

Original Research Paper

# Service-Learning in Business Education: An Analysis of Spirituality, Leadership and Motivation

Mark Dickerson, Roxanne Helm-Stevens and Randy Fall

*School of Business and Management, Azusa Pacific University, United States*

## Article history

Received: 26-08-2016

Revised: 18-02-2017

Accepted: 11-05-2017

Corresponding Author:  
Roxanne Helm-Stevens  
School of Business and  
Management, Azusa Pacific  
University, United States  
Email: rhelmstevens@apu.edu

**Abstract:** The major goal of this study was to explore student perceptions of service-learning and its effect on development of their leadership skills and spirituality. This manuscript begins by describing the theoretical foundations that inform the literature on the correlation between service-learning and leadership, spirituality and motivation. The researchers then put forth their quantitative data, presented using two data sets, drawing three clear links in the constructs of spirituality, motivation and leadership—all of which support previous findings. The findings further suggest that for this sample of students, a spiritual understanding of their role in service-learning was moderately correlated with both motivation and leadership.

**Keywords:** Service-Learning, Leadership, Spirituality, Motivation

## Introduction

In a monograph written in the late 1990's, John Dirkx (1997) complained that in higher education "learning continues to be framed within a technical-rational view of knowledge, in which we learn instrumentally to adapt to the demands of our outer environment. Bubbling just beneath this technical-rational surface is a continual search for meaning, a need to make sense of the changes and the empty spaces we perceive both within ourselves and our world" (Groen and Jacob, 2006, p. 79).

In contrast to this picture of instrumental learning, colleges throughout the United States have explored the possibility of transformational learning through experiential approaches such as service learning. Jacoby describes service learning as "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" (1996, p. 5).

Support for this approach has become very popular, growing exponentially over the past three decades (Saltmarsh, 2005; Welch and Koth, 2009). Welch and Koth (2009) explain that "service-learning includes the key characteristic of being relational by responding to human and community needs. In fact, engaging in relationships with 'the other' may be the core element of the service-learning process" (p. 6).

Not only is service learning motivated by the desire to engage students in community service, but it also has

support in adult pedagogy and transformational learning theory. As Harkavy and Benson (1998) point out: "Genuine learning, according to Dewey (1994), only occurs when human beings focus their attention, energies and abilities on solving genuine dilemmas and perplexities—and when they reflect on their experience and, therefore, increase their capacity for future intelligent thought and action" (Harkavy and Benson, 1998, p. 16).

Similarly, Mezirow (1991) contends that a "disorienting dilemma" can lead to a process of transformation: Disorientation, self-examination and realization that others have had similar experience, experimentation with new identities and connections and reintegration. He states "All transformative learning involves taking action to implement insights derived from critical reflection. When distortions addressed by transformative learning are sociocultural, social action becomes an integral part of the process of transformative learning" (1991, p. 225).

In support of Mezirow's learning theory, Welch and Koth (2013) documented the possibility that service-learning may lead to personal transformation. They state: "As students and instructors grapple with articulating this phenomenon, the nature of their descriptions often suggests both personal transformation and a transcendence of the self. These individuals become aware of something 'bigger'—not only bigger than earning a grade or meeting the instructional objectives of a course— but something bigger than their sense of self" (p. 3).

### *Service Learning and Spirituality*

This awareness of something “bigger” beyond themselves leads students to explore their purpose and life and spirituality. Over a seven year period, the Higher Education Research Institute at UCLA conducted a longitudinal research project entitled “Cultivating the Spirit: How College Can Enhance Students’ Inner Lives.” The researchers surveyed over 112,000 freshmen students in 2004 and followed up with a survey of a subset of 15,000 of those students in their junior year. From the survey data, Astin *et al.* (2010) found that “Fully four in five students tell us that they ‘have an interest in spirituality’.... More than eight in ten report that ‘to find my purpose in life’ is at least a ‘somewhat’ important reason for attending college” (p. 3). Of those students who had participated in service-learning programs during the three years between surveys there was an 11% increase “in representation among high scorers on Spiritual Quest [desire to grow in spirituality], relative to a 7% increase among those who had no such participation” (p. 40). They also found that “it was reassuring to find that this quality of caring ...grows during the college years. In fact, it is the spiritual quality that shows the greatest change, almost doubling in high-scorers between the freshman and junior years” (p. 65). Experiences that led to gains in caring and in seeing the world ecumenically included both self-reflection and development of relationships with individuals unlike themselves. The researchers conclude “service learning appears to work because it enables students to identify and direct their personal goals through an exploration of moral and ethical positions about themselves and their communities and to relate larger social issues to their lives” (Astin *et al.*, 2010, p. 146).

Welch and Koth (2013) suggested that service learning engages students in a spiritual formation process, which they believe “occurs in six relational ‘spaces’” (p. 14). These six “spaces” are identified as “unknown ... encounter ... authenticate ... radicalization ... integration ... [and] practice” (p. 16). In the radicalization “space” “one leaves their comfort zone, a long-held mindset or assumption, to take on something new” (p. 18). “The self still exists, but now it is part of something bigger” (p. 19). The authors observe that “the spiritual formation process begins as an encounter with the other that, in turn, results in a deeply personal introspection to make meaning and purpose that is then manifested into a set of behaviors or a way of being. Service-learning often provides this type of experience to students by exposing them to new situations in the community” (p. 22).

One issue with studies on spirituality is the lack of an accepted operational definition of the construct. As Mayhew (2004) explains, “many researchers feel as though spirituality is too subjective to be of any value in

the objective world” (p. 649). For the students in his study, spirituality was about “connectedness and explication”. Astin suggests that spirituality encompasses our “subjective life”, our “qualitative and affective experiences” and “the values that we hold most dear, our sense of who we are and where we come from, our beliefs about why we are here-the meaning and purpose that we see in our work and our life-and our sense of connectedness to each other and to the world around us” (Astin, 2004, p. 34). For Tisdell (2003) spiritual development “is about the ongoing development of identity” and “is intimately connected to how we understand all aspects of identity, including our gender, ethnicity, culture and class background” (p. 117).

Those studies that have focused on the impact of service learning on student spirituality have noted three primary catalysts for growth: Participating in or observing significant community, being exposed to difference and reflection (Campbell, 2014; Radecke, 2007).

### *Service Learning and Leadership*

At the same time that student participants are engaged in “disorienting dilemmas” and exploring their connections with diverse others, they are also experiencing opportunities to work as a team, solve problems and communicate with others, all key leadership skills. Wurr and Hamilton (2012) note: “A growing number of studies point to the efficacy of promoting leadership development through service-learning projects. The convergence of data from both student leadership development studies (Astin, 1993; Astin and Astin, 2000; Astin and Cress, 1998; Dugan, 2006a, 2006b; Dugan and Komives, 2007; Kirlin, 2003; Komives *et al.*, 2005; 2006; Kouzes and Posner, 2003) and service-learning research (Astin and Astin, 2000; Eyler and Giles, 1999; Eyler *et al.*, 1997; Kuh, 2008; Moely *et al.*, 2002; Pascarella and Terenzini, 2005) not only supports the claim that leadership skills can be taught, but also that leadership programs affect a wide range of personal and social learning outcomes, including personal efficacy and interpersonal communication skills” (p. 216).

However, Astin *et al.* (2000) reported that positive results for growth in leadership and self-efficacy were “borderline” after completing a longitudinal study with over 22,000 college undergraduates. An explanation for this may be that many service-learning programs do not provide opportunities for leadership development. As Des Marais *et al.* (2000) notes: “Most often, students are assigned to do a particular task rather than being allowed to determine each and every step of a service-learning experience .... Simply assigning students tasks in teacher-designed service-learning projects denies them the opportunity for decision-making and action planning. It limits their interconnectedness of tasks and gives them no sense of the complexity of project management and leadership” (Des Marais *et al.*, 2000, p. 679).

A number of articles outline approaches to the deliberate use of service learning to teach leadership behaviors (Harrison, 2010; Schaffer and Peterson, 2001; Lester, 2015; Zlotkowski *et al.*, 2006). Foli *et al.* (2014) describe the use of service learning in a leadership development course with 65 undergraduate students and their finding that not only did the students perceive growth in their leadership skills but that this improvement was verified by their peers. Using the Leadership Practices Inventory, researchers found improvement in such behaviors as ability to delegate, professional communications, goal setting and planning and encouragement of others.

### *Service Learning and Motivation*

There is some research support for the notion that students who are highly motivated to participate in service learning become more engaged with the substantive content of the course. Cohen and Kinsey (1994) concluded from one of their studies “service education, as a pedagogical tool, increased motivation and contextual learning of specific, substantive course material involving messages and audiences. This finding has strong theoretical support from studies indicating that attitudes and affective experiences are solidly interrelated with intrinsic motivation (Fisher, 2000; Ilies and Judge, 2002; Seo *et al.*, 2004). Given the connection between students with high intrinsic motivation to engage in service learning and the likelihood that they will experience heightened feelings of interest and learning, it is important for researchers to explore ways of structuring these learning experiences that motivate students in this way.

### *Research Setting*

Located in southern California, Azusa Pacific University is a private, Christian college. The university’s undergraduate population totals approximately 6000 students with a 68% female student body population. The ethnic population, including Black, Asian, Hispanic, American Indian or Native Alaskan, Native Hawaiian or other Pacific Islander and Two or More Ethnicities, comprises 43% and International students account for 4% of the student body.

Service-learning plays an important role in the university as is evidenced by the involvement of more than 3000 undergraduate students per year in hundreds of service-learning courses across 20 disciplines. During the last five years alone, the university received several prestigious awards, including the Carnegie Community Engagement Award and the President’s Higher Education Community Service Honor Roll, acknowledging the university’s role in addressing and solving community problems and achieving meaningful and measureable outcomes within those communities.

The university selected BUSI448, Organizational and Administrative Behavior, as one of three courses to highlight in their President’s Honor Role application to the Corporation for National and Community Service. In terms of student enrollment and the number of community participants served, this course houses the largest service-learning project in the university. In a typical semester, more than 150 students enroll and serve at local continuation education high schools in seven school districts.

## **Methodology**

### *Description of Participants and Service-Learning Program*

Undergraduate business students participating in the service-learning program were upperclassman enrolled in BUSI448, a required course in the business management curriculum. As part of their requirements for the course, students were placed into small groups and asked to complete six weeks of service in a continuation education high school in the local school districts. Essentially, students were tasked with becoming a high-functioning self-managed team and working through the concepts of group dynamics as they volunteer, with the goal of achieving team effectiveness and serving as role models for the high school students.

Each group of students was assigned a classroom in one of seven participating continuing education high schools where they remained for six weeks following one week of orientation. Groups were formed to ensure a diverse range of personality, characteristics, experience, comfort level and skill sets. Students rotated job responsibilities each week, allowing them to experience different roles and develop deeper understanding of their strengths and weaknesses.

Each week, a team leader was designated and tasked with the responsibilities of coordinating curriculum delivery and instructional materials, guiding the development of exercises and discussion using active teaching techniques, communicating tasks and responsibilities to team members, following-up with task progress and contingency planning. Each group member was required to occupy the leadership role a minimum of one week during the service-learning project. Although teacher guidance was available, students maintained primary responsibility for delivering the curriculum, working together each week to create strategies for engagement. Following each lesson, site leaders evaluated overall group performance and provided each group with performance feedback.

The university students taught their lessons using the Options: Business Education and Life Skills for Urban Youth curriculum (Options), a modularized lesson-plan curriculum, to teach local high school students. Developed in 2009, Options was specifically designed

to facilitate mentoring relationships between the college students and the high school students. Built upon two core design pillars of education and mentoring, its holistic approach teaches high school students business education and life skills while providing opportunities for relationship building with the college students.

Throughout their six-week teaching assignments, university students delivered lessons on topics encompassing business education, career planning and personal skills development. Module topics include lesson titled Study Skills, Goal Setting, Spending and Financial Basics, Why Self-Esteem and Self-Knowledge Matter and Post High School, which helps prepare students for post-high school by learning how to write a resume, apply for college, or conduct a job search. Activities, exercises and discussions in the curriculum are designed to facilitate mentoring conversations.

#### *Dataset 1*

The first dataset consisted of 65 participants, 37 males and 28 females. Ages in the sample ranged from 20 to 32, with a mean age of 21.4. The sample was 65% white, 15% Hispanic, 6% Black, 7% Asian and 2% other. Grade point averages in the sample ranged from 2.6 to 3.98, with an average GPA of 3.4.

Data was collected through a student-created survey, attached as Appendix A, with five questions in each of four topic areas: faith, motivation, conflict and leadership. The five questions in each topic area were combined to create composite variables.

#### *Dataset 2*

The second dataset included 66 participants, 31 females and 35 males. The sample was 61% white, 15% Asian, 12% Hispanic, 9% mixed-race and 3% other. Data was collected via a survey created by undergraduate students in the BUSI448 course, as a part of their participation in the service-learning experience with high school students. This survey, attached as Appendix B, included 47 items, divided into the following sections: Demographics, motivation, leadership, group dynamics, diversity and faith integration. Items in each section were combined to create composite variables.

#### *Qualitative Research*

Qualitative research methods were utilized to better understand the why and how of the quantitative research findings. Open-ended questions were designed to provide researchers with the opportunity to gain insight on student perceptions and opinions. At the end of the semester, students were given the opportunity to answer three open-ended questions. Several students took the opportunity to provide their perspectives on motivation,

leadership and spirituality providing rich qualitative data. A sampling of student responses is included in the Discussion of Findings. Sample student responses are presented in descriptive, narrative form.

#### *Research Results, Data Set 1*

A stepwise linear regression revealed that the motivation composite variable significantly predicted leadership,  $\beta = 0.84$ ,  $t(63) = 12.39$ ,  $p < 0.000$ . Motivation and leadership were also highly correlated,  $r(65) = 0.84$ ,  $p < 0.000$ . Moderate correlations were found for faith and leadership ( $r(65) = 0.38$ ,  $p = 0.002$ ), faith and motivation ( $r(65) = 0.42$ ,  $p = 0.001$ ), conflict and leadership ( $r(65) = 0.55$ ,  $p < 0.000$ ) and conflict and motivation ( $r(65) = 0.56$ ,  $p < 0.000$ ).

#### *Research Results, Dataset 2*

A stepwise linear regression analysis was performed to measure the ability of the demographic variables and each of the composite variables to predict scores on the leadership composite variable. Only one variable, the motivation composite, was found to significantly predict leadership scores,  $\beta = 0.63$ ,  $t(62) = 6.45$ ,  $p < 0.000$ . Motivation and leadership were also highly correlated,  $r(64) = 0.63$ ,  $p < 0.000$ . Inspection of mean scores by gender revealed a difference in leadership scores. The mean leadership composite score for females was 50.66, while the mean score for males was 54.61. Analysis of variance comparing females vs. males on leadership composite scores found a statistically significant difference, with males scoring slightly higher on leadership:  $F(2, 62) = 2.92$ ,  $p = 0.04$ , though with an eta squared of only 12.

Below, Table 1, illustrates the percentage of students who agreed (strongly agree, agree, or somewhat agree) with the selected survey questions. Students' perceptions of their experiences were calculated in the areas of spirituality, leadership and motivation.

#### *Discussion of Findings*

Research results drew three clear links in the constructs of spirituality, motivation and leadership. Major statistical findings are examined and summarized below. In addition to the survey instrumentation, two open-ended questions were asked of all students: (1) Were you motivated to participate in the service-learning project? Why or why not? (2) Did the service learning project increase your awareness and understanding of leadership and your leadership development? If so, how? All participants were asked precisely the same two questions. In order to encourage students to answer the open questions in their own terms and in a manner that reflects their own perceptions, dialogue on the service-learning project was not invited.

Table 1. Percentage of students who agreed (strongly agree, agree, or somewhat agree) with selected survey questions

Question	Percent agreement
<b>Spirituality</b>	
While working on the program, I sought God's love and support on a daily basis.	75
I viewed my service learning project as a form of ministry	87
My actions at my service learning site served as an example of my faith	84
During my service learning experience, I often turned to God when I needed comfort	75
<b>Leadership</b>	
Working with the students at my service learning site taught me better ways to communicate with others	89
I am usually the one who decides what the group should do and how we should accomplish it	71
Upon completion of this service learning project, I have an improved sense of leadership	86
I feel this program made me a better leader	97
<b>Motivation</b>	
I took pride in the work I did during this experience	81
I believe my service learning experience led me to a higher level of personal attainment	92
I felt I had a high level of responsibility in my service learning experience	98
My service learning experience led me to personal growth	97

Being qualitative in nature makes these types of open-ended questions lacking the statistical significance needed for conclusive research. Nevertheless, the open-ended questions were incredibly useful in several different ways. The responses provided rich and detailed insight into students' feelings and experiences and allowed the investigators to gain a deeper understanding of the quantitative research results. Specifically, investigators benefitted from the opportunity to gain insight on unique opinions and the relationships between student motivation and learning.

Themes began to emerge from the qualitative research results that allowed the investigators to explore the totality of the situation and attempt to examine the why and how of student perceptions. Specifically, students' responses to open-ended questions provided insight on unique opinions and the relationships between student motivation and learning.

### *Spirituality*

Student responses to the survey questions indicate a strong role of faith in their service-learning experiences. Eighty-seven percent of students viewed their service learning as a form of ministry. Further, in the first dataset, faith was also moderately correlated with both motivation and leadership. While this perspective on service-learning may be unique to this population of students, these findings indicate that the ways students understand the meaning of service-learning in their lives likely influences their engagement and learning. Future research could compare service learning at faith-based vs. non-faith-based institutions to measure the impact of faith perspectives on service-learning.

Reflective responses to the open-ended questions regarding the students' perception of spirituality at work in the service-learning project, often included a sense of calling:

"I personally loved the options program because I felt that I could relate to the students. I was never in the specific situation of being a lock-down student as them; however, I was an adolescent who always displayed deviant behavior. The problem is, is that I never had the opportunity to be directed and mentored from students that were a little further along the timeline of life than me. I wish that I had college role models navigating me through my misplaced priorities and behaviors. This why I care so much for the options service learning project. I now get the opportunity to make a difference in the life adolescents that are demonstrating the same behavior as I once did. Lately, I have felt this calling to provide more selfless acts for people. I firmly believe that God placed this class directly in my path so that I can be that light in another person's eyes. I feel that I effectively helped by motivating, teaching and mentoring."

"I can only hope that our Community Day students take our advice and seek us out for mentoring when they need it in the future. I feel that it is a blessing that God has permeated this university and used us as a tool to reach into the community to provide life-altering services. In my opinion, this is the most rewarding service-learning project class that APU has to offer."

Several researchers have noted the importance of spirituality in service-learning and its role in creating introspection regarding the students' learning process (Koth, 2003; Schaffer 2004; Sikula and Sikula, 2005). In a study of undergraduate students in a private Christian university, Park *et al.* (2009) found a positive correlation

between the ability of students “to act as ‘salt and light’ by exhibiting the ideals of their faith through action and having a feeling of usefulness during the service-learning project” (2009, p.61).

### *Motivation*

Ninety-seven percent of students agreed that the service-learning experience led them to personal growth. Ninety-eight percent of students felt a high level of personal responsibility in the service-learning activities. That is, it appears the students found the service-learning experience to be highly motivating. They felt responsible to the high school students and to the curriculum.

Motivation and leadership were found to be highly correlated in both datasets. The responsibility entailed in the service-learning activities seem to have engendered in students a desire to not only work hard, but to also take on leadership.

Typical responses to the open-ended question asking students about their motivation to participate in service-learning included reflections, such as:

“I was very motivated to participate in the service learning. I’ve always wanted to have real world experience in my college studies, to see how well the in class material actually relates to the real world. Moreover I was looking forward to this class to learn leadership and management skills, so the service-learning project was the perfect opportunity to grow personally and to be a positive role model for the students.”

“Before enrolling into the class I heard about the service learning project and it excited me. Working with the youth in any way is something that motivates me and I believe that I’ve been called to this group of individuals. Thus going into Sierra High school I was motivated to not only teach the kids, but build relationships and be a small glimpse of light to them. My motivation was focused on being able to build intentional and inspiring connections with the kids and resulted in encouraging me to wanting to pursue this field.”

Motivation was largely described as the desire for real-world experience and/or the sense of calling or service. The major factors influencing student motivation were not surprising. Certainly, an advantage of service-learning is the real-world application which cannot be found in the classroom (Taylor, 2005); additionally, it also often capable of providing opportunities for students to gain work experience (Neelankavil, 1994; McLaughlin, 2010), build their

resumes and provide an advantage in a job interview (Tucker *et al.*, 1998).

### *Leadership*

Ninety-seven percent of students agreed that the service-learning experience made them better leaders. As a dependent variable, leadership was found to be significantly predicted by motivation. Scores on leadership and motivation survey items were also found to be highly correlated. This data shows a powerful effect of service-learning on students’ views of themselves as leaders. While previous research had established possible leadership effects from service-learning experiences, our findings go even farther, to near-unanimous endorsement of the leadership benefits of service-learning.

Interestingly, we also found a significant, though small, difference in leadership scores by gender. This finding suggests a need for future research focused on leadership differences by gender.

Common responses to the open-ended question of leadership learning included areas of self-identified growth, such as:

“We had to organize, direct, instruct and motivate our students in effective and efficient ways that made them comfortable and feel important, all while actually learning some. One of the main things I wanted to grow in was finding how to balance my people and task oriented leadership styles. I learned that for me its best go in 50/50 and then interact with those I’m working with based on what I perceive is needed. For instance, if someone is engaged with work all the time I should put more effort into their personal welfare. On the other hand if someone is all about socializing, I should encourage them to be more productive and set up whatever tools necessary to help them. The biggest lesson for leadership that I’m walking away with is that there is no one perfect way to lead and leaders must be as flexible if not more as those following to be effective and influential to the upmost.”

“Yes, the service learning project did increase my awareness and understanding of leadership and my own as well. It showed me that everyone has different leadership styles and that there is not one right way. I was able to see how each person in my group led, not just by being the main leader. We all lead in small ways too, by getting people to do their work, keeping the group on track and on topic, taking leadership over a certain part of

the project such as speaking out loud or facilitating group work.”

“The service learning project definitely increased my awareness and understanding of leadership and my own personal leadership development. I found that I stepped up to the leadership position at many times while we were in the classroom. There were moments when I alone did the lecture portion of the class agenda, due to the fact that no one else preferred to do it. I developed as a leader and saw my growth throughout the five weeks. I became more comfortable addressing the students when they lost focus and led the students when we had activities.”

“Leadership qualities were displayed by all the individuals on the team. At times, I felt like the team looked to me to direct or lead in the conversations in the classroom lessons. In these moments I was reminded about leadership and being able to get my team through a rough patch or situation and figure out a way to solve it. One of the biggest points that I learned about being a leader was first you have to build relationship and credibility with the team members or students so that they can gain respect for you. Another thing I learned about leadership is the fact of taking on the toughest challenges that no one else wants. It is in those instances where individuals grow and rise above the rest. Ultimately, this service learning project was a great way to learn more about team work and working in different groups and it was also a great reminder of the leadership qualities I possess.”

In their responses to open-ended questions, students who self-reported that they were highly motivated to participate in the service-learning project were more likely to indicate that they had experienced great degrees of insight. Scholarly support exists for the notion that academic service-learning helps students translate theory into practice (Jaques, 2000; Soslau and Yost, 2007; Darby *et al.*, 2013).

### *Limitations*

As a survey design, this study presents students' self-reported perceptions on motivation, leadership, spirituality and learning. While students appeared to be forthright in their responses, it is impossible to know if the self-reports accurately reflect students' experiences. The study data from the present study was generated from surveys designed and developed by the students themselves. As a consequence, only some of the

questions were usable. Some questions had to be discarded because of awkward or confusing wording, cumbersome combinations of concepts, or a poor match between the question and the possible responses.

Another important limitation of the present study is that the qualitative data was not the focus of the student-designed surveys, leading to qualitative data that was useful anecdotally, but not amenable to systematic qualitative analysis. Future studies could benefit from more complete qualitative responses by participants.

The study is also limited by the context of the service-learning experience. The service-learning occurred in a business course, within an undergraduate business program. The course is offered in the context of a faith-based institution, which means that many students select the university with a focus or interest in matters of spirituality. The role of spirituality in the lives of such self-selected students is likely to be different than would be found in other kinds of universities.

### **Conclusion**

Our study supports previous findings that service learning projects provide an opportunity for undergraduate students to apply academic learning, experience leadership, participate in group work and, for some, apply their spiritual understandings to their academic work. Our findings further suggest that for this sample of students, a spiritual understanding of their role in service-learning was correlated with both motivation and leadership. Importantly, this study allowed students to participate in the same high school classrooms for six weeks, longer than many service-learning experiences. This longer duration, along with a curriculum that was designed to be highly participatory, created opportunities for students to develop mentoring relationships with the high school students.

For practitioners, we believe that our findings provide support for more extensive service-learning experiences for undergraduate business students. While brief experiences have demonstrated some benefits, our results indicate that more time in a service-learning project allows greater opportunities for the development of meaningful relationships, which, in turn, creates more meaningful opportunities for leadership.

For researchers, our data reveals interconnected web of influences among variables of leadership, spirituality, motivation and group dynamics, as reported by the students themselves. These variables and several others, could be understood more fully through the use of additional tools for measuring the impact of service learning. Future studies using objective data, such as data from observers or video recordings, could be particularly helpful in expanding beyond self-reported effects of service learning.

## Acknowledgement

The researchers gratefully acknowledge the National Natural Science Foundation of China (31271812, 81071685), the National High Technology Research and Development Program of China (863 Program).

## Funding Information

The authors have not received any financial support.

## Author's Contribution

**Mark Dickerson:** First lead on the literature review and provided the majority of the writing of the literature review portion of the manuscript. Reviewed and revision of the manuscript.

**Roxanne Helm-Stevens:** Second lead on the literature review, contributed to the writing of the manuscript, designed and coordinated research plan and organized the study. Responsible for data collection and provided the qualitative research design and analysis.

**Randy Fall:** Coordinated the data-analysis, interpreted data taking into account the unique characteristics of the research. Provided research findings, designed the research methodology reviewed and revision of the manuscript.

## Ethics

The authors are not aware of any ethical issues that may arise after the publication of this manuscript. The article is original and contains unpublished material. Moreover, all authors have read and approved the manuscript.

## References

- Astin, A.W., 1993. What Matters in College: Four Critical Years Revisited. 1st Edn., Jossey-Bass, San Francisco, ISBN-10: 078790838X, pp: 512.
- Astin, A.W., 2004. Why spirituality deserves a central place in liberal education. *Liberal Educ.*, 90: 34-41.
- Astin, A.W. and H.S. Astin, 2000. Leadership Reconsidered: Engaging Higher Education in Social Change. 1st Edn., W.K. Kellogg Foundation, Battle Creek, MI, pp: 106.
- Astin, A.W., H.S. Astin and J.A. Lindholm, 2010. Cultivating the Spirit: How College can Enhance Students' Inner Lives. 1st Edn., John Wiley and Sons, San Francisco, ISBN-10: 0470875712, pp: 224.
- Astin, A.W., L.J. Vogelgesan, E.K. Idera and J.A. Yee, 2000. How Service Learning Affects Students. 1st Edn., Higher Education Research Institute, University of California, Los Angeles, pp: 248.
- Astin, H.S. and C. Cress, 1998. The impact of leadership programs on student development. Higher Education Research Institute.
- Campbell, R.H., 2014. The role of service learning in developing spirituality and transforming students. The University of Memphis.
- Cohen, J. and D.F. Kinsey, 1994. 'Doing good' and scholarship: A service-learning study. *Journalism Educ.*, 48: 4-14.  
DOI: 10.1177/107769589304800402
- Darby, A., B. Longmire-Avital, J. Chenault and M. Haglund, 2013. Students' motivation in academic service-learning over the course of the semester. *Coll. Student J.*, 47: 185-191.
- Des Marais, J., T. Yang and F. Farzanehkia, 2000. Service-learning leadership development for youths. *Phi Delta Kappan*, 81: 678-680.
- Dirkx, J., 1997. Nurturing soul in adult learning. *New Direct. Adult Continu. Educ.*, 74: 79-88.  
DOI: 10.1002/ace.7409
- Dugan, J.P., 2006a. Explorations using the social change model: Leadership development among college men and women. *J. Col. Student Dev.*, 47: 217-225.  
DOI: 10.1353/csd.2006.0015
- Dugan, J.P., 2006b. Involvement and leadership: A descriptive analysis of socially responsible leadership. *J. Coll. Student Develop.*, 47: 335-343.  
DOI: 10.1353/csd.2006.0028.
- Dugan, J.P. and S.R. Komives, 2007. Developing leadership capacity in college students: Findings from a national study. National Clearinghouse for Leadership Programs, College Park, MD.
- Eyler, J. and D.E. Giles, 1999. Where is the Learning in Service-Learning. 1st Edn., Jossey-Bass, San Francisco, ISBN-10: 0787944831, pp: 315.
- Eyler, J., D.E. Giles and J. Braxton, 1997. The impact of service-learning on college students. *Michigan J. Community Service Learn.*, 4: 5-15.
- Fisher, C.D., 2000. Mood and emotions while working: Missing pieces of job satisfaction. *J. Organ. Behav.*, 21: 185-202.
- Foli, K.J., M. Braswell, J. Kirkpatrick and E. Lim, 2014. Development of leadership behaviors in undergraduate nursing students: A service-learning approach. *Nurs. Educ. Perspect.*, 35: 76-82.  
PMID: 24783721
- Groen, J. and J. Jacob, 2006. Spiritual transformation in a secular context: A qualitative research study of transformative learning in a higher education setting. *Int. J. Teach. Learn. Higher Educ.*, 18: 75-88.
- Harkavy, I. and L. Benson, 1998. De-platonizing and democratizing education as the bases of service learning. *New Direct. Teach. Learn.*, 73: 11-20.  
DOI: 10.1002/tl.7302



- Harrison, P.A., 2010. Casting a vote: A creative opportunity for service-learning. *J. Nurs. Educ.*, 49: 539-540. DOI: 10.1002/tl.7302
- Ilies, R. and T.A. Judge, 2002. Understanding the dynamic relationships among personality, mood and job satisfaction: A field experience sampling study. *Organ. Behav. Hum. Decis. Proc.*, 89: 1119-1139. DOI: 10.1016/S0749-5978(02)00018-3
- Jaques, D., 2000. *Learning in Groups: A Handbook for Improving Group Work*. 1st Edn., Psychology Press, ISBN-10: 0749430915, pp: 310.
- Kirlin, M., 2003. Civic skill building: The missing component in service programs? *Polit. Sci. Polit.*, 35: 571-575. DOI: 10.1017/S1049096502000872
- Komives, S.R., S.D. Longersbeam, J.E. Owen, F.C. Mainella and L. Osteen, 2006. A leadership identity development model: Applications from a grounded theory. *J. Coll. Student Dev.*, 47: 401-417. DOI: 10.1353/csd.2006.0048
- Komives, S.R., J.E. Owen, S.D. Longersbeam, F.C. Mainella and L. Osteen, 2005. Developing a leadership identity: A grounded theory. *J. College Student Dev.*, 46: 593-611. DOI: 10.1353/csd.2005.0061
- Koth, K., 2003. Deepening the commitment to serve: Spiritual reflection in service-learning. *About Campus*, 7: 2-8.
- Kouzes, J. and B. Posner, 2003. *The Leadership Challenge*. 3rd Edn., Jossey-Bass, San Francisco.
- Kuh, G.D., 2008. *High-Impact Educational Practices: What they are, who has Access to them and Why they Matter*. 1st Edn., Association of American Colleges and Universities, Washington, pp: 35.
- Lester, S.W., 2015. Melding service learning and leadership skills development: Keys to effective course design. *J. Exp. Educ.*, 38: 280-295. DOI: 10.1177/1053825915576196
- Mayhew, M., 2004. Exploring the essence of spirituality: A phenomenological study of eight students with eight different worldviews. *NASPA J.*, 41: 647-674. DOI: 10.2202/1949-6605.1392
- McLaughlin, E., 2010. The "real-world" experience: Students perspectives on service-learning projects. *Am. J. Bus. Educ.*, 3: 109-118. DOI: 10.19030/ajbe.v3i7.463
- Mezirow, J., 1991. *Transformative Dimensions of Adult Learning*. 1st Edn., Wiley, San Francisco, ISBN-10: 1555423396, pp: 272.
- Moely, B.E., M. McFarland, D. Miron, S. Mercer and V. Ilustre, 2002. Changes in college students' attitudes and intentions for civic involvement as a function of service-learning experience. *Michigan J. Commun. Service Learn.*, 9: 18-26.
- Neelankavil, J.P., 1994. Corporate America's quest for an ideal MBA. *J. Manage. Dev.*, 13: 38-52.
- Park, D., R. Helm, D. Kipley and D. Hancock, 2009. Connecting faith and personal values with the service learning experience to create more effective service learning. *Bus. Renaissance Q.*, 4: 61-76.
- Pascarella, E.T. and P.T. Terenzini, 2005. *How College Affects Students: A Third Decade of Research*. 1st Edn., Wiley, San Francisco, ISBN-10: 0787910449, pp: 848.
- Radecke, M.W., 2007. Service-learning and faith formation. *J. Coll. Character*, 8: 1-28. DOI: 10.2202/1940-1639.1618
- Saltmarsh, J., 2005. The civic promise of service learning. *Liberal Educ.*, 91: 50-56.
- Schaffer, M.A. and S.J. Peterson, 2001. *Teaching Undergraduate Research and Group Leadership Skills Through Service-Learning Projects*. In: *Service Learning: Curricular Applications in Nursing*, Poirrier, G. (Ed.), Jones and Bartlett Learning, Boston, ISBN-10: 0763714291, pp: 41-50.
- Schaffer, R.H., 2004. Service-learning in Christian higher education: Bringing our mission to life. *Christian Higher Educ.*, 3: 127-145. DOI: 10.1080/15363750490429417
- Seo, M., L.F. Barrett and J.M. Bartunek, 2004. The role of affective experience in work motivation. *Acad. Manage. Rev.*, 29: 423-439. DOI: 10.5465/AMR.2004.13670972
- Sikula, J. and A.S. Sikula, 2005. Spirituality and service learning. *New Direct. Teach. Learn.*, 104: 75-81. DOI: 10.1002/tl.216
- Soslau, E.G. and D.S. Yost, 2007. Urban service-learning: An authentic teaching strategy to deliver a standards-driven curriculum. *J. Exp. Educ.*, 30: 36-53. DOI: 10.1177/105382590703000104
- Taylor, M.L., 2005. A service-learning kaleidoscope of insights: conversations with mihaly csikszentmihalyi, theorist/systems change artist; bernard milano, practitioner/ foundation leader; and john saltmarsh, historian/service-learning educator. *Acad. Manage. Learn. Educ.*, 4: 363-376. DOI: 10.5465/AMLE.2005.18122427
- Tisdell, E.J., 2003. *Exploring Spirituality and Culture in Adult and Higher Education*. 1st Edn., John Wiley and Sons, San Francisco, ISBN-10: 0787971243, pp: 320.
- Tucker, M.L., A.M. McCarthy, J.A. Hoxmeier and M.M. Lenk, 1998. Community service learning increases communication skills across the business curriculum. *Bus. Commun. Q.*, 61: 88-99. DOI: 10.1177/108056999806100211
- Welch, M. and K. Koth, 2009. Spirituality and service learning: Parallel frameworks for understanding students' spiritual development. *Spirituality Higher Educ.*, 5: 1-9.

Welch, M. and K. Koth, 2013. A metatheory of spiritual formation through service-learning in higher education. *J. College Student Develop.*, 54: 612-627.  
 DOI: 10.1353/csd.2013.0089

Wurr, A.J. and C.H. Hamilton, 2012. Leadership development in service-learning: An exploratory

investigation. *J. Higher Educ. Outreach Engage.*, 16: 213-239.

Zlotkowski, E.A., N.V. Longo and J.R. Williams, 2006. *Students as Colleagues: Expanding the Circle of Service-Learning Leadership*. 1st Edn., Campus Compact, Providence, ISBN-10: 0972939458, pp: 279.

## Appendix

First Data Set, Service-Learning Project Survey

INSTRUCTIONS: Use the scale below to indicate the extent to which you agree with the value expressed in each statement.

1	2	3	4	5	6
strongly disagree	moderately disagree	mildly disagree	mildly agree	moderately agree	strongly agree

1.	I felt recognized for a job well done during my service learning experience.	1	2	3	4	5	6
2.	I feel this program has made me a better leader.	1	2	3	4	5	6
3.	During my service, I feel I learned to prevent problems before they occur.	1	2	3	4	5	6
4.	I believe I have done an excellent job at stimulating the intellect of those I taught.	1	2	3	4	5	6
5.	I felt I had a high level of responsibility in my service learning experience.	1	2	3	4	5	6
6.	While working in this program, I sought God's love and support on a daily basis.	1	2	3	4	5	6
7.	I managed all conflict well when working in the service learning program.	1	2	3	4	5	6
8.	I have learned to inspire others as a result of this program.	1	2	3	4	5	6
9.	I believe God was behind every decision I chose to make.	1	2	3	4	5	6
10.	Following my service learning, I can honestly say I learned to resolve issues after they occurred.	1	2	3	4	5	6
11.	During my service learning experience I often turned to God when I needed comfort.	1	2	3	4	5	6
12.	I took pride in the work I did during this experience.	1	2	3	4	5	6
13.	I considered every individual when doing my service learning training.	1	2	3	4	5	6
14.	My service learning experience led me to personal growth.	1	2	3	4	5	6
15.	While working in the service learning program, I looked to God for strength and guidance.	1	2	3	4	5	6
16.	I was able to clearly identify a problem during my service learning experience.	1	2	3	4	5	6
17.	I feel that God was supporting me during my training experience.	1	2	3	4	5	6
18.	I believe the service learning program has prepared me to be influential	1	2	3	4	5	6
19.	I learned to anticipate conflict while participating in this program.	1	2	3	4	5	6
20.	I believe my service learning experience led me to a higher level of personal attainment.	1	2	3	4	5	6
21.	Age: _____						
22.	Gender: <input type="checkbox"/> Male <input type="checkbox"/> Female						
23.	Income: <input type="checkbox"/> 0-25K <input type="checkbox"/> 26-50K <input type="checkbox"/> 50-75K <input type="checkbox"/> 76-100K <input type="checkbox"/> 100K+						
24.	Ethnicity: <input type="checkbox"/> African American/Black <input type="checkbox"/> Asian <input type="checkbox"/> Caucasian <input type="checkbox"/> Hispanic/Latino/Latina <input type="checkbox"/> Other:						
25.	GPA: _____						

Second Data Set, Service-Learning Project Survey

*Demographics:*

1. Gender:  Male  Female
2. Ethnicity (check all that apply):  Caucasian  Hispanic  African American  Asian-American/Pacific Islander  Native American  Other \_\_\_\_\_
3. Personality Type:  Type A  Type B  Both  Neither
4. Learning Style:  Visual  Auditory  Kinesthetic
5. Have you participated in a service-learning project before?  Yes  No

Using the 7-point Likert scale below, please answer the following questions:

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Slightly Disagree	Neither Disagree nor Agree	Slightly Agree	Agree	Strongly Agree

*Motivation:*

1. This service-learning project did not improve my ability to work with others.	1	2	3	4	5	6	7
2. I felt like I had a specific purpose being at my service-learning site.	1	2	3	4	5	6	7
3. I feel encouraged regardless of whether my efforts are noticed or not.	1	2	3	4	5	6	7
4. I was discouraged when I did not see any visible improvements at my service-learning site.	1	2	3	4	5	6	7
5. It was important to me to feel a sense of acceptance within my group.	1	2	3	4	5	6	7
6. It was difficult to feel motivated within my group when we had disagreements.	1	2	3	4	5	6	7
7. I enjoy opportunities to share my ideas within a group setting.	1	2	3	4	5	6	7
8. I am discouraged when I feel like I have to do all the work in a group.	1	2	3	4	5	6	7
9. I come up with my best ideas when I am alone as opposed to when I am working with my group.	1	2	3	4	5	6	7
10. Upon completion of this service-learning project, I have an improved sense of motivation in life.	1	2	3	4	5	6	7

*Leadership:*

1. I would not have participated in the service-learning project if I had not received class credit for it.	1	2	3	4	5	6	7
2. Working with the students at my service-learning site taught me better ways to communicate with others.	1	2	3	4	5	6	7
3. It was difficult for me to speak to the students at the service-learning site.	1	2	3	4	5	6	7
4. I felt every member should have the freedom to express their creativity within the group.	1	2	3	4	5	6	7
5. It is difficult to proceed with something when there is uncertainty.	1	2	3	4	5	6	7
6. I am flexible when it comes to making changes.	1	2	3	4	5	6	7
7. I am usually the one who decides what the group should do and how we should accomplish it.	1	2	3	4	5	6	7
8. I am often able to settle conflict when it arises within the group.	1	2	3	4	5	6	7
9. I push my group to do better when another group is doing better than us.	1	2	3	4	5	6	7
10. It is difficult for me to trust others to do their portion of work outside of group meetings.	1	2	3	4	5	6	7
11. Upon completing this service-learning project, I have an improved sense of leadership.	1	2	3	4	5	6	7

*Teamwork:*

1. My service-learning project gave me a better opportunity to form relationships with my peers.	1	2	3	4	5	6	7
2. I found it difficult to collaborate with the other members of my service-learning group.	1	2	3	4	5	6	7

3. I do my best work when I am working alone.	1	2	3	4	5	6	7
4. I prefer working in a group with people I know.	1	2	3	4	5	6	7
5. I am okay working in groups as long as I am in charge.	1	2	3	4	5	6	7
6. I find it difficult to agree on shared standards of behavior within my group.	1	2	3	4	5	6	7
7. I work better in small groups (3-5 people) as opposed to larger groups (6 or more people).	1	2	3	4	5	6	7
8. Groupthink (group pressure to conform) makes it difficult for me to contribute to my group.	1	2	3	4	5	6	7
9. I do not see the necessity to meet with my group in person.	1	2	3	4	5	6	7
10. Every member of the group should use their own abilities to benefit the project.	1	2	3	4	5	6	7
11. After working on this learning service project, I am better able to work with a group of peers.	1	2	3	4	5	6	7

Diversity:

1. At times I felt uncomfortable being around the students because of their difference in backgrounds.	1	2	3	4	5	6	7
2. I was introduced to new world views while working with the students.	1	2	3	4	5	6	7
3. I thrive in environments that challenge me to think differently.	1	2	3	4	5	6	7
4. The diversity each member brought to the group benefitted us.	1	2	3	4	5	6	7
5. I find myself opposed to ideas that are different from my own.	1	2	3	4	5	6	7
6. There is more than one way to see most things and I accept that.	1	2	3	4	5	6	7
7. I understand and accept that everyone has their own point of view.	1	2	3	4	5	6	7

Spirituality:

1. I felt inadequate to share my faith with the students at my service learning site.	1	2	3	4	5	6	7
2. I viewed my service-learning project as a form of ministry.	1	2	3	4	5	6	7
3. My actions at my service-learning site served as an example of my faith.	1	2	3	4	5	6	7
4. I feel I have grown in my faith after completing this service-learning project.	1	2	3	4	5	6	7

Mark S. Dickerson has been practicing law since 1976 and has served in private practice, as general counsel for a multi-national corporation listed on the New York Stock Exchange and as a member of a crisis management team addressing the legal and financial issues facing a large faith-based organization prosecuted for fraud and involved in one of the largest charitable bankruptcy proceedings in U.S. history. Dr. Dickerson currently serves as Sr. Vice President and General Counsel of Azusa Pacific University. He received a B.S. in mathematics from Grand Canyon University, a J.D. from Harvard Law School, a M.A. in Theology from Fuller Theological Seminary and both an M.A. and a PhD in Human and Organizational Systems from Fielding Graduate University. Dr. Dickerson teaches graduate courses in both organizational leadership and human resource management. He has authored and co-authored several articles on organizational leadership, management education and theology.

Roxanne Helm-Stevens, DBA, is a professor and chair of business management programs at Azusa Pacific University. Dr. Helm-Stevens earned her doctorate of strategic management from Alliant International University. Her areas of teaching include organizational behavior, management, performance improvement and employee development. She actively participates in national and international conferences, presenting and publishing on the topics of strategic business management, organizational behavior, educational leadership and service-learning. She serves on several editorial boards for national and international journals and has co-authored two textbooks.

Randy Fall, Ph.D. is a Professor in the Department of School Counseling and School Psychology and the Department of Educational Leadership at Azusa Pacific University. Dr. Fall earned his doctorate from UCLA in 2002. He teaches courses in psycho-educational assessment and in research methods. His personal research agenda includes large-scale and individual assessment and sociocultural approaches to cognition. He also has experience as a school psychologist and consultant for several school districts in southern California.