudes and social capital that increased
or showed little to no change as a result of participation in service-learning. This
finding concurs with past studies (D'Agostino, 2010; Eyler & Giles, 1997; Lin,
2001; Moely et al., 2002a, 2002b; Myers-Lipton, 1998; Sax & Astin, 1997) at
predominately white institutions. Overall, the findings regarding civic attitudes
follow the tendencies of previous research. There was a significant impact on the
civic attitudes of college students that took service-learning classes compared to
those who enrolled in classes without the service-learning component. The
service-learning group’s scores stayed almost exactly the same, while there was
a decline in the scores of the control (non-service-learning) group, indicating at a
minimum, service-learning was a treatment to assist in the overall attitudinal
decline of college students. This decline will be discussed in relation to national
data on student engagement in this chapter.

The study’s social capital indicators were similar to the civic attitudes
scores but did not reveal the same significance. The service-learning group
increased, while the non-service-learning group decreased but were not
significant. The three variables of race, gender, and classification performed as
predicted. All of the predicted change happened at a minimal level. This means
that females did have a larger score increase than males, non-whites scored better than whites, and underclassmen scores were slightly better than their upperclassmen peers. However, these findings are not statistically significant at the five percent level.

_Civic Attitudes and Service-Learning_

Hypothesis 1, which stated academic service-learning will have an effect on a student’s civic attitudes score as compared to students in non-service-learning courses, was supported, but this was due to the non-service-learning group showing a significant decline in their civic attitudes score. This created the significant variance in civic attitudes found between the groups at the end of the semester. The service-earning group’s civic attitudes scores stayed almost exactly the same while the non-service-learning students decreased. Service-learning gives students many opportunities to interact with people different in age, social class, and race from those they see every day, providing opportunities for, in this case, a maintenance of initial civic attitudes.

Moely et al. (2002a, 2002b) show significance of variance in the pre- and posttest of a similar scale. Those results show no change or a slight increase in the service-learning group while a sharp decrease occurs in the non-service-learning group. For students not engaged in service-learning, evaluations decrease on each scale, indicating that their initial optimism was not maintained over time. Service-learning students, on the other hand, maintained their positive initial view of civic attitudes. Moely et al. (2002a, 2002b) noted that there has been a consistent trend for students in the control groups to experience a decline
in their attitudes and behaviors over the course of the semester. Other researchers (Lipton-Myers, 1998) have observed this same trend. One potential explanation is that there is an overall decrease in overall attitudes over the course of any given semester. Lipton-Meyers (1998) examined a range of attitudes for college students including experiential education experiences and showed an overall decline in all attitudes citing end-of-semester stress and preparation for finals as contributors to that decline. That said, statistically significant differences occurred between the treatment and control groups with this research, which suggests that service-learning experience can serve as an intervention to combat this general decline in attitudes. This follows trends outlined by the National Survey on Student Engagement (NSSE). NSSE data shows a continuous decline in overall engagement with all university initiatives. This data supports the trend of a declining level of civic attitudes with the non-service-learning group and slight to no change in attitudes for service-learning students.

**Social Capital and Service-Learning**

Hypothesis 2, which states that academic service-learning will have a positive effect on a student’s social capital score as compared to students in non-service-learning courses, had similar results, but was not statistically significant. Similarly to the construct on civic attitudes, the service-learning group showed an increase in social capital scores while the non-service-learning group showed a very slight decline. In contrast to the civic attitudes, the analysis of variance on the social capital scale was not significant at the .05 level. The increase by the
service-learning group was slight compared to the decrease by the non-service-learning group that was very slight, almost non-existent. Thus, not much can be concluded from this finding, but it was comparable to previous research at less diverse institutions.

D'Agostino (2010) pioneered the research connecting service-learning and social capital. Her initial study examined the effect of service-learning on social capital, and the results were similar to this study. The service-learning group showed minimal increase in social capital scores while the non-service-learning group showed a decrease in scores. Eggert’s (2002) research examined the development of social capital pre- and post-tertiary (postsecondary) education. The most important finding of his study was that these differences existed prior to higher education and probably were most likely reflecting variables outside of the educational system such as family influences or socioeconomic class. The experience of higher education did have a small effect on the probability of involvement in civic organizations in Eggert’s (2002) research. Eggerton (2002) concluded that the existence of pre-existing social capital is important in determining higher education’s effect on social capital. Social capital acquired before higher education has a strong correlation to further development once in a higher education setting. Much of the social capital research including Lin (2001) and D’Agostino (2010) show the effects of experiential learning on social capital. Relationships formed in the service-learning experience broaden a student’s social network. The research tells us that increased social networks increase the likelihood of a range of factors, including employment opportunities.
Previous research (Coleman, 1988; D'Agostino, 2010; Egerton, 2002) identifies the lack of knowledge about an existing level of social capital in study participants as a strong limitation to this research. It is difficult to fully understand increases or decreases in social capital when the researcher does not know how much social capital is present for participants in both treatment and control groups to begin with. This issue is a potential explanation for the lack of significant increase in social capital scores.

**Gender, Civic Attitudes, and Service-Learning**

Hypothesis 3 had multiple parts exploring the difference in pre- and posttest civic attitudes scores further examined by demographic. It states that moderating values of gender, race, and class standing will have a significant effect on students’ civic attitude scores. H3 predicts that females will score better than males, non-whites better than whites, and underclassmen better than upperclassmen.

Hypothesis 3A examines the demographic of gender, which is consistent with almost all service-learning research and predicts that females will score higher than males. Although the findings were not significant, there are implications. Females consistently score higher than males on both pre- and posttest with constructs of civic attitudes, leadership, and social capital (D’Agostino, 2010; Moely et al., 2002a, 2002b; Morgan, 2002). These finding are very similar to what Ridgell (1994) found when he studied a group of Maryland students for civic attitudes. Females had higher scores on both the pretest and posttest than males with no significant increase due to the service-learning
experience. Furco (1997) found that females did have a significantly (at the .05 level of significance) greater increase than males in academic and ethical measure as part of a three-way interaction between school, gender, and service-learning vs. non-service-learning grouping. While Furco’s findings are more positive than the findings in this study, it is important to note that Furco felt that the interaction between school site and other variables needed greater study before any clear finding could be stated from his results. There seems to be a general predisposition amongst females to view service-learning in a positive light. Females tend to choose to participate at a higher rate than males and may feel more comfortable in most service-learning programs (Eyler & Giles, 1999). The assumptions were confirmed with the control group but not with the service-learning group.

Males in the service-learning group scored higher than the females. A study by Nichols and Monard (2001), which focused on gerontology courses implementing a relevant service-learning component, found that females tended to benefit most when their service involved one-on-one relationship building, while males seemed to benefit most when their service was directly related to future occupational goals.

**Race, Civic Attitudes and Service-Learning**

Hypothesis 3B predicts that non-white students will score higher than white students. The hypothesis was accepted at a significant level with non-whites showing an improvement greater than whites in the service-learning group while the non-whites in the non-service-learning group showed a greater decline
in civic attitudes than whites. Green (2003) extensively explores the relationship between race and service-learning. What has been found through that work is that many service-learning experiences take middle class privileged white students and place them in service sites that are predominately underserved populations largely of different races, primarily African Americans followed by Hispanic groups. This research, along with Moely et al.’s (2002 a, 2002b), was conducted at predominately white institutions and results show that minority students experience greater change. Green (2003) implied that privilege led the white students to feel more sympathetic in service-learning rather than thinking about issues that promote their own development. This research confirms a significant different effect on attitudes between whites and non-whites. The effect of the service-learning component was minimal for white students; however, non-white students showed a small increase from the service-learning group and a sharp decrease in the non-service-learning group. The findings in this hypothesis could be attributed to the fact that this research was done at a university with more racial diversity that the participants in the previous research. For the white students, being exposed to minority peers is much more common at USM. This predisposition to diversity allows white students to work with racial diversity in the service-learning experiences without experiencing as much sympathy (Green, 2003) as students in less diverse institutions. The decline in the scores of minority students supports research stating that minority students have tendencies to be more affected by these experience because they come into higher education with less civic attitudes (Perna, 2002). We see that as the
minority students in the treatment group have a greater increase while the
minority students in the control group show a shaper decline in scores.

*Classification, Civic Attitudes, and Service-Learning*

Hypothesis 3C predicted that service-learning underclassmen will have
higher increases in scores than non-service-learning students. Due to the lack of
participants of underclassmen in the non-service-learning courses, the control
group data was not used. This study showed a slight decrease in scores in both
groups with a slightly larger decrease attributed to upperclassmen. The findings
were non-significant, however, the data trend is consistent with national student
engagement data.

National Survey of Student Engagement (NSSE) data consistently
predicts a decreasing level of engagement among college students, which would
lead to higher scores in underclassmen. Association of American College and
Universities (AACU, 2007) data explain these trends by citing the initial optimism
with which the underclassmen students come into college. That initial optimism
declines. Upperclassmen participate less often in active and collaborative
learning activities, such as contributing to class discussions, making class
presentations, and working with peers on projects during class. In fact,
upperclassmen are much less likely to engage in such activities than
underclassmen (AACU, 2007). As stated earlier, previous research has
confirmed this by identifying a decrease in positive attitude from the beginning to
the end of any given semester.
Gender, Social Capital, and Service-Learning

Hypothesis 4 contains sub-hypotheses that explore the difference in pre- and posttest social capital scores further examined by demographic. It states moderating values of gender, race and class standing will have a significant effect on students’ social capital scores. Hypothesis 4 predicts that females will score better than males, non-whites better than whites, and underclassmen better than upperclassmen. Similarly to the construct on civic attitudes, this study concurred with trends from the previous research but at a level not statistically significant.

Hypothesis 4A predicted that females will score higher than males on social capital measures. While the results were non-significant, females did outperform males in the service-learning group and the non-service-learning group. Egerton (2002) found that gender was positively associated with service-learning, indicating that women tended to report higher levels of social capital than men, all other things being equal. Recent studies indicate college men have less dense social networks than their female counterparts (Li, 2007) and that those peer networks may help to explain the more prevalent unrealized expectations of men (Hanson, 1994). Research shows that men spend less time studying, receive lower grades, have more disciplinary problems, are less likely to persist, and report lower enjoyment of school (Delaney, 2005; Jacob, 2002).

Pre-existing social capital can impact scores. A study by Gandara (1995) shows that college women have higher levels of parental involvement, on average, than men. About 54% of women reported that most or all of their friends plan to attend
college, whereas only 44% of men reported this. All of these factors lead to a social network not nearly as robust as females.

Race, Social Capital, and Service-Learning

Hypothesis 4B stated that non-whites will score higher than whites on social capital measures. The results of this hypothesis were not significant. Scores for non-whites in the service-learning group showed a greater change than the whites. The non-whites in the non-service-learning group showed a much sharper decline in social capital scores than whites. Research by Perna (2000) found that social capital mattered more in the decision to attend college and throughout their experiences for non-white students (specifically African Americans and Hispanics) than it did for white students. Perna (2000) explained that, given their comparatively low levels of achievement and relative lack of human capital resources at home, minority students may be the most affected by experiences that relate to their social capital. In other words, there is perhaps greater potential for social capital to grow in non-white students’ educational experiences. In addition, there is ample evidence that peers play a significant role in the development of college students (e.g., Astin, 1993; Pascarella & Terenzini, 2005). Many times service-learning experiences give students the opportunity for students to interact more with each other for the service-learning project. This helps explain the overall increases in both whites and non-whites in the service-learning group. Informal interactions with racially diverse peers have been associated with, among other positive outcomes, increased social capital
(Astin, 1993). However, the results were not statistically significant for whites and non-whites on social capital so limited conclusions can be drawn.

**Classification, Social Capital, and Service-Learning**

Hypothesis 4C predicted that underclassmen would have a higher increase in scores than upperclassmen. Due to the lack of participants of underclassmen in the non-service-learning courses, the control group data was not used. Social capital scores decreased in the service-learning underclassmen group and showed a small increase with service-learning upperclassmen. While the results of this study were not significant, they do concur with other studies. Research with similar results explained it by examining social capital and its reliance on relationships. The expectation is that students develop more relationships with peer, faculty, staff, and others as their college career progresses, which naturally leads to more positive views on social capital (D’Agostino, 2010; Egerton, 2002).

**Correlation between Civic Attitudes and Social Capital**

Hypothesis 5 predicted a positive correlation between the civic attitudes scale and the social capital scale, meaning that an increase in civic attitudes will result in an increase in social capital when measured together. Although the positive correlation was considered weak by statistical standards, this study give insight to faculty, administrators, and service-learning practitioners about the civic outcomes of service-learning by showing a maintenance or increase in attitudes connected to indicators of social capital when exposed to service-learning pedagogy. This research confirms our findings that social capital and civic
attitudes are directly correlated. This research can be used as a tool for faculty deciding on teaching methods for their courses. With the research showing a decline in student attitudes, using service-learning could at least mitigate or help students maintain a more positive view of the concepts of civic attitudes and social capital during the course of a given semester.

**Summary**

In conclusion, three of the nine hypotheses proved to be statistically significant which provides insight to the implications of this study. Significance was hypothesized at the five percent level. It is important to note that hypotheses 3C and 4C would have both been significant at the 10% percent level, justifying further discussion about the relationship between class standing and both civic attitudes and social capital.

**Implications**

This study provides several implications for the field. Service-learning acted as an intervention that mitigates what seems to be an increasing decline in overall student engagement. With non-white students showing a greater attitudinal decline than white students, service-learning becomes even more important at racially diverse institutions such as USM. Additionally, a consideration of the relationship between this decline in student engagement and how it might affect student retention is important. More research to examine the issues of why students experience such a decline in attitudes is necessary. Although non-significant, hypotheses 3B and 4B showed a sharp contrast in the scores of non-whites compared to whites. This opens the door to further research
looking at service-learning and other university initiatives with race as a dependent variable. This research showed some significant changes in attitudes for non-whites that were not prevalent in previous research, which was done at predominately white institutions. More research is needed to study the impact of diversity on university initiatives such as service-learning. This might include a study that simultaneously uses the same instrument to analyze service-learning at two universities of differing racial demographics. It also provides confirmation that the explanation of these results in Green's (2003) study are plausible as she states that white students may feel more sympathetic towards service-learning. It is important for universities that lack diversity to explore this issue further to find ways to help students explore the development of civic attitudes and social capital through these experiences.

This research provides a detailed look at some of the promises and challenges in educating students for citizenship. In particular, this study shows an overall decline in civic attitudes for students not engaged in the intervention of service-learning. Campus programming structured for civic engagement can influence students' civic attitudes and social capital.

This research offers practitioners a way of considering the many contributions that their campuses can and do make on students' civic attitudes. Findings from this study indicate the importance of engaging in civic education in some form either through curricular or co-curricular experiences while in college. Faculty and student affairs professionals should be aware of the civic influences in their teaching and professional practice. The resulting charge to faculty and
staff is to develop opportunities to discuss current social, political, and economic issues in curricular and co-curricular settings on campus with ample opportunities for service, reflection, and learning.

Civic engagement has been an important policy concern for public administrators. Many civic initiatives have not lived up to expectations: civic attitudes and youth engagement continue to decline. Universities are being called upon to be a main actor in addressing this problem. How to position this goal as higher education’s main responsibility has been addressed through the inclusion of civic education courses in the curriculum. This study explores service-learning, a specific type of civic education, as part of the solution to the problem. Service-learning has been perceived as fitting into the mission of higher education (Jacoby, 1996) and building community.

Future Research

There are many opportunities for research in this area. More samples of students taking a class in the same discipline could be used. For example, one group would be taking a sociology class that incorporates the components of service and reflection, and the other group would be a sociology class without service or reflection. A pretest measuring civic attitude would be administered to both groups at the beginning of the semester and then a posttest measuring civic attitude would be administered again at the end of the semester. Comparisons could then be made between the amount of change experienced in each group to determine whether service and reflection impact a change in civic attitude.
The student characteristics of gender, classification, and race were used in this study. It would be interesting to conduct a similar study examining other demographic variables, such as grade point average. Egerton (2002) examined experiential learning’s effect on social capital with father’s income as a dependent variable. He investigated whether social class effects on social capital were the same between professional and managerial sectors of the middle class before entry to higher education. It was found that the children of professionals were more likely to be active in civic organizations compared with children of manual workers, while the same disparity did not exist for the children of managers. This casts doubt on the most parsimonious explanation of greater middle-class involvement in voluntary organization.

A similar study could be conducted to analyze the impact of type and location of institution using the same survey instruments. Two samples of students could be used from two different types of urban institutions. One sample of service-learning students could be taken from a predominantly white urban institution and another sample of service-learning students from a historically black urban university. The service-learning course curricula would need to be as similar as possible. Each group would be administered the pre- and posttests at the same time in the same fashion. Then, the data could be analyzed to examine how the characteristics of type and location of institution impacts service participation and civic attitude development.

The data from this study were collected from one group of students who were enrolled in a one-semester service-learning course. To understand the
long-term impact of service participation during and after college, a longitudinal study could be conducted to track civic responsibility development. First-year students who enroll in a service-learning course could be tracked throughout their college careers. Perhaps a group of students could be formed who would commit to enroll in one service-learning course each year while they were in college. They would be administered a series of surveys to track their development during their four or five years of undergraduate coursework. Then, upon graduation, they would still be tracked. Surveys would then be administered in two-year intervals for 10 years. Such a study would provide information on the long-term impact and development of civic responsibility in students who participated in service-learning courses during and after their undergraduate years.

Limitations

This study had a variety of limitations. It was limited by the sample size, the participants in the sample, the questions on the instrument, and the ranges chosen for the civic attitude scores. The size of the sample limited the transferability of the findings in this study to larger populations. Since only 136 of the 172 students completed both the pre- and posttests, the usable sample was rather small. For unknown reasons, some students who completed the surveys did not fill in all the items. Therefore, of the 172 participants, there was an even smaller number of respondents who actually answered all the items being analyzed. The participants in the sample limited this study. Participants were not equally distributed in each of the characteristics being analyzed. Since many
students at the university had previous service experience, it is hard to know whether they had high civic attitude levels before they took the service-learning course or if their attitudes were changed due to the course activities. A threat to validity occurred in the sample with students in non-service-learning courses. Courses selected that did not include service-learning were courses that typically had a broad range of students from different classifications. Unfortunately, the courses selected had only upperclassmen; therefore, there was no sample to compare for underclassmen non-service-learning students.

The items on the survey limited this study. Since the researcher could only conduct analyses related to the information elicited from the survey questions, there was no control over the definitions created for each topic in a section. The content and format were predetermined. Therefore, the researcher was unable to create definitions or further questions and was limited to only the items listed on the survey. The ranges chosen for the civic attitude scores limited this study. Since the scores were grouped in the ranges of 1.00 to 1.99, 2.00 to 2.99, 3.00 to 3.99, and 4.00 and above, the data resulted in a curvilinear pattern. The direction of relationship in the data analyses curved due to the manner in which the scores were grouped. The distribution of scores could have been more linear if the scores were classified differently. A classification pattern 1.00 to 1.49, 1.50 to 1.99, 2.00 to 2.49, 2.50 to 2.99, 3.00 to 3.49, 3.50 to 3.99, 4.00 to 4.49, and 4.5 and above might have shown a more linear pattern of civic attitude scores.

This research explores social capital at a micro level. Research could be done to examine the effect of service-learning engagement on the macro level.
Social capital refers to a quality of networks and relationships that enables individuals to cooperate and act collectively (Putnam, 1993). Collective social capital emphasizes social capital as a collectively-produced and owned good, from which the whole community could benefit. It is looked at primarily in terms of its benefit to society rather than the individual. It is seen as a macro-level good, property of a whole community. Research can be done to measure this effect on that macro level. This would be possible by collecting data not only from students, but also from faculty and community partners as well. Further research should explore, qualitatively, how service-learning contributes to civic attitudes and social capital.

Conclusion

This study examines civic attitudes and social capital as an outcome of service-learning. In the service-learning arena, many scholars, such as Gelmon et al. (1998), emphasized the deficiency of research focused on community building and the difficulty of conducting such research because of the potential presence of confounding variables (e.g., pre-existing attitudes). It is, thus, very important that civic attitudes and social capital not only be measured accurately but be aligned with service-learning goals as well.

Service-learning has demonstrated the potential to address the long-discussed decline in citizen participation and its consequences. The implementation of service-learning programs has the capacity to be an intervention to an increasingly unengaged college student, which is necessary to revitalize civic engagement and build community. The findings of this study are
promising for the potential of service-learning as an influence upon student development.

It is critical for universities like The University of Southern Mississippi to continue to research engagement initiatives across the university. A recent annual survey of colleges and universities released by Moody’s investors painted a grim picture for many institutions (Basken, Field, & Kelderman, 2011). A growing number of schools face declining enrollment and less revenue from tuition. They found that nearly half of colleges and universities that responded expected enrollment declines for full-time students, and many of them expect to have to raise tuition dollars. Much of the reasoning behind this is the lack of students’ abilities to get jobs upon graduation (Petrecca, 2010). Universities must have the data necessary to evaluate programs to know what is providing value to students to prepare them to secure a career and become engaged citizens.
APPENDIX A

CASQ QUESTIONNAIRE WITH SOCIAL CAPITAL SCALE

Today we are asking you to complete a questionnaire about the attitudes you hold toward people, college, and certain perspectives on life, society, and yourself. It will take about 10-15 minutes of your time.

THE UNIVERSITY OF SOUTHERN MISSISSIPPI
AUTHORIZATION TO PARTICIPATE IN A RESEARCH PROJECT

Participant's Name _____________________________

Consent is hereby given to participate in the research project titled Developing Civic Attitudes: The Effect of an Academic Service-Learning Component on the Civic Attitudes of College Students. All procedures and/or investigations to be followed and their purpose, including any experimental procedures, were explained by Joshua Duplantis. Information was given about all benefits, risks, inconveniences, or discomforts that might be expected.

The opportunity to ask questions regarding the research and procedures was given. Participation in the project is completely voluntary, and participants may withdraw at any time without penalty, prejudice, or loss of benefits. All personal information is strictly confidential, and no names will be disclosed. Any new information that develops during the project will be provided if that information may affect your willingness to continue participation in the project.

Questions concerning the research, at any time during or after the project, should be directed to Joshua Duplantis at 601-266-6467. This project and this consent form have been reviewed by the Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about your rights as a research participant should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-0001, (601) 266-6820.

_________________________________________  ____________
Participant's Signature                        Date
The person conducting the research will sign below:

*I have personally discussed the research procedure and any possible risks with the above named individual. I am satisfied that he/she understands the information provided.*

______________________________                      ___________
Researcher's Signature                      Date

Please answer the questions below as honestly and frankly as you can. Do not put your name on the form. Your answers to this survey will be confidential and will be seen only by the research team.

You may remove and keep the final page of the survey, which contains the names, phone numbers, and e-mail addresses for those conducting this research. Please contact them if you have any questions about the survey. Thank you for your cooperation.

Course Number and Name: ________________________________

Date of Birth (month and year ex: 11/1982): ________________________________

Your Gender (Please circle)         M      F      Age _____ years

Your Race (Please Circle)
Caucasian    African American    Asian/Pacific Islander
American Indian    Hispanic

Year in School (Please circle): Freshman    Sophomore    Junior    Senior    Graduate

On the pages that follow are a number of opinion statements about public issues, politics, and your beliefs about the world in general. You will agree with some, disagree with some and have no opinion about others. Please use the following scale to indicate your degree of agreement with each item. Do this by writing the appropriate number in the blank to the left of each statement.
Please be open and honest in your answers. It would help us most if you do not skip any questions.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly</td>
<td>Somewhat</td>
<td>Neither Disagree</td>
<td>Somewhat</td>
<td>Strongly</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>Disagree</td>
<td>Nor Agree</td>
<td>Agree</td>
<td>Agree</td>
</tr>
</tbody>
</table>

1. _____ In the future, I plan to participate in a community service organization.
2. _____ When trying to understand the position of others, I try to place myself in their position.
3. _____ In the last twelve months, I have participated in protest, marches, boycotts or other social or political demonstrations.
4. _____ I think that what we are learning in this course is valuable.
5. _____ I think that I will be able to use what I am learning in this class in other classes later on.
6. _____ I can listen to other people’s opinions.
7. _____ I can work cooperatively with a group of people.
8. _____ I am satisfied with the opportunities the university provides for students to become leaders.
9. _____ I feel that I can make a difference in the world.
10. _____ I try to place myself in the place of others in trying to assess their current situation.
11. _____ I plan to do some volunteer work.
12. _____ I plan to become involved in my community.
13. _____ I plan to help others who are in difficulty.
14. _____ In the last twelve months, I have served on a committee of a local club or organization.
15. _____ I tend to solve problems by talking them out.
16. _____ I can easily get along with people.
17. _____ I am a good leader.
18. _____ I find it easy to make friends.
19. _____ I can think logically in solving problems.
20. _____ It is important for me to learn what is being taught in this course.
21. ____ If I was looking for a job, I would use the newspaper classifieds.

22. ____ I dislike most of the work in this course.

23. ____ I plan to become an active member of my community.

24. ____ I think that what I am learning in this course is useful for me to know.

25. ____ If I was looking for a job, I would ask a friend for a job opportunity.

26. ____ I am committed to making a positive difference.

27. ____ It is important for me to really understand the materials covered in this class.

28. ____ I try to find effective ways of solving problems.

29. ____ I am satisfied with the opportunities the university provides for community involvement.

30. ____ I would rather have somebody else take the lead in formulating a solution.

31. ____ I am satisfied with the opportunities the university provides for career preparation.

32. ____ I can think analytically in solving problems.

33. ____ I plan to participate in a community action program.

34. ____ I have the ability to lead a group of people.

35. ____ In the last twelve months, I have attended a public meeting about town or school affairs.

36. ____ In the last twelve months, I have contributed my time as a volunteer (e.g., at a nonprofit agency)

37. ____ My coursework is relevant to everyday life.

38. ____ I can successfully resolve conflicts with others.

39. ____ If I was looking for a job, I would ask a relative for a job opportunity

40. ____ I can communicate well with others.

41. ____ I am a better follower than a leader.
APPENDIX B

MEAN SCORES FOR EACH SURVEY ITEM PRETEST

Number of Responses Per Question for Each Measure on the Instrument

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Mean</th>
<th>S D</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>2</td>
<td>19</td>
<td>40</td>
<td>44</td>
<td>4.2</td>
<td>.801</td>
<td>105</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>59</td>
<td>41</td>
<td>4.33</td>
<td>.599</td>
<td>105</td>
</tr>
<tr>
<td>3</td>
<td>73</td>
<td>16</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>1.61</td>
<td>1.146</td>
<td>105</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>31</td>
<td>67</td>
<td>4.52</td>
<td>.809</td>
<td>105</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>3</td>
<td>13</td>
<td>29</td>
<td>59</td>
<td>4.35</td>
<td>.876</td>
<td>105</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>1</td>
<td>14</td>
<td>36</td>
<td>53</td>
<td>4.32</td>
<td>.814</td>
<td>105</td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>39</td>
<td>64</td>
<td>4.58</td>
<td>.568</td>
<td>105</td>
</tr>
<tr>
<td>8</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>32</td>
<td>70</td>
<td>4.63</td>
<td>.539</td>
<td>105</td>
</tr>
<tr>
<td>9</td>
<td>0</td>
<td>3</td>
<td>16</td>
<td>44</td>
<td>42</td>
<td>4.19</td>
<td>.797</td>
<td>105</td>
</tr>
<tr>
<td>10</td>
<td>0</td>
<td>1</td>
<td>13</td>
<td>40</td>
<td>51</td>
<td>4.34</td>
<td>.731</td>
<td>105</td>
</tr>
<tr>
<td>11</td>
<td>0</td>
<td>1</td>
<td>6</td>
<td>37</td>
<td>61</td>
<td>4.51</td>
<td>.652</td>
<td>105</td>
</tr>
<tr>
<td>12</td>
<td>2</td>
<td>2</td>
<td>11</td>
<td>54</td>
<td>36</td>
<td>4.14</td>
<td>.825</td>
<td>105</td>
</tr>
<tr>
<td>13</td>
<td>27</td>
<td>8</td>
<td>11</td>
<td>12</td>
<td>47</td>
<td>3.41</td>
<td>1.68</td>
<td>105</td>
</tr>
<tr>
<td>14</td>
<td>1</td>
<td>4</td>
<td>16</td>
<td>52</td>
<td>32</td>
<td>4.04</td>
<td>.836</td>
<td>105</td>
</tr>
<tr>
<td>15</td>
<td>0</td>
<td>3</td>
<td>7</td>
<td>38</td>
<td>57</td>
<td>4.41</td>
<td>.743</td>
<td>105</td>
</tr>
<tr>
<td>16</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>34</td>
<td>70</td>
<td>4.65</td>
<td>.496</td>
<td>105</td>
</tr>
<tr>
<td>17</td>
<td>0</td>
<td>1</td>
<td>20</td>
<td>41</td>
<td>43</td>
<td>4.2</td>
<td>.777</td>
<td>105</td>
</tr>
<tr>
<td>18</td>
<td>1</td>
<td>1</td>
<td>15</td>
<td>43</td>
<td>45</td>
<td>4.23</td>
<td>.802</td>
<td>105</td>
</tr>
</tbody>
</table>
Appendix B (continued).

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Mean</th>
<th>S D</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>0</td>
<td>0</td>
<td>11</td>
<td>54</td>
<td>40</td>
<td>4.27</td>
<td>.642</td>
<td>105</td>
</tr>
<tr>
<td>20</td>
<td>0</td>
<td>1</td>
<td>9</td>
<td>26</td>
<td>69</td>
<td>4.55</td>
<td>.693</td>
<td>105</td>
</tr>
<tr>
<td>21</td>
<td>17</td>
<td>15</td>
<td>26</td>
<td>30</td>
<td>17</td>
<td>3.14</td>
<td>1.31</td>
<td>105</td>
</tr>
<tr>
<td>22</td>
<td>55</td>
<td>25</td>
<td>19</td>
<td>3</td>
<td>3</td>
<td>1.80</td>
<td>1.02</td>
<td>105</td>
</tr>
<tr>
<td>23</td>
<td>0</td>
<td>5</td>
<td>15</td>
<td>44</td>
<td>41</td>
<td>4.15</td>
<td>.841</td>
<td>105</td>
</tr>
<tr>
<td>24</td>
<td>1</td>
<td>3</td>
<td>7</td>
<td>31</td>
<td>63</td>
<td>4.44</td>
<td>.820</td>
<td>105</td>
</tr>
<tr>
<td>25</td>
<td>5</td>
<td>5</td>
<td>31</td>
<td>47</td>
<td>16</td>
<td>3.58</td>
<td>1.02</td>
<td>105</td>
</tr>
<tr>
<td>26</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>39</td>
<td>62</td>
<td>4.53</td>
<td>.651</td>
<td>105</td>
</tr>
<tr>
<td>27</td>
<td>1</td>
<td>0</td>
<td>9</td>
<td>28</td>
<td>67</td>
<td>4.52</td>
<td>.735</td>
<td>105</td>
</tr>
<tr>
<td>28</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>53</td>
<td>47</td>
<td>4.39</td>
<td>.61</td>
<td>105</td>
</tr>
<tr>
<td>29</td>
<td>2</td>
<td>0</td>
<td>28</td>
<td>43</td>
<td>32</td>
<td>3.98</td>
<td>.86</td>
<td>105</td>
</tr>
<tr>
<td>30</td>
<td>11</td>
<td>27</td>
<td>49</td>
<td>16</td>
<td>2</td>
<td>2.72</td>
<td>.914</td>
<td>105</td>
</tr>
<tr>
<td>31</td>
<td>0</td>
<td>3</td>
<td>22</td>
<td>45</td>
<td>35</td>
<td>4.06</td>
<td>.811</td>
<td>105</td>
</tr>
<tr>
<td>32</td>
<td>1</td>
<td>0</td>
<td>20</td>
<td>43</td>
<td>40</td>
<td>4.12</td>
<td>.895</td>
<td>105</td>
</tr>
<tr>
<td>33</td>
<td>2</td>
<td>7</td>
<td>20</td>
<td>46</td>
<td>29</td>
<td>3.85</td>
<td>1.02</td>
<td>105</td>
</tr>
<tr>
<td>34</td>
<td>1</td>
<td>0</td>
<td>16</td>
<td>39</td>
<td>49</td>
<td>4.28</td>
<td>.793</td>
<td>105</td>
</tr>
<tr>
<td>35</td>
<td>3</td>
<td>10</td>
<td>34</td>
<td>38</td>
<td>20</td>
<td>3.59</td>
<td>.997</td>
<td>105</td>
</tr>
<tr>
<td>36</td>
<td>44</td>
<td>7</td>
<td>13</td>
<td>19</td>
<td>22</td>
<td>2.69</td>
<td>1.64</td>
<td>105</td>
</tr>
<tr>
<td>37</td>
<td>21</td>
<td>6</td>
<td>8</td>
<td>25</td>
<td>44</td>
<td>3.59</td>
<td>1.59</td>
<td>105</td>
</tr>
</tbody>
</table>
Appendix B (continued).

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Mean</th>
<th>S D</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>38</td>
<td>1</td>
<td>4</td>
<td>18</td>
<td>40</td>
<td>42</td>
<td>4.12</td>
<td>.895</td>
<td>105</td>
</tr>
<tr>
<td>39</td>
<td>0</td>
<td>1</td>
<td>14</td>
<td>52</td>
<td>36</td>
<td>4.11</td>
<td>.902</td>
<td>105</td>
</tr>
<tr>
<td>40</td>
<td>6</td>
<td>4</td>
<td>28</td>
<td>38</td>
<td>28</td>
<td>3.71</td>
<td>1.13</td>
<td>105</td>
</tr>
<tr>
<td>41</td>
<td>1</td>
<td>0</td>
<td>6</td>
<td>47</td>
<td>51</td>
<td>4.40</td>
<td>.687</td>
<td>105</td>
</tr>
<tr>
<td>42</td>
<td>21</td>
<td>21</td>
<td>44</td>
<td>15</td>
<td>4</td>
<td>2.61</td>
<td>.814</td>
<td>105</td>
</tr>
</tbody>
</table>
### APPENDIX C

**MEAN SCORES FOR EACH SURVEY ITEM POSTTEST**

Number of Responses Per Question for Each Measure on the Instrument

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Mean</th>
<th>S D</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>2</td>
<td>10</td>
<td>33</td>
<td>58</td>
<td>4.36</td>
<td>.878</td>
<td>105</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>1</td>
<td>12</td>
<td>40</td>
<td>51</td>
<td>4.32</td>
<td>.790</td>
<td>105</td>
</tr>
<tr>
<td>3</td>
<td>76</td>
<td>8</td>
<td>7</td>
<td>8</td>
<td>6</td>
<td>1.66</td>
<td>1.22</td>
<td>105</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>0</td>
<td>9</td>
<td>38</td>
<td>57</td>
<td>4.42</td>
<td>.731</td>
<td>105</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>2</td>
<td>10</td>
<td>31</td>
<td>60</td>
<td>4.38</td>
<td>.881</td>
<td>105</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
<td>1</td>
<td>19</td>
<td>36</td>
<td>46</td>
<td>4.15</td>
<td>.948</td>
<td>105</td>
</tr>
<tr>
<td>7</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>43</td>
<td>58</td>
<td>4.47</td>
<td>.721</td>
<td>105</td>
</tr>
<tr>
<td>8</td>
<td>2</td>
<td>2</td>
<td>7</td>
<td>33</td>
<td>61</td>
<td>4.41</td>
<td>.852</td>
<td>105</td>
</tr>
<tr>
<td>9</td>
<td>4</td>
<td>6</td>
<td>26</td>
<td>36</td>
<td>33</td>
<td>3.83</td>
<td>1.05</td>
<td>105</td>
</tr>
<tr>
<td>10</td>
<td>1</td>
<td>5</td>
<td>10</td>
<td>39</td>
<td>50</td>
<td>4.25</td>
<td>.888</td>
<td>105</td>
</tr>
<tr>
<td>11</td>
<td>1</td>
<td>1</td>
<td>11</td>
<td>33</td>
<td>59</td>
<td>4.40</td>
<td>.792</td>
<td>105</td>
</tr>
<tr>
<td>12</td>
<td>2</td>
<td>0</td>
<td>11</td>
<td>44</td>
<td>48</td>
<td>4.29</td>
<td>.807</td>
<td>105</td>
</tr>
<tr>
<td>13</td>
<td>31</td>
<td>8</td>
<td>6</td>
<td>14</td>
<td>46</td>
<td>3.34</td>
<td>.955</td>
<td>105</td>
</tr>
<tr>
<td>14</td>
<td>3</td>
<td>5</td>
<td>15</td>
<td>49</td>
<td>33</td>
<td>3.99</td>
<td>.955</td>
<td>105</td>
</tr>
<tr>
<td>15</td>
<td>2</td>
<td>3</td>
<td>9</td>
<td>34</td>
<td>57</td>
<td>4.33</td>
<td>.926</td>
<td>105</td>
</tr>
<tr>
<td>16</td>
<td>2</td>
<td>1</td>
<td>8</td>
<td>34</td>
<td>60</td>
<td>4.41</td>
<td>.829</td>
<td>105</td>
</tr>
<tr>
<td>17</td>
<td>1</td>
<td>2</td>
<td>17</td>
<td>45</td>
<td>40</td>
<td>4.15</td>
<td>.829</td>
<td>105</td>
</tr>
<tr>
<td>18</td>
<td>1</td>
<td>5</td>
<td>10</td>
<td>34</td>
<td>55</td>
<td>4.30</td>
<td>.900</td>
<td>105</td>
</tr>
</tbody>
</table>
Appendix C (continued).

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Mean</th>
<th>S D</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>48</td>
<td>48</td>
<td>4.32</td>
<td>.778</td>
<td>105</td>
</tr>
<tr>
<td>20</td>
<td>1</td>
<td>1</td>
<td>10</td>
<td>42</td>
<td>51</td>
<td>4.34</td>
<td>.769</td>
<td>105</td>
</tr>
<tr>
<td>21</td>
<td>15</td>
<td>15</td>
<td>24</td>
<td>29</td>
<td>22</td>
<td>3.26</td>
<td>1.33</td>
<td>105</td>
</tr>
<tr>
<td>22</td>
<td>48</td>
<td>34</td>
<td>14</td>
<td>6</td>
<td>3</td>
<td>1.87</td>
<td>1.03</td>
<td>105</td>
</tr>
<tr>
<td>23</td>
<td>1</td>
<td>2</td>
<td>14</td>
<td>38</td>
<td>50</td>
<td>4.27</td>
<td>.837</td>
<td>105</td>
</tr>
<tr>
<td>24</td>
<td>1</td>
<td>2</td>
<td>12</td>
<td>42</td>
<td>48</td>
<td>4.27</td>
<td>.814</td>
<td>105</td>
</tr>
<tr>
<td>25</td>
<td>3</td>
<td>5</td>
<td>34</td>
<td>33</td>
<td>30</td>
<td>3.78</td>
<td>1.00</td>
<td>105</td>
</tr>
<tr>
<td>26</td>
<td>1</td>
<td>0</td>
<td>7</td>
<td>36</td>
<td>61</td>
<td>4.48</td>
<td>.708</td>
<td>105</td>
</tr>
<tr>
<td>27</td>
<td>1</td>
<td>3</td>
<td>13</td>
<td>35</td>
<td>53</td>
<td>4.29</td>
<td>.865</td>
<td>105</td>
</tr>
<tr>
<td>28</td>
<td>1</td>
<td>0</td>
<td>10</td>
<td>39</td>
<td>55</td>
<td>4.40</td>
<td>.741</td>
<td>105</td>
</tr>
<tr>
<td>29</td>
<td>2</td>
<td>3</td>
<td>33</td>
<td>36</td>
<td>31</td>
<td>3.86</td>
<td>.941</td>
<td>105</td>
</tr>
<tr>
<td>30</td>
<td>16</td>
<td>23</td>
<td>37</td>
<td>21</td>
<td>8</td>
<td>2.82</td>
<td>1.14</td>
<td>105</td>
</tr>
<tr>
<td>31</td>
<td>4</td>
<td>7</td>
<td>22</td>
<td>42</td>
<td>30</td>
<td>3.82</td>
<td>1.04</td>
<td>105</td>
</tr>
<tr>
<td>32</td>
<td>1</td>
<td>2</td>
<td>13</td>
<td>39</td>
<td>50</td>
<td>4.28</td>
<td>.828</td>
<td>105</td>
</tr>
<tr>
<td>33</td>
<td>2</td>
<td>4</td>
<td>25</td>
<td>34</td>
<td>40</td>
<td>4.00</td>
<td>.975</td>
<td>105</td>
</tr>
<tr>
<td>34</td>
<td>2</td>
<td>2</td>
<td>14</td>
<td>36</td>
<td>51</td>
<td>4.25</td>
<td>.899</td>
<td>105</td>
</tr>
<tr>
<td>35</td>
<td>2</td>
<td>14</td>
<td>31</td>
<td>34</td>
<td>24</td>
<td>3.60</td>
<td>1.04</td>
<td>105</td>
</tr>
<tr>
<td>36</td>
<td>48</td>
<td>16</td>
<td>9</td>
<td>5</td>
<td>27</td>
<td>2.49</td>
<td>1.68</td>
<td>105</td>
</tr>
<tr>
<td>37</td>
<td>10</td>
<td>4</td>
<td>6</td>
<td>11</td>
<td>74</td>
<td>4.28</td>
<td>1.30</td>
<td>105</td>
</tr>
<tr>
<td>38</td>
<td>4</td>
<td>2</td>
<td>28</td>
<td>33</td>
<td>38</td>
<td>3.94</td>
<td>1.02</td>
<td>105</td>
</tr>
<tr>
<td>Survey Question</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>Mean</td>
<td>S D</td>
<td>N</td>
</tr>
<tr>
<td>-----------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>------</td>
<td>-----</td>
<td>----</td>
</tr>
<tr>
<td>39</td>
<td>2</td>
<td>0</td>
<td>11</td>
<td>48</td>
<td>44</td>
<td>4.25</td>
<td>.769</td>
<td>105</td>
</tr>
<tr>
<td>40</td>
<td>5</td>
<td>4</td>
<td>31</td>
<td>32</td>
<td>33</td>
<td>3.80</td>
<td>1.07</td>
<td>105</td>
</tr>
<tr>
<td>41</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>43</td>
<td>54</td>
<td>4.43</td>
<td>.634</td>
<td>105</td>
</tr>
<tr>
<td>42</td>
<td>17</td>
<td>20</td>
<td>53</td>
<td>11</td>
<td>4</td>
<td>2.66</td>
<td>.996</td>
<td>105</td>
</tr>
</tbody>
</table>
NOTICE OF COMMITTEE ACTION
The project has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.

Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the “Adverse Effect Report Form”.

If approved, the maximum period of approval is limited to twelve months.

Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 12062103
PROJECT TITLE: Developing Social Capital: The Effect of an Academic Service-Learning Component on the Civic Attitudes of College Students
PROJECT TYPE: Dissertation
RESEARCHER/S: Joshua Duplantis
COLLEGE/DIVISION: College of Science & Technology
DEPARTMENT: Economic and Workforce Development
FUNDING AGENCY: N/A
IRB COMMITTEE ACTION: Expedited Review Approval
PERIOD OF PROJECT APPROVAL: 06/26/2012 to 06/25/2013

Lawrence A. Hosman, Ph.D.
Institutional Review Board Chair
REFERENCES


Jacoby, B. (2010). How to create a successful service-learning project or program. *Student Affairs Leader, 38*(22), 1-4.


doi:10.1111/1467-9248.00435


doi:10.1080/014428700113991


doi:10.1007/s10755-009-9110-7


