Attitudes toward academic service learning semesters: A comparison of business students with non-business students

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Abstract: This study examines the attitudes of university students toward academic service semesters and their interest in participating in them. The findings suggest that students' attitudes toward an urban-based academic service learning program may be multidimensional. Four of the six factors identified in the study as being associated with students' attitudes toward the academic service learning program were found to be related to their level of interest in participating in the program. Interestingly, no evidence was observed which would suggest that business students possess lower attitudes toward academic service learning semesters than non-business majors or that they would be less interested in participating in them.

Keywords: business students, experiential education, societal mission.

I. Introduction.

The missions of most colleges and universities include a significant societal component – a component which has been ignored by many institutions until recently (Boyer, 1996; Bringle, Games and Malloy, 1999; Reardon, 1998). In response to a call by Boyer (1994) for college and universities to return to their historic commitment to serve their communities and to serve humanity as a whole, increasing attention is being placed by many schools on their local and regional communities and on the global community. The increasing attention being placed on the societal component of institutional missions is prompting a number of societal-oriented initiatives, including a call to increase the societal involvement of students. A pedagogy consistent with the societal missions of colleges and universities is service learning (Easterling and Rudell, 1997). As a consequence, service learning as a pedagogy has been receiving increasing interest at many colleges and universities (Burke, 2007). In addition to increasing their societal involvement, the benefits of service learning to colleges and universities are several, including higher student retention (Bringle, Hatcher and Muthiah, 2010) and higher donations by students after graduation (Astin and Sax, 1998).

Although service learning is key to increasing a college or university's societal involvement, service learning is primarily an educational undertaking (Gelmon et al., 2001). As such, its role in furthering students' education is of primary importance. Research appears to indicate that service learning has the potential to significantly add to students' education (Deeley, 2010). Service learning, however, is not a single homogeneous activity. Instead, service learning is employed in a great variety of differing fashions depending on the academic objectives of the experience (Eyler and Gikes, 1999; Hefferman, 2001). Many of the service learning experiences consist of either entire courses centered around service learning or courses which include a service learning component along with a more conventional component (Hefferman, 2001). An

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additional type of service learning experience is one involving a semester-long immersion experience (Bargo, 2005). In these immersion experiences, students are involved in service learning full-time for an entire semester and receive 12-15 hours of course credit.

Academic service learning semesters involve students living in a disadvantaged environment for a semester, either internationally or in a domestic urban environment. One of the goals of such an experience is for students to build a holistic appreciation of an alternative environment — an appreciation which often is impossible when students only engage with individuals and/or organizations in a service area a few times a week (which is typical in other types of service learning experiences). Academic service learning semesters are presently being offered by a number of colleges and universities.

Given the obvious dominant service perspective of academic service learning semesters, it is logical to expect that they may be more appealing to students who are majoring in nonbusiness areas than to students majoring in business. Business students are commonly viewed to be more oriented toward preparing for income-generating employment and as being less disposed to service-oriented activities (Wilson 2008). McNeel (1994) and Bécares and Turner (2004) support this relationship, observing that business students are less empathetic to the needs of others than students pursuing majors in other areas. Similarly, Myyry and Helkama (2001) note that business students are more work and achievement-oriented and less empathetic than are students pursuing other majors. The less empathic nature of business students can be expected to negatively affect their tendency to help others (often a major component of service learning activities). Eisenberg and Fabes (1990), for instance, suggest a theoretical link between empathy and helping behavior, a contention which has been supported by empirical research (e.g., Barr and Higgins-D'Alessandro, 2007; Bekkers, 2005). Indeed, May and Alligood (2000) suggest that empathy is necessary for the manifestation of helping behavior. Similarly, Davis et al. (1999) suggest that highly empathetic individuals are more likely to enter or pursue situations which may produce feelings of sympathy and compassion, such as what could be encountered in service learning. Consequently, business students can be expected to be less motivated to pursue experiences which may appear to them as involving helping others while not directly aiding them in achieving their short-term personal employment objectives. If this is true, business students can be expected to hold lower opinions of service learning semesters and be less likely to desire to participate in one.

Although the value of service learning in business education is well known (e.g., Godfrey, Illes and Berry, 2005; Metcalf, 2010), the adoption of service learning in business education has lagged that of other areas (Govekar and Rishi, 2007). Indeed, the incorporation of service learning into business education is a relatively recent phenomenon (Gujarathi and McQuade, 2002). Manring (2004) notes that service learning has gained attention in business education only during the previous seven years (at the time of their article) and Zlotkowski (1996) noted minimal use of service learning as a pedagogy in business courses in 1996. Service learning in business, therefore, does not have the long history which it does in other disciplines. Hence, the lack of a history of business students participating in service learning may lead business students to be less familiar with possible service learning opportunities.

The purpose of this paper is to begin to examine this issue involving an academic service learning semester set in a disadvantaged urban setting. This study will examine whether students pursuing business degrees hold less positive attitudes toward academic serving learning semesters and whether they possess less interest in pursuing an academic service learning semester experience than students who are pursing non-business majors. First, service learning

will be discussed. Second, service learning in business education is explored. Third, academic service learning semesters are defined. Finally, hypotheses are developed, tested, and results are reported and discussed.

II. Service learning.

The traditional objective of education has been the successful conveyance of information to students. Within this perspective, students are viewed to be open vessels to be filled with knowledge and information (Freire, 1998). Education is viewed as a transfer of information from wise, experienced individuals to students waiting to be filled with wisdom.

The success of this approach in educating students has been questioned (e.g., Bringle and Hatcher, 2003; Munter, 2002). Although the traditional approach to education seems logical, several view the traditional approach to education as leading to serious shortcomings (e.g., Guyton, 2000; Kohn, 1999). Specifically, the traditional approach has been accused of turning students into passive underachievers – a problem which Bransford and Nye (1989) call an "inert knowledge problem." Consequently, students are thought to gain a significant amount of knowledge via a traditional approach to education, but are thought to be unable to apply the knowledge to real-life problems and situations or to make the transition from memory to action. Faced with this reality, many in higher education have called for changes in classroom pedagogy (e.g., Jacoby, 1996).

One alternative pedagogy that has been suggested as a means to combat the problems perceived in traditional pedagogy is service learning. One of the keys to service learning as an alternate pedagogy is its ability to get students involved in their education (Munter, 2002). Instead of being viewed merely as vessels to fill with knowledge, service learning forces students to become involved in the application of this knowledge. Service learning is not a new form of pedagogy – service learning has a long history. As discussed earlier, growth in the use of service learning, however, is a relatively recent phenomenon. In recognition of the advantages of service learning as a pedagogy, its use has grown at an astounding rate during the past two decades (Bringle, Phillips and Hudson, 2004).

Although service learning has been widely discussed, confusion exists over its substance. Service learning is very different than just forced volunteerism or merely an effort of getting students involved in projects outside of the classroom. Instead, service learning is an "educational methodology which combines community service with explicit academic learning objectives, preparation for community service, and deliberate reflection. Students participating in service-learning provide direct and indirect community service as part of their academic coursework, learn about and reflect upon the community context in which service is provided, and develop an understanding of the connection between the service and their academic work" (Gelmon et al., 2001, p. v). More concisely, service learning is "a pedagogical process whereby students participate in course-relevant community service to enhance their learning experience" (Petkus, 2000, p. 64). Indeed, service learning is a part of a credit-bearing course (Bringle and Hatcher, 1996; Johnson, 2000). The focus of service learning, therefore, is on student education. Although service learning directly connects traditional curriculum with concern for one's community (Deeley, 2010; Kaye, 2004) and builds students' skills to engage their community, the primary goal of service learning is to improve students' learning processes.

Some trace the origins of service learning to the writings of John Dewey (1941) who advocated experiential and citizenship-based education (Burke, 2007; Fertman, 1994). Dewey

identified a six-step process of inquiry: (1) encountering a problem, (2) identifying a question to be resolved, (3) gathering information, (4) developing hypotheses, (5) testing hypotheses, and (6) drawing conclusions (1938). Building upon Dewey, Kolb (1984) reconceptualized the experiential learning process as a four-stage experiential learning cycle (Kolb's Experiential Learning model). Kolb expressed that true learners "must be able to involve themselves fully, openly and without bias in new experiences (concrete experience); they must be able to observe and reflect on these experiences from many perspectives (reflective observation); they must be able to create concepts that integrate their observations into logically sound theories (abstract conceptualization); and they must be able to use these theories to make decisions and solve problems (active experimentation)" (1981, p.236). Kolb's model has provided the theoretical basis for the use of service learning as an integral pedagogy (Cone and Harris, 2003).

As mentioned earlier, service learning experiences directly benefit both the community and students involved. In their research examining this issue, Eyler et al. (2001) observed favorable or neutral outcomes for students, community, or college or university for 132 of 135 studies on service learning reviewed. The primary focus of service learning, however, is to strengthen students' education (Ver Beck, 2002). Although underprivileged individuals, society, etc. also benefit from service learning activities, they are not the primary target of service learning experiences.

The benefits that students receive from engaging in service learning activities have been explored by several. Kupiec (1993), for instance, suggests that service learning produces three primary benefits: more effective learning, more effective service, and more effective integration of university and community. Zlotkowski (1996) believe that service learning can help students build technical skills, but it can also help students build soft skills such as effective teamwork, cross-functional flexibility, interpersonal and communication skills, and multicultural sensitivity. Bhaget and Ahmed (2000) suggest that service learning can produce such benefits since it allows students to transcend the limitations imposed by course structures. By involvement in the community, students are able to gain a deeper understanding of course material and to develop a capability to see and comprehend the linkages and commonalities between various areas. Rama, Ravenscroft, Wolcott and Zlotkowski (2000) suggest that service learning experiences motivate students to work harder and become more involved with their own education. Furthermore, they suggest that service learning provides students with context for their classroom learning and provides opportunities for students to encounter and actively work with individuals with diverse backgrounds. Finally, Bernacki and Jaeger (2008) observe that service learning experiences lead to more compassionate students who possess a greater ability to solve problems.

Thompson (2000) examined the effects of participating in a service learning experience on the opinions of students relative to a similar class without a service learning component. She observed that students taking a class with a service-learning component were more likely to express that respecting diversity, time management and responsibility, career skills, critical thinking skills, and democratic ideals and citizenship are important skills learned from the course than were students attending the class without a service-learning component. Moreover, many of the students taking the class with a service-learning component believed they were more motivated in the class if they were in a traditional class. On the other hand, however, Thompson (2000) also observed that students attending class without the service-learning component were more likely to express that reading and writing skills and factual and "academic" knowledge as important skills gained from the course than were students attending class with a service-learning component.

Eyler and Giles (1999) also examined the benefits provided by service learning and observed increased personal development, social responsibility, interpersonal skills, tolerance, learning, and application of learning. Similarly, McCarthy and Tucker (1999) observed that service learning appears to build students' problem-solving and leadership skills and fosters social responsibility. (Simons and Clearly (2006), however, did not observe a difference in problem-solving skills). Bhagat and Ahmed (2000) report a study comparing sections of a humanities course, one with a service learning component and one without. They report that superior content learning in the course with a service learning component along with enhancement of their values and community orientation. Andrews (2007) observed similar effects in business courses. Morton and Troppe (1996) also report that long-term retention of content information is improved with service learning. Cohen and Kinsey (1994) observed similar results. Astin and Sax (1998) report that service learning is linked to increased grade point average, retention, degree completion, civic responsibility, and life skills. Boss (1994) observed only a slight advantage in content learning for students engaged in service learning, but a substantial improvement in moral reasoning. Most of the empirical studies examining the value of service learning has shown that service learning appears to positively affect learning (Marcus, Howard and King, 1993) and complexity of thinking (Batchelder and Root, 1994). The results of student evaluations and alumni surveys indicate that students desire opportunities to bridge the gap between theory and practice such as are provided by service learning activities (Vander Veen, 2002).

In summary, Kaye believes that, as a result of being involved in service learning, students will "apply academic, social and personal skills to improve the community; make decisions that have real, not hypothetical results; grow as individuals, gain respect for peers, and increase civic participation; experience success no matter what their ability level; gain a deeper understanding of themselves, their community, and society; and develop as leaders who take initiative, solve problems, work as a team, and demonstrate their abilities while and through helping others" (Kaye, 2004, p. 7).

A. Service learning in Business education.

Although the acceptance of service learning in business education has lagged that of many other disciplines (Manring, 2004), the need for service learning arguably exists (Lester et al., 2005). Indeed, similar criticism has been levied against the nature of business education by business practitioners and by AACSB, the primary accrediting body of collegiate schools of business. Candy and Crebert (1991), for instance, state that although recent graduates are full of information and theories, they are generally not prepared to solve problems and make decisions. Similarly, Singh and Eischen (2007) state that there are limits to what can be achieved via traditional pedagogy. Academicians themselves have noted a growing "reality gap" – a growing differential between the needs of society and the internal priorities of institutions of higher education (Zlotkowski, 1996). Consequently, AACSB advocates increased use of experimental education, such as service learning (Ames, 2006).

Service learning appears to directly address several of these apparent shortcomings in business school education (Govekar and Rishi, 2007). Service learning also is able to address what is viewed to be growing public pressure to broaden the education of business students to include opportunities to apply business techniques and processes to social problems and nonprofit institutions (Easterling and Rudell, 1997; Mottner, 2010). Given the apparent benefits

of service learning in a business context, however, the integration of service learning into business courses has been slow (Zlotkowski, 1998). Where service learning has been implemented, however, successful results have been reported – in each instance, student learning increased as a result of the experience. Applications have been reported in accounting (e.g., Gujarathi and McQuade, 2002; McCoskey and Warren, 2003; Strupeck and Whitten, 2004), finance (e.g., Palmer, Goetz, and Chatterjee, 2009), statistics (e.g., Root and Thorme, 2001), management (Flannery and Pragman, 2010; Kenworthy and Fornaciari, 2010), strategic management (e.g., Angelidis, Tomic and Ibrahim, 2004), project management (e.g., Brown, 2000; Larson and Drexler, 2010), organizational communication (e.g., Stevens, 2001), public relations (e.g., Mitchell, 2009; Patterson, 2004), entrepreneurship (e.g., McCrea, 2010), and marketing (e.g., Ekrich and Voorhees, 2002; Knowles, 2000; Metcalf, 2010; Petkus, 2000).

Although service learning seems to have value in business education, business classes may not be the only place where business students can be exposed to service learning opportunities. In addition to opportunities in general education courses and electives, academic service learning semesters may provide students with additional opportunities to hone their skills and apply their knowledge.

B. Academic service learning semesters.

Academic service learning semesters involve a semester-long learning immersion in a disadvantaged area. During the semester, students live with a host family so they can live with the context of the economically poor and marginalized peoples and engage in local civic and social activities. Academic service learning semesters are not directly tied into a specific course or discipline area. Instead, they attempt to foster a holistic approach for engaging a community and working with the community to begin address some of the issues that they face.

III. The study.

The objective of this exploratory study is to examine students' attitudes toward participating in an urban-based academic service learning program offered by a university located in Midwestern U.S. Specifically, the attitudes of students majoring in business are compared to the attitudes of students not majoring in business. Based on the earlier discussion, students majoring in business are hypothesized to 1) express lower attitudes toward an urban-based academic service program, 2) possess a lower interest in participating in the experience, and 3) be less familiar with the program than students majoring in other areas.

- **H1:** Students majoring in business possess lower attitudes toward an urban-based service learning program than students pursuing other majors.
- **H2:** Students majoring in business are less likely to express interest in participating in the endeavor than students pursuing other majors.
- **H3:** Students majoring in business are less familiar with the opportunity of an urban-based service learning program than students pursuing other majors.

A convenience sample was gathered from students attending a liberal arts university located in the Midwest section of the U.S. Consistent with its liberal arts tradition, the university places significant attention on community engagement and concern for others, particularly the

poor. Students majoring in business and those not majoring in business were solicited for involvement in this study. The resulting sample was comprised of 88 students with 54 students pursuing a business major and 34 pursuing majors in other areas. Thirty-eight of the respondents were male and 50 were female. Nineteen of the respondents were freshman, 21 were sophomores, 24 were juniors, and 24 were seniors.

The instruments used were designed for this study. To measure students' attitudes toward the service learning program, 27 items were developed based on preliminary qualitative research based on a focus group comprised of fifteen students at the university with the goal of identifying items which may affect students' attitudes toward an urban-based academic service learning program. The resulting items are displayed in Appendix 1.

Items were also developed to measure students' desire to participate in the academic service learning program. They were also developed based on preliminary qualitative research based on the focus group mentioned above. The items included the following: 1) I find the academic service learning program interesting, 2) I would be motivated to participate in the academic service learning program at (the university), and 3) The (the location of the academic service learning program) component of the academic service learning program is appealing.

Finally, familiarity with the urban service learning program was measured using a single item: I am familiar with the academic service learning program at (the university).

Students responded to each of the items using a five-point Likert scale. Since the intervals between the possible response categories cannot be considered equal (Jamieson 2004), responses from Likert scales represent ordinal data, and should theoretically not be treated as interval data or assessed with any statistical methods that are meant for interval data (Lubke and Muthen, 2004). Cascio and Aguinis (2005) note, however, that measures used for behavioral research often approximate interval measurement close enough to enable the researcher to run statistics that assume an equal interval scale.

IV. Results.

The items to measure students' attitudes toward an urban-based academic service learning program were factor analyzed using principal components analysis. Since a single factor was not expected, varimax rotation was used. Although eight factors with an eigenvalue greater than one were identified, examination of the scree plot and the factor scores suggest that a six-factor solution may be most appropriate (see Figure 1). The six factors appear to represent 1) level of comfort with the academic service program, 2) monetary concerns (difficulty of maintaining employment while participating in academic service learning), 3) distance from friends concerns, 4) social network disruption concerns, 5) graduation concerns (not being able to graduate in four years), and 6) cost savings (lower cost of living during the service learning experience) (see Table 1). The reliability of each of the factors is acceptable (although the reliability of the final factor is only marginally so). The Cronbach's alpha for each of the factors is as follows; level of comfort – 0.733, monetary concerns – 0.932, distance from friends concerns – 0.817, social network disruption concerns – 0.745, graduation concerns – 0.871, and cost savings – 0.671.

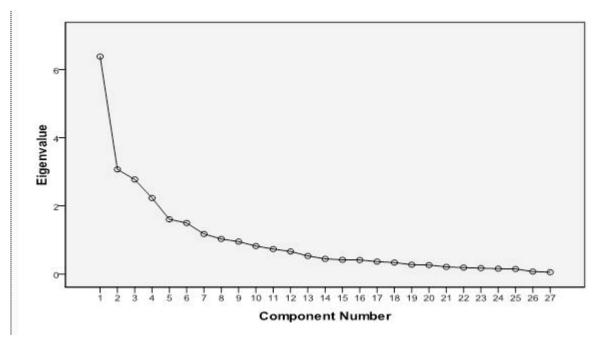


Figure 1. Scree test.

Table 1. Factor analysis results.

	Extraction	Sums of	Loadings	Rotation	Sums of	Loadings
		Squares			Squares	
Factor	Total	% of	Cum. %	Total	% of	Cum. %
		Variance			Variance	
1	6.383	23.641	23.641	4.552	16.859	16.859
2	3.072	11.377	35.018	2.727	10.100	26.959
3	2.776	10.282	45.300	2.605	9.648	36.607
4	2.232	8.267	53.567	2.522	9.339	45.946
5	1.605	5.944	59.511	2.456	9.097	55.043
6	1.498	5.549	65.060	1.983	7.346	65.060

The reliability of the items to measure students' level of interest in participating in the urban-based academic service learning program is 0.803, indicating satisfactory reliability.

Correlations between the factors obtained from factor analyzing the items measuring students' attitudes toward the urban-based service learning program and students' level of interest in participating and their familiarity with the program are displayed in Table 2. Significant (at the 0.05 level) relationships were observed for four of the six factors. Students who expressed that they are comfortable with the program, are less concerned with spending time away from friends, less concerned about losing contact with their social network, and are not expecting a cost savings from participating in the service learning program possess a higher level of interest in participating in the program. No relationship, however, was observed between either students' monetary concerns or their graduation concerns and level of interest in participating in the program. As would be expected, a significant relationship was observed between familiarity with the program and interest in participating.

Table 2. Correlations between students' attitudes toward an urban-based service learning program and students' level of interest in participating and their level of familiarity with the program.

Attitude Factor	Correlation	Significance
Level of Comfort	0.743	0.000
Monetary Concerns	0.004	0.972
Distance from Friends Concerns	0.442	0.000
Social Network Disruption Concerns	-0.240	0.024
Graduation Concerns	0.030	0.781
Cost Concerns	-0.335	0.001
Familiarity	0.449	0.000

T-tests were conducted to examine whether business students possess different attitudes than non-business majors of participating in the urban-based service learning program, levels of interest in the program, and level of familiarity of the program. The results are displayed in Table 3. No significant (at the 0.05 level) differences were observed between business majors and non-business majors for any of the attitude factors. Similarly, no significant difference was observed between business majors and non-business majors for their level of interest in participating in the program. No support, therefore, was observed for either Hypothesis 1 or Hypothesis 2. A significant difference, however, was noted for familiarity with the program, where non-business majors were observed to be more familiar with the program than business majors. Support for Hypothesis 3, therefore was observed.

V. Discussion.

Although exploratory in nature, the findings raise a number of interesting questions. First, the findings suggest that students' attitudes toward an urban-based academic service learning program may be multidimensional. In addition to the level of comfort students have with the academic service program, several other factors involving monetary and relationship issues appear to affect students' attitudes toward the academic service learning program. If a university wishes to affect students' attitudes toward such a program, therefore, the findings suggest that attention should be placed on several factors, but with the primary attention being placed on the students' level of comfort with the program. Communication with past students with successful experiences in the program may be beneficial, where the comfort level of prospective participants can be increased.

Four of the six factors associated with students' attitudes toward the academic service learning program were found to be related to students' level of interest in participating in the program. If a university wishes to affect students' interest in the program, it would appear that the university should place attention on these issues. The strongest relationship involves the level of comfort factor. Hence, attention should first be placed on increasing students comfort level with the program.

Table 3. A comparison of attitudes toward participating in a urban-based service learning program between business students and non-business students.

Attitude Factor	Mean Sum of Responses Business/Non-Business	t-value	Significance
Level of Comfort	26.96 27.5	-0.332	0.741
Monetary Concerns	9.96 10.62	-0.788	0.433
Distance from Friends Concerns	9.96 9.97	-0.011	0.991
Social Network Disruption Concerns	19.19 18.74	0.594	0.554
Graduation Concerns	12.54 11.88	0.934	0.353
Cost Concerns	11.65 11.79	-0.248	0.804
Level of Interest	9.28 10.00	-1.199	0.234
Familiarity	2.70 3.29	-2.158	0.034

It appears that any thoughts that students majoring in business may have lower attitudes toward the service learning program and may have less interest in participating in the program appear to be unfounded. No evidence was observed which would suggest the existence of such a difference. The only difference observed was that business students were observed to have a lower degree of familiarity with the program than students majoring in non-business areas. Given that familiarity with the program is related to the level of comfort students have with the program (r = 0.375, significance = 0.000) and with interest in participating in the program (r = 0.449, significance = 0.000), the possibility exists that increased attempts to make business students aware of the program may be able improve business students' attitudes toward of the program and their likelihood of participating.

A. Limitations.

Several limitations exist which may affect the generalizability of the findings. First, the study was conducted at a single university (a liberal arts university which places significant attention on community involvement and concerns for others, particularly the poor). Consequently, students pursuing business majors at this university may be more predisposed toward participating in an urban service program than students pursuing business majors at other types

of colleges and universities. Consequently, the generalizability of the findings to students attending other types of colleges and universities is unknown. Second, the study was based a relatively small sample. Third, the instruments used in the study have not yet been subjected to validity testing. Finally, no mechanism existed to gauge subsequent actual involvement in the service learning program by study participants.

B. Conclusions.

To address needs in the community, to improve students' educational experiences, and/or to respond to desires of stakeholders, many colleges are attempting to increase student involvement in urban-based semester-long service learning programs. If corroborated by further research, this study suggests that many of the issues which are important to students' attitudes toward such programs and to their interest in participating in the programs may be actionable by a university seeking to increase involvement. Furthermore, no differences were observed in the attitudes toward the program or interest in participating between students majoring in business and those not majoring in business. This suggests that students majoring in business should not be ignored when urban-based academic service learning programs are considered.

C. Directions for future research.

The research suggests several directions for future research. First, the present study was conducted at a university with a particular mission. Research examining attitudes in other settings is warranted. Furthermore, it may be advantageous to examine students attitudes by class to see if differences may exist at the freshman level reflecting differences in students' backgrounds and to see if changes occur as a result of exposure in the collegiate setting.

Although the study identifies students' attitudes, the bases and, consequently, the ease by which students' attitudes can be changed are unknown. Increased knowledge of the bases of the attitudes toward the service learning opportunity may provide increased understanding into how students' attitudes may be changed.

Although attitudes have been shown to affect behavior (Fishbein and Ajzen 1975), the relationship between students' attitudes toward service and their propensity to actually engage in the activity has not been previously examined. Most of the research conducted on service learning involves service learning as a required component of a course. Little research attention has been placed on the choice process of students faced with a optional service learning activity.

Finally, research activity should be focused on examining the validity of the instrument developed in this study.

Appendix 1. Scale items.

- 1. I would be comfortable living away from my friends at (the university) for a semester.
- 2. It is important that I graduate from (the university) in four years.
- 3. I must have a paying job on or off campus while in school.
- 4. Spending most of my time off campus away from my friends for a semester would be beneficial.
- 5. Getting my degree in four years is important.
- 6. If I lived off campus away from my (the university) friends for a semester, I would be unhappy.
- 7. Having a paying job while I attend school is important.
- 8. If it takes me longer than four years to get my degree, I will be disappointed.
- 9. Not having a paying job for a semester would be a financial problem.
- 10. I would feel safe living in (the location of the academic service learning program) in a university-sponsored apartment for a semester.
- 11. Being on campus everyday improves my academic performance.
- 12. I must have safe living conditions.
- 13. Living and studying in a university-sponsored apartment in (the location of the academic service learning program) would not be a problem.
- 14. My grades would suffer if I lived in a university-sponsored apartment in (the location of the academic service learning program) for a semester.
- 15. It would be unsafe to live in a university-sponsored apartment for a semester in (the location of the academic service learning program).
- 16. Social interaction on campus is important.
- 17. Living in a university-sponsored apartment for a semester in (the location of the academic service learning program) with my peers would be exciting.
- 18. I would expect to pay less living in (the location of the academic service learning program) compared with living on campus for a semester.
- 19. Culturally speaking, (the location of the academic service learning program) would be a good place to use my academic skills.
- 20. If I lived in a university sponsored apartment in (the location of the academic service learning program) for a semester I would not miss social interactions on campus.
- 21. I would feel comfortable living with a group of my peers in (the location of the academic service learning program) for a semester in a university-sponsored apartment.
- 22. I would not mind paying regular (the university) housing costs while living in (the location of the academic service learning program) for a semester.
- 23. If I knew that I could apply my academic skills in (the location of the academic service learning program) area, I would be interested in participating.
- 24. I would find it depressing living with my peers in a university-sponsored apartment in (the location of the academic service learning program) for a semester.
- 25. Utilizing my education while living in (the location of the academic service learning program) would be important.
- 26. If I lived in a university-sponsored apartment in (the location of the academic service learning program) for a semester, I would miss social interactions on campus.
- 27. I would not like paying the regular (the university) housing costs while living in (the location of the academic service learning program) for a semester.

Factors

Factor 1: Level of comfort with the academic service program

- 10. I would feel safe living in (the location of the academic service learning program) in a university-sponsored apartment for a semester.
- 13. Living and studying in a university-sponsored apartment in (the location of the academic service learning program) would not be a problem.
- 14. My grades would suffer if I lived in a university-sponsored apartment in (the location of the academic service learning program) for a semester.*
- 15. It would be unsafe to live in a university-sponsored apartment for a semester in (the location of the academic service learning program).*
- 17. Living in a university-sponsored apartment for a semester in (the location of the academic service learning program) with my peers would be exciting.
- 19. Culturally speaking, (the location of the academic service learning program) would be a good place to use my academic skills.
- 21. I would feel comfortable living with a group of my peers in (the location of the academic service learning program) for a semester in a university-sponsored apartment.
- 23. If I knew that I could apply my academic skills in (the location of the academic service learning program) area, I would be interested in participating.
- 24. I would find it depressing living with my peers in a university-sponsored apartment in (the location of the academic service learning program) for a semester.*
- 25. Utilizing my education while living in (the location of the academic service learning program) would be important.

Factor 2: Monetary concerns (difficulty of maintaining employment while participating in academic service learning)

- 3. I must have a paying job on or off campus while in school.
- 7. Having a paying job while I attend school is important.
- 9. Not having a paying job for a semester would be a financial problem.

Factor 3: Distance from friends concerns

- 1. I would be comfortable living away from my friends at (the university) for a semester.
- 4. Spending most of my time off campus away from my friends for a semester would be beneficial.
- 6. If I lived off campus away from my (the university) friends for a semester, I would be unhappy.*

Factor 4: Social network disruption concerns

- 11. Being on campus everyday improves my academic performance.
- 12. I must have safe living conditions.
- 16. Social interaction on campus is important.
- 20. If I lived in a university sponsored apartment in (the location of the academic service learning program) for a semester I would not miss social interactions on campus.*
- 26. If I lived in a university-sponsored apartment in (the location of the academic service learning program) for a semester, I would miss social interactions on campus.

Factor 5: Graduation concerns (not being able to graduate in four years)

- 2. It is important that I graduate from (the university) in four years.
- 5. Getting my degree in four years is important.
- 8. If it takes me longer than four years to get my degree, I will be disappointed.

Factor 6: Cost savings (lower cost of living during the service learning experience)

- 18. I would expect to pay less living in (the location of the academic service learning program) compared with living on campus for a semester.
- 22. I would not mind paying regular (the university) housing costs while living in (the location of the academic service learning program) for a semester.*
- 27. I would not like paying the regular (the university) housing costs while living in (the location of the academic service learning program) for a semester.
- * Reverse-scored

References

Ames, M. D. (2006). AACSB International's advocacy of experimental learning and assurance of learning – Boom or bust for SBI student consulting? The changing entrepreneurial landscape. In *Proceedings of the USABE/SBI 2006 joint conference* (pp. 8-15). Tucson, AZ.

Andrews, C. P. (2007). Service learning: Applications and research in business. *Journal of Education for Business*, 83, (1), 19-26.

Angelidis, J., Tomic, and Ibrahim, N. (2004). Service learning projects enhance student learning in strategic management courses. *Review of Business*, 25 (Spring), 32-36.

Astin, A. W. and Sax, L. J. (1998). *How volunteer service benefits college students*. Los Angeles: UCLA Graduate School of Education and Information Studies.

Bargo, M (2005). Graffiti of a Nicaraguan survivor. *Humanist*, 65 (3), 27-29.

Barr, J. J. and Higgins-D'Alessandro, A. (2007). Adolescent empathy and prosocial behavior in the multidimensional context for school culture. *Journal of Genetic Psychology*, *168* (3), 231-250.

Batchelder, T. and Root, S. (1994). Effects of an undergraduate program to integrate academic learning and service: Cognitive, prosocial cognitive, and identify outcomes. *Journal of Adolescence*, 17 (August), 341-355.

Bécares, L. and Turner, C. (2004). Sex, college major, and attribution of responsibility in empathetic responding to persons with HIV infection. *Psychological Reports*, *95* (2), 467-476.

Bekkers, R. (2005). Participation in voluntary associations: Relations with resources, personality, and political values. *Political Psychology*, 26 (3), 439-454.

Bernacki, M. L. and Jaegar, E. (2008). Exploring the impact of service learning on moral development and moral orientation. *Michigan Journal of Community Service Learning*, *14* (2), 5–15.

Bhagat, P. S. and Ahmed, I. (2000). *Community based service learning pedagogy in the marketing curriculum*. Villanova, PA: Villanova University.

Boss, J. (1994). The effect of community service work on the moral development of college students. *Journal of Moral Education*, 23 (2), 183-197

Boyer, E. L. (1996). The scholarship of engagement. *Journal of Public Service and Outreach*, 1 (1), 11-20.

Boyer, E. (1994). Creating the new American college. *The Chronicle of Higher Education*, March 9, A48.

Bransford, J. D. and Nye, N. J. (1989). A perspective on cognitive research and its implications for instruction. In L. Resnick and L. E. Klopfer (Eds.), *Toward the thinking curriculum: Current cognitive research* (pp. 175-205). Alexandria, VA: Association for Supervision and Curriculum Development.

Bringle, R. G., Games, R. and Malloy, E. A. (1999). *Colleges and universities as citizens*. Needham Heights, MA: Allyn and Bacon.

Bringle, R. G. and Hatcher, J. A. (2003). Reflection in service learning: Making meaning of experience. In S. Jones (Ed.), *Introduction to service learning toolkit: Readings and resources for Faculty* (pp. 83-89). Providence RI: Campus Compact.

Bringle, R. G. and Hatcher, J. A. (1996). Implementing service learning in higher education. *Journal of Higher Education*, 67 (March/April), 221-240.

Bringle, R., Hatcher, J. A., and Muthiah, R. N. (2010). The role of service-learning on the retention of first-year students to second year. *Journal of Community Service Learning*, 16 (Spring), 38-49.

Bringle, R. G., Phillips, M. A., and Hudson, M. (2004). *The measure of service learning: Research scales to assess student experiences*. Washington DC: American Psychological Association.

Brown, K. (2000). Developing project management skills: A service learning approach. *Project Management Journal*, 31 (December), 53-58.

Burke, Debra D. (2007). Service learning: Opportunities for legal studies in business. *Journal of Legal Studies Education*, 24 (2), 129-163.

Candy, P. C. and Crebert, R. G. (1991). Ivory tower to concrete jungle. *Journal of Higher Education*, 62 (Sept/Oct), 570-592.

Cascio, W. F. and Aguinis, H. (2004). *Applied psychology in human resource management,* 6th ed. Upper Saddle River NJ: Prentice Hall.

Cohen, J. and Kinsey, D. (1994). Doing good and scholarship: A service learning study. *Journalism Educator*, 48 (4), 4-14.

Cone, D. and Harris, S. (2003). Service learning practice: Developing a theoretical framework. In S. Jones (Ed.), *Introduction to service learning toolbox: Readings and resources for faculty* (pp. 27-39). Providence, RI: Campus Compact.

Davis, M. H., Mitchell, K. V., Hall, J. A., Lothert, J., Snapp, T., and Meyer, M. (1999). Empathy, expectations, and situational preferences: Personality influences on the decision to participate in volunteer helping behaviors. *Journal of Personality*, 67 (3), 469-503.

Deeley, S. J. (2010). Service-learning: Thinking outside the box. *Active Learning in Higher Education*, 11 (March), 43-53.

Dewey J. (1941). Democracy and education. New York: Macmillan.

Dewey J. (1938). Experience and education. New York: Macmillan.

Easterling, D. and Rudell, F. (1997). Rationale, benefits, and methods of service learning in marketing education. *Journal of Education for Business*, 73 (September/October), 58-61.

Eisenberg, N., and Fabes, R. A. (1990). Empathy: Conceptualization, measurement, and relation to prosocial behavior. *Motivation and Emotion*, *14* (2), 131-149.

Ekrich, D. and Voorhees, C. (2002). Expanding experiential learning in marketing: The synergy of affiliation and visitation. In *Proceedings of the American Marketing Association national educator's conference*. San Diego, CA: American Marketing Association.

Eyler, J. S. and Giles, Jr., D. E. (1999). *Where's the learning in service learning?* San Francisco: Josey Bass.

Eyler, J. S., Giles, Jr., D. W., Stenson, C. M., and Gray, C. J. (2001). At a glance: What we know about the effects of service learning on college students, faculty, institutions and communities, 1993-2000. Nashville, TN: Vanderbilt University.

Fannery, B. L. (2010). Service-learning and integrated course design: Principles of management and the campus kitchen metaproject. *Journal of Management Education*, *34*, (1), 11-38.

Fertman, C. I. (1994). Service learning for all students. Bloomington, IN: Phi Delta Kappa Educational Foundation.

Fishbein, M. and Ajzen, I. (1975). Belief, attitude, intention and behavior: An introduction to theory and research. Reading MA: Addison-Wesley.

Freire, P. (1998). Pedagogy of the oppressed. In A. M. Araujo-Freire and D. Macedo (Eds.), *The Paulo Freire reader* (pp. 45-79). New York: Continuum Press.

Gelmon, S. B., Holland, B. A., Driscoll, A., Spring, A., and Kerrigan, S. (2001). *Assessing service-learning and civic engagement: Principles and techniques*. Providence, RI: Campus Compact.

Godfrey, P. C., Illes, L. M. and Bery, G. C. (2005). Creating breadth in business education through service learning. *Academy of Management Learning and Education*, *4*, 309-323.

Govekar, M. A. and Rishi, M. (2007). Service learning: Bringing real-world education into the B-school classroom. *Journal of Education for Business*, 83 (1), 3-10.

Gujarathi, M. and McQuade, R. J. (2002). Service learning in business schools: A case study in an intermediate accounting course. *Journal of Education for Business*, 77 (3), 144-150.

Guyton, E. (2000). Social justice in teacher education. The Educational Forum, 64 (2), 108-114.

Hefferman, K. (2001). Fundamentals of service-learning course construction. Providence RI: Campus Compact.

Jacoby, B. (1996). Service learning in today's higher education. In B. Jacoby (Ed.), *Service learning in higher education: Concepts and practices* (pp. 3-25). San Francisco: Jossey-Bass.

Jamieson, S. (2004) Likert scales: How to (ab)use them. Medical Education, 28, 1212-1218.

Johnston, T. C. (2000). The case for service learning in marketing education. In *Proceedings of the fall educator's conference* (pp. 16-18). St. Louis: Marketing Management Association.

Kaye, C. B. (2004). The complete guide to service learning: Proven practical ways to engage students in civic responsibility, academic curriculum and social action. Minneapolis: Free Spirit.

Kenworthy, A. L. and Fornaciari, C. (2010). No more reinventing the service-learning wheel. *Journal of Management Education*, *34* (February), 3-8.

Knowles, P. A. (2000). Marketing. In S. J. Madden (Ed.), *Service learning across the curriculum: Case applications in higher education* (pp. 49-58). Lanham, MD: University Press of America.

Kolb, D. (1984). *Experiential learning: Experience as a source of learning and development*. Englewood Cliffs NJ: Prentice-Hall.

- Kolb, D. A. (1981). Learning styles and disciplinary differences. In A. W. Chickering (Ed.), *The modern American college* (pp. 232-255). San Francisco: Jossey-Bass.
- Kupiec, T. Y. (1993). Introduction. In T. Y. Kupiec (Ed.), *Rethinking tradition: Integrating service with academic study on college campuses* (pp. 3-13). Providence, RI: Campus Compact.
- Larson, E. and Drexler, J. A. (2010), Project management in real time: A service learning project." *Journal of Management Education*, 34 (4), 551-573.
- Lester, S. W., Tomkovick, C., Wells, T., Flunker, L. and Kickel, J. (2005). Does service-learning add value? Examining the perspectives of multiple stakeholders. *Academy of Management Learning and Education*, *4*, 278-294.
- Lubke, G. H. and Muthen, B. O. (2004). Applying multigroup confirmatory factor models for continuous outcomes to Likert scale data complicates meaningful group comparisons. *Structural Equation Modeling*, 11 (4), 514-534.
- Manring, S. L. (2004). Using academic service-learning in a business school curriculum to foster development of emotional intelligence. Presented at New Designs for Learning In and Across the Disciplines AAC&U Pedagogies of Engagement Conference. Chicago.
- Marcus, G. B., Howard, J. P. F. and King, D. C. (1993). Integrating community service and classroom instruction enhances learning: Results from an experiment. *Educational Evaluation and Policy Analysis*, 15 (4), 410-419.
- May, B. A., & Alligood, M. R. (2000). Basic empathy in older adults: Conceptualization, measurement, and application. *Issues in Mental Health Nursing*, 21 (4), 375-386.
- McCarthy, A. M. and Tucker, M. L. (1999). Students' attitudes toward service learning: Implications for implementation. *Journal of Management Education*, *23* (October), 554-573.
- McCoskey, M. and Warren, D. L. (2003). Service learning: An innovative approach to teaching accounting: A teaching note. *Accounting Education*, 12 (December), 405-413.
- McCrea, E. A. (2010). Integrating service-learning into an introduction to entrepreneurship course. *Journal of Management Education*, *34* (February), 39-61.
- McNeel, S. P. (1994). College teaching and student moral development. In J. R. Rest and D. Narváez (Eds.), *Moral development in the professions* (pp. 27-50). Hillsdale, NJ: Lawrence Erlbaum.
- Metcalf, L. E. (2010). Creating international community service experiences in a capstone marketing-projects course. *Journal of Marketing Management*, 32 (2), 151-171.
- Mitchell, A. M. (2009). From skeptics to champions: How to get PR students interested in college-oriented service-learning projects. *Public Relations Tactics*, 16 (10), 19.

Morton, K. and Troppe, M. (1996). From the margin to the mainstream: Campus compact's project on integrating service with academic study. *Journal of Business Ethics*, 15 (1), 21-32.

Mottner, S. (2010). Service-learning in a nonprofit marketing course: A comparative case of pedagogical tools. *Journal of Nonprofit & Public Sector Marketing*, 22 (3), 231-245.

Munter, J. (2002). Linking community and classroom in higher education: Service learning and student empowerment. *Journal of Nonprofit & Public Sector Marketing*, 10 (2), 151-164.

Myyry, L. and Klaus, H. (2001). University students' value priorities and emotional empathy. *Educational Psychology*, 21 (1), 25-40.

Palmer, L., Goetz, J., and Chatterjee, S. (2009). Expanding financial education and planning opportunities through service-learning. *Financial Services Review*, 18 (Fall), 157-175.

Patterson, S. A. (2004). How service learning enhances your PR program. *Public Relations Tactics*, 11 (April), 23.

Petkus, E. (2000). A theoretical and practical framework for service learning in marketing: Kolb's experiential learning cycle. *Journal of Marketing Education*, 22 (April), 64-70.

Rama, D. V., Ravenscroft, S. P., Wolcott, S. K. and Zlotkowski, E. (2000). Service learning outcomes: Guidelines for educators and researchers. *Issues in Accounting Education*, 15 (4), 657-692.

Reardon, K. M. (1998). Participatory action research as service learning. In R. A. Rhoads and J. P. F. Howard (Eds.), *Academic service: A pedagogy of action and reflection* (pp. 57-64). San Francisco: Jossey-Bass.

Root, R. and Thorme, T. (2001). Community-based projects in applied statistics: Using service learning to enhance student understanding. *The American Statistician*, *55* (4), 326-331.

Simons, L. and Cleary, B. The influence of service learning on students' personal and social development. *College Teaching*, *54*, (4), 307-319.

Singh, N. and Eischen, K. (2007). Lost, dysfunctional or evolving? A view of business schools from Silicon Valley. *IMB Management Review*, 20 (September), 320-344.

Stevens, B. (2001). Cross-cultural service learning: American and Russian students learn applied organizational communication. *Business Communication Quarterly*, 64 (3), 59-69.

Strupeck, C. D. and Whitten, D. (2004). Accounting service learning experiences and the IRS volunteer income tax assistance programme: A teaching note. *Accounting Education*, 13 (March), 101-112.

Thompson, K. (2000). Assessing student learning outcomes of service-learning at Otterbein College. Honor's Thesis. Otterbein College.

Vander Veen, S. (2002). Marketing services. In G. G. Heffner and C. D. Beversluis (Eds.), *Commitment and connection: Service learning and Christian higher education* (pp. 191-200). Lanhan, MD: University Press of America.

Ver Beek, K. (2002). International service learning: A call to caution. In G. G. Heffner and C. D. Beversluis (Eds.), *Commitment and connection: Service learning and Christian higher education* (pp. 55-69). Lanhan, MD: University Press of America.

Wilson, M. N. (2008). Service learning benefits and opportunities for business programs. *Business Education Digest*; (17), 54-64.

Zlotkowski, E. (1996). Opportunity for all: Linking service learning and business education. *Journal of Business Ethics*, 15 (1), 5-20.

Zlotkowski, E. (1998). Successful service learning programs: New models of excellence in higher education. New York: Jossey-Bass.