DIFFERENCES IN STUDENT LEARNING OUTCOMES THAT UTILIZE HIGH IMPACT PRACTICES

Lori Simons\textsuperscript{a*}, Charlotte Marshall\textsuperscript{b}, Nancy Blank\textsuperscript{c}, Natalie Weaver\textsuperscript{d}

\textsuperscript{a}Widener University, Chester, Pennsylvania 19013, USA, 610-499-4002
\textsuperscript{b}Widener University, Chester, Pennsylvania, 19013, USA, 610-499-4000
\textsuperscript{c}Widener University, Chester, Pennsylvania, 19013, USA, 610-499-4000
\textsuperscript{d}Widener University, Chester, Pennsylvania, 19013, USA, 610-499-4000

Abstract

This study compares student learning outcomes for 1,500 students enrolled in psychology courses that utilize academic- and cultural-based service-learning and experiential learning (i.e., internships) as primary pedagogical methods. A repeated measures analyses of variance with post hoc Tukey HSD analyses were conducted to measure differences in student learning outcomes from the beginning to the end of the semester for academic-based service-learners (ABSL), cultural-based service-learners (CBSL), and experiential learners (EL). There were significant Group x Time interaction effects. Experiential learners and academic-based service-learners increased their guilt and shame regarding their own Whiteness from the beginning to the end of semester compared to cultural-based service-learners. Cultural-based service-learners also increased their intercultural relationships, civic responsibility, interpersonal engagement, and understanding of diversity content by the end of the semester. ABSL, CBSL, and EL contribute to different student learning outcomes. The alignment between HIPs and student learning outcomes is discussed.

Keywords: Academic-Based Service-Learning, Experiential Learning, Cultural-Based Service-Learning, High Impact Practices, Student Learning Outcomes

© 2020 Published by European Publisher. www.europeanpublisher.com

*Corresponding author.
E-mail address: Insimons@widener.edu

doi: 10.15405/ejsbs.266

This is an Open Access article distributed under the terms of the Creative Commons Attribution-Noncommercial 4.0 Unported License, permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

Received: 09 September, 2019; Revised: 13 December, 2020; Accepted: 29 December, 2020
1. Introduction

Institutions of higher education (IHE) have incorporated high-impact practices in liberal arts curricula as a way to teach students to think critically about the conditions that lead to racial and economic disparities and ultimately to develop into socially-responsible citizens (Kuh & O’Donnell, 2013; Quaye & Harper, 2007). High impact practices assist students with achieving these learning goals using a broad range of courses and strategies from service-learning to internships (Kuh & O’Donnell, 2013). Academic-based service-learning (ABSL) is a pedagogical approach that combines academic study with community service (Eyler, 2002); while, cultural-based service-learning (CBSL) combines diversity learning with service-learning (Baldwin, Buchanan, & Rudisill, 2007; Sterling, 2007). CBSL and ABSL are designed to promote reciprocal learning in which students and recipients (i.e., community partners) learn from each other. Internships differ from service-learning in that field experiences are designed to promote student learning rather than reciprocal learning and typically involve supervised discipline- and career-related work for academic credit (Sigmon, 1996; Sweitzer & King, 2009). The purpose of this study is to examine differences in student learning outcomes over the course of the semester by type of pedagogy among students enrolled in psychology courses. The types of pedagogy differ by content and dosage. Students enrolled in ABSL courses were exposed to a high level of community service and a low level of diversity content, while those students enrolled in CBSL courses were exposed to a high level of both community service and diversity content, and those students enrolled in EL courses were exposed to a low level of both community service and diversity content. The aim of this study is to identify outcomes for various HIPs with the goal of assisting faculty in choosing pedagogical strategies which will meet their learning objectives.

Research on student outcomes using ABSL, CBSL, and EL is mixed. The findings from this study contribute to better understanding of the intricacies of each pedagogy. According to the transformational perspective, student participation in experiential learning challenges preconceived assumptions and teaches them to reformulate their attitudes (Cipolle, 2010; Mitchell et al., 2015). Investigations on ABSL and CBSL counter this perspective and suggest that some students change while other students retain their preconceived assumptions about social justice issues (Caswell, 2018; Simons, et al, 2013; Torres-Harding, Diaz, Schamberger, & Carollo, 2015). Conley and Hamlin (2009) conducted a case analysis on reflections from five students enrolled in a semester-long, first-year seminar at an inner-city college. These researchers found that all five participants changed their thoughts about power and privilege and gained an understanding of the conditions that lead to inequities in society. Yeh (2010) also conducted a content analysis of participant responses. In this study, a semi-structured
interview was administered to a purposeful sample of 10 students enrolled in service-learning courses at two research universities. Her findings indicate that participants gain awareness and understanding of the disenfranchised communities in which they worked. Brody and Wright (2004) propose that service-learning provides students with an opportunity for informal interracial contact with recipients who differ from them in race and class at placement sites located in metropolitan communities, and these interactions encourage them to rethink assumptions and reformulate attitudes about diverse recipients.

In contrast, Dunlap, Scoggin, Green, and Davi (2007) suggest that students retain their stereotypes through participation in service activities that reinforce the power dynamic between White students and service recipients. Boyle-Baise and Langford (2004) conducted a case study with eight students enrolled in a social justice seminar and observed that students acquired limited information about their own privilege from the beginning to the end of service. Green (2001) also detected that students were resistant to recognizing how racial privilege influences interactions with recipients after analyzing response papers from 14 students in a social justice seminar. Students may retain stereotypes after engaging in interracial interactions with recipients that reinforce their prejudicial attitudes or participating in service experiences that do not negate their beliefs (Bell, Horn, & Roxas, 2007). In fact, there is the potential for students to leave service or field experiences with little understanding of the systematic nature of racial and economic disparities unless diversity and social justice issues are explicit course objectives and outcomes (Simons, Fehr, Blank, Barnes, Georganas, & Manampuram, 2012b). Failure to find service impacts on student diversity attitudes may reflect a limitation in the course content or instructional strategy (Moely, McFarland, Miron, Mercer, & Illustre, 2002). ABL courses that do not include race, class, or culture content will not challenge students to think about how race and class influence their interactions with recipients; therefore, service experiences may reinforce the “power dynamic” between White students and diverse recipients (Moely et al., 2002, p. 24).

The few studies that have systematically assessed the impact of internships on student learning point to the transformation of student attitudes (Sweitzer & King, 2009). Several researchers describe internship components (Bailey, Barber, & Nelson, 2017; Miller, Carr, Utter, Styron, & Steiner, 2017; Motiff & Roehling, 1994; VandeCreek & Fleischer, 1984) or explain how fieldwork assists students achieve learning goals (Hutz, Gomes, & McCarthy, 2006; Von Dras & Miller, 2002). Reddy and Hill (2002) conducted focus groups with 32 psychology majors and discovered that students acquire communication skills, time-management, and responsibility through participation in an internship. Weiss (2004) found that students who participated in a psychology internship course increased their content...
knowledge by the end of the term (Simons et al., 2011). conducted a survey with 38 students enrolled in a practicum/internship program. The results revealed that students improved their multicultural skills from the beginning to the end of the internship. Field supervisors also reported that students demonstrated content knowledge, communication and time-management skills, and cultural competence in their fieldwork. Additional scholarship is necessary to disentangle impacts from diversity content that are utilized in CBSL and the service context (i.e., service-learning vs. internships). Specifically, research is needed to evaluate if and what high impact practices will assist students learn about the complexities of race and culture in psychology courses. Our study serves as a next step in this area of research.

2. Research Question

We sought to answer the question: Are there differences in student learning outcomes from the beginning to the end of the semester for students enrolled in psychology courses that utilize ABSL, CBCL, and EL?

3. Method

A cross-sectional research design was used to measure differences in student learning for students enrolled in psychology courses that utilize HIPs from 2002 through 2015. All students completed an informed consent form, a demographic information sheet, and a survey that measured Civic Action Skills Questionnaire (CASQ), the Color-blind Attitudes Scale (CoBRAS), the Multicultural Counseling Inventory (MCI), the Multicultural Environmental Inventory (MEI), the Multigroup Ethnic Identity Measure (MEIM), the Scale of Ethnocultural Empathy (SEE), the Psychological Costs of Racism to Whites Scale (PCRW), the Socially Responsible Leadership Scale (SRLS), the Three Aspects of Engagement, and the Toronto Empathy Questionnaire (TEQ). Students completed the survey in class and gave it directly to the researcher. An online version replaced the paper-and-pencil survey in spring 2010. Additional items measuring citizenship, ethnocultural empathy, empathetic reactions to racism, and multicultural content and course climate were included in the online survey. Students were given a link to access the survey at the beginning and end of the term. Surveys took approximately 30 minutes to complete.

3.1. Participant

A total of 1,500 undergraduate students enrolled in ABSL (52%), CBSL (17%), and EL (also known as internship) (31%) courses during 2002-2015 at a private teaching university in a northern metropolitan area took part in the study. The majority of students were White
(78%) and female (82%) with a mean age of 18.60 years (SD= 3.23). The remaining students self-identified as African-American (11%), Latino/a (3%), Asian-American (3%), Indian (3%), and Biracial or Multiracial (2%), male (17%) and transgender (1%). Of these students, slightly more than half of them were freshmen (59%), and the remaining students were sophomores (27%), juniors (7%) and seniors (7%) when they took part in the study. Slightly more than half (59%) of the students reported taking at least one service-learning course prior to their current service or internship course.

3.2. Course Content

3.2.1. Academic-Based Service-Learning. Educational Psychology

Early Learners is a three-credit course intended to prepare students to work with children at a public school. This course requires a service-learning field placement to meet the National Council Accreditation for Teacher Education and the Pennsylvania Department of Education standards. The class begins with a lecture on service-learning. The next two classes consist of a two-hour orientation by guest speakers representing the public schools in the Chester-Upland School District. Students are required to complete 15 hours of service in which they tutor or mentor children who are / may differ from them in race, ethnicity, and / or socioeconomic status. Students also are required to answer structured reflection questions before, during, and after service. These questions require students to apply their service experiences to the course content, integrate course readings to support their perspectives, and reflect on their thoughts and feelings about both the service context and the course content. The rest of the class is devoted to lecture and discussion that correspond to topics on measurement theory, achievement tests, developmental, behavioral, and motivational theories, and diversity in school settings. Students also complete three examinations and a paper. The paper assignment requires students to watch a diversity film (i.e., Stand and Deliver, Dangerous Minds) so they can acquire a deeper understanding of educational disparities. Students then summarize the movie, describe the main character, compare and contrast the demographic characteristics of this character to the child with whom they were paired at the school, and apply psychological theories from various scholars (i.e., Bruner, Erikson, Piaget, Vygotsky, and Werner) to explain the development of the main character. Students are required to describe what they learned about multicultural education in a public school. Finally, students take part in a closing reception at the service placement and participate in a reflection on their learning throughout the semester.
3.2.2. Cultural-Based Service-Learning

Multicultural Psychology is a three-credit course that fulfills a distribution requirement in the psychology and African and African American Studies curricula. In-class time begins with a discussion on student concerns about taking this class, guidelines for this course, and a lecture on multiculturalism. The next two classes consist of an orientation on service-learning activities by guest speakers representing different placement sites.

At all placement sites, the university students who are predominantly White and working, middle, and upper class differ from the children they are paired with. The first two placements require students to assist the teacher in his / her classroom and to tutor or mentor children. The third placement requires students to work with high school students on their capstone project. The fourth placement requires students to work with children or adults at a community-based program. All placement sites are located in an urban lower-income community. Students are required to complete 15 hours of service. The rest of the course is devoted to lecture, reflective and experiential activities, and discussion. In contrast to the ABSL course, topics covered in detail include multicultural psychology, stereotypes, ageism, sexism, and other isms, classism and racism, racial identity development, oppression and privilege, prejudice reduction, and cultural competence. Experiential activities (i.e., crossing-the-line) and video-clips (i.e., People Like Us, Blue Eyed) are used to stimulate reflection and discussion.

Students are required to complete a multicultural observation paper, a movie critique of a diversity film, an intercultural interview paper, and reflections about their course and service experiences. The multicultural observation is an immersion experience. Students attend an activity associated with a culture or ethnic group that is distinctively different from them. For example, some students attend a church service other than their own, dine at a restaurant that serves ethnic food, or go to a part of the community or city to which they have never been. Then they write a short description about what they did, how it felt while they were doing it, and what they learned. Students are also required to watch a diversity film (i.e., Crash, Save the Last Dance), apply diversity theories to explain the main theme of the movie, and describe what they did or did not learn in terms of racial identity development and multicultural competence (i.e., awareness, knowledge, & skills). In addition, students are required to complete an intercultural interview paper. This assignment requires students to develop an interview on any topic related to multicultural psychology (i.e., classism, ageism, racism), interview two individuals who differ in one cultural characteristic (i.e., age, race, religion, sexuality, nationality, education, gender, or socioeconomic status), and compare and contrast their responses. Students integrate theory and research to explain the main findings from the
interviews. Students are also required to complete structured reflection questions after each class and service experience so they can critically analyze their thoughts and feelings about race and class concepts within the course and service context over the semester. The course ends with a social network activity and a reflective discussion about how student concerns about taking this class have changed throughout the semester.

3.2.3. Internship

The internship program is a sequential model comprising a professional development seminar and an internship. The professional development seminar is designed as a one-credit course in which students learn about the logistics of setting up an internship. In-class time begins with an exploration of students' academic or career aspirations. Guest speakers present about their organizations, the requirements for an internship, and how to go about obtaining a position. Students learn about professional and ethical behaviors that are relevant to each site and participate in active learning including case studies, role-playing, mock interviews, and reflection assignments. Students participate in a mock interview that is video-taped and subsequently reflect on their own performance. The mock interview reflection requires students to evaluate their own performance for strengths and for growth, explain how they arrived at these conclusions, and discuss how they plan to improve upon these areas for their "actual" interviews. Students are further required to complete a goal sheet that requires them to describe what they want to learn from an internship and explain how this experience will assist them in achieving their career goals. This information is used to pair students with placement sites. Students obtain the necessary paperwork (i.e., child abuse & criminal history clearances, malpractice insurance) and are matched with a placement site by the end of the course.

After successful completion of the professional development seminar, students enroll in an internship. The internship provides students with opportunities to gain extensive “real world” experience related to psychology (American Psychological Association, 2005). Placements include community mental-health centers, drug and alcohol counseling centers, rehabilitation and community centers, intervention and educational programs, and other agencies in which students are able to utilize helping skills and put their knowledge of psychology into practice.
3.3. Measures and Procedure

The measures described below were included in pretest and posttest surveys to assess student learning outcomes for each course and HIP as shown in Table 1.

A Demographic Questionnaire, developed by the researchers, was used to gather information on gender, race, age, and year in school.

The Civic Attitudes and Skills Questionnaire (CASQ), developed by Moely, Mercer, Illustre, Miron, and McFarland (2002b), assessed civic attitudes and skills. The CASQ, an 84-item self-report questionnaire, yields scores on six scales: 1. Civic Action (respondents evaluate their intentions to become involved in the future in some community service); 2. Interpersonal and Problem-Solving Skills (respondents evaluate their ability to listen, work cooperatively, communicate, make friends, take the role of the other, think logically and analytically, and solve problems); 3. Political Awareness (respondents evaluate their awareness of local and national events and political issues); 4. Leadership Skills (respondents evaluate their ability to lead); 5. Social Justice Attitudes (respondents rate their agreement with items expressing attitudes concerning the causes of poverty and misfortune and how social problems can be solved); and 6. Diversity Attitudes (respondents describe their attitudes toward diversity and their interest in relating to culturally different people). Internal consistencies for each scale reported by Moely, McFarland, Miron, Mercer and Illustre (2002a) ranged from .69 to .88, and test-retest reliabilities for each scale ranged from .56 to .81. This scale has a strong level of reliability ($\alpha=.93$) among the current student group. The interpersonal problem-solving skills and social justice attitudes subscales were used in this study.

The Color-Blind Racial Attitude Scale (CoBRAS), developed by Neville, Lilly, Duran, Lee, and Browne (2000), assessed contemporary racial attitudes. The CoBRAS, a 20-item self-report measure, yields scores on three scales: 1. Unawareness of Racial Privilege (respondents evaluate their lack of awareness of White racial privilege); 2. Unawareness of Institutional Discrimination (respondents evaluate their lack of awareness of racial issues associated with social policies, affirmative action, and discrimination); and 3. Unawareness of Blatant Racial Issues (respondents evaluate their lack of awareness of blatant racial problems in the United States). Cronbach’s coefficient alpha for each scale ranged from .86 to .88 (Neville, Lilly, Duran, Lee, & Browne, 2000).

The Multicultural Counseling Inventory (MCI), developed by Sodowsky, Taffe, Gutkin, and Wise (1994) measured cultural competence on four scales: 1. Awareness (respondents assess the degree of their cultural awareness); 2. Knowledge (respondents assess the degree of their cultural knowledge); 3. Skills (respondents assess the degree of their cultural
skills); and 4. Relationship (respondents assess their interactional process and relationships with others who differ from them). Cronbach's coefficient alpha for each scale ranged from .68 to .80. This scale has a strong level of reliability (α = .81) among the current student group. The awareness, knowledge and relationship subscales were used in this study.

The Multicultural Environmental Inventory (MEI), developed by Pope-Davis, Liu, Nevitt, and Toporek (2000) assessed the degree to which multiculturalism is integrated in the curriculum on four subscales: 1. Curriculum and Supervision (respondents assess the degree to which multicultural issues are integrated into the course); 2. Climate and Comfort (respondents assess the degree to which their comments are valued in class); 3. Honesty in Recruitment (respondents assess the degree to which they are honest about the climate when recruiting); and 4. Multicultural Research (respondents assess how much multicultural issues are integrated in research). The internal consistency reliability estimates for the four subscales ranged from .83 to .92. The curriculum and supervision and the climate and comfort subscales that were used in this study were slightly modified to evaluate the course content and classroom climate in an undergraduate diversity course.

The Multigroup Ethnic Identity Measure (MEIM), developed by Phinney (1992), measured two aspects of students' ethnic identity: 1. Ethnic Identity Achievement based on exploration and commitment; and 2. Sense of Belonging to and attitudes toward, one's ethnic group. Mean scores were calculated to produce two subscale scores. Reliability for this scale is strong (alpha = .80).

The Psychological Costs of Racism to Whites Scale (PCRW), developed by Spanierman and Heppner (2004), measures the costs of racism to Whites as emotional, cognitive and behavioral consequences experienced by White individuals as a result of racism on three subscales: 1. White Empathetic Reactions Toward Racism (respondents assess their feelings about racial injustice); 2. White Guilt (respondents assess the degree to which they feel responsible for racism) and 3. White Fear of Others (respondents assess how much they trust or distrust people who culturally differ from them). Items were added together to produce three subscales. The internal consistency for each subscale ranged from .69 to .95. Cronbach's coefficient alpha for each scale ranged from .63 to .78. The White empathetic reactions toward racism and White guilt subscales were used in this study.

The Scale of Ethnocultural Empathy, developed by Wang, Davidson, Yakushko, Savoy, Tan, and Bleier (2003), measures cultural empathy on four subscales: 1. Empathetic Feeling and Expression (respondents assess their ability to take a position when they are offended by a joke or comment about a group who culturally differs from them); 2. Empathetic Perspective-Taking (respondents assess the degree to which they can put themselves in the
shoes of someone who is culturally different); 3. Acceptance of Cultural Differences (respondents assess their acceptance of others who culturally differ from them); and 4. Empathetic Awareness (respondents assess their ability to recognize how society portrays people based on racial or ethnic stereotypes). Items are added together to produce a total scale and four subscales. Cronbach's coefficient alpha for the total scale and the four subscales ranged from .71 to .91. The four subscales were used in this study.

The Socially Responsible Leadership Scale, developed by Dugan (2006), measured characteristics associated with leadership on eight subscales: 1. Consciousness of Self (respondents assess their level of comfort in expressing oneself); 2. Congruence (respondents assess their ability to take a stand when they believe in something); 3. Commitment (respondents assess their ability to follow through on tasks); 4. Common Purpose (respondents assess their ability to work with others who share collective values); 5. Collaboration (respondents assess their belief in having better outcomes as a result of people working together); 6. Controversy with Civility (respondents assess the belief that hearing differences in opinions enriches thinking); 7. Citizenship (respondents assess the importance of playing an active role in communities); and 8. Change (respondents assess the degree to which they work well in changing environments). The internal consistency for each scale ranged from .69 to .92. The citizenship subscale was used in this study and has strong level reliability (α=.90).

The Toronto Empathy Questionnaire, developed by Spreng, McKinnon, Mar, and Levine (2009), measures empathy. Sixteen items are added together to produce a total scale. The test-retest reliability score was .81 and Cronbach's coefficient alpha was .87.

The Three Aspects of Engagement, developed by Gallini and Moely (2003), assessed students' views of their engagement. This 27-item self-report questionnaire yields scores on three scales: 1. Community Engagement (respondents evaluate the extent to which their attitudes changed as a result of course participation, working with people of different backgrounds, and feeling connected to the community): 2. Academic Engagement (respondents describe their satisfaction with the academic course and university, and their connectedness to their studies and field of interest): and 3. Interpersonal Engagement (respondents evaluate the course's influence on their ability to effectively work with others, communicate with other students, and make friends). Items are added together to produce three subscale scores. Cronbach's coefficient alpha for each scale ranged from .85 to .98. The community and interpersonal engagement subscales were used in this study.
Table 1. The Alignment Among Courses, Course Objectives, HIPs, and Survey Measures

| Courses               | Course Objectives                                                                 | HIPs       | Survey Measures                                  |
|-----------------------|-----------------------------------------------------------------------------------|------------|--------------------------------------------------|
| Educational PSY       | (At the end of this course, students will be able to demonstrate knowledge about and skills in) | ABSL       | CASQ-Interpersonal Problem-Solving Skills and Social Justice |
|                       | 1. Educational inequities, diversity, and Social Justice Issues                    |            | Three Aspects of Engagement-Interpersonal and Community Engagement |
|                       | 2. Critical thinking (problem-solving skills)                                     |            | SRLS-Citizenship                                 |
|                       | 3. Community and Interpersonal Engagement                                         |            |                                                  |
|                       | 4. Civic and Social Responsibility                                                |            |                                                  |
| Multicultural PSY     | 1. Multicultural Awareness                                                        | CBSL       | CoBras-White privilege, Institutional Discrimination Attitudes |
|                       | 2. Multicultural Knowledge                                                        |            | SEE/Ethnocultural Empathy-Awareness, Acceptance, Feelings, and Perspective-Taking |
|                       | 3. Multicultural Skills                                                           |            | MCI-Awareness, Knowledge, Intercultural Relationships and Skills |
|                       | 4. Racial-cultural-ethnic identity development                                     |            | MEI-Course and Climate                           |
|                       | 5. Understanding the diversity material; diversity and racial attitudes            |            |                                                  |
|                       | 6. Perspective-Taking Skills                                                      |            |                                                  |
| Practicum & Internship| 1. Critical thinking skills                                                       | EL         | TEQ/General Empathy                              |
|                       | 2. Effective communication Skills                                                 |            | SEE/Ethnocultural Empathy-Awareness, Acceptance, Feelings, and Perspective-Taking |
|                       | 3. Professional and/or Civic Leadership                                           |            | CASQ-Interpersonal Problem-Solving Skills and Social Justice |
|                       | 4. Civic and Social Responsibility                                                |            | SRLS-Citizenship                                 |

4. Results

A repeated measures analyses of variance with post hoc Tukey HSD analyses were conducted to evaluate student learning outcomes for academic-based service-learners (ABSL), cultural-based service-learners (CBSL), and experiential learners (EL) from the beginning to the end of the semester. The type of HIP (i.e., ABSL, CBSL, and EL) was used as the independent variable and pretest and posttest survey scores were used as dependent variables. In Table 2, there were significant Group (i.e., HIP) x Time interaction effects. In Table 3, post hoc analyses revealed significant differences in students' White guilt attitude, multicultural relationship, interpersonal engagement, multicultural environment (i.e., course & climate), and citizenship scores for students exposed to different HIPs. Compared to cultural-based service-learners, experiential learners and academic-based service-learners increased White guilt F (2,
207) = 5.80, p<.01 and decreased multicultural relationship F (2, 296) = 3.79, p<.05 and interpersonal engagement F (2, 194) = 3.11, p<.05 scores from the beginning to the end of semester. Experiential learners had lower ratings for the integration of the diversity content in the course F (2, 251) = 8.29, p<.001. This group of students reported lower scores in climate F (2, 220) = 5.28, p<.01 and citizenship F (2, 255) = 6.06, p<.01 over the semester compared to both groups of service-learners.

Table 2. Mean Scores, Standard Deviations, and F Ratios for Pre- and Posttest Scores for CASQ, CoBRAS, MCI, MEI, MEIM, PCRW, SEE, SRLS, TEQ, and Three Aspects of Engagement as a Function of ABSL, CBSL and Experiential Learning

| Measure            | Time Points | F ratios          | Time x Group | Group X Time x Group |
|--------------------|-------------|-------------------|---------------|----------------------|
|                    | Pretest     | Posttest          |               |                      |
| CASQ               | M           | SD                | M             | SD                   | 24.07*** | 63.62 |
| Interpersonal Skills | 3.59        |                   | 48.47         | 63.62                |          |      |
| ABSL               | 46.22       | 7.42              | 48.47         | 8.30                 |          |      |
| CBSL               | 47.80       | 7.04              | 48.21         | 7.73                 |          |      |
| Experiential Learning | 41.43       | 7.90              | 41.83         | 6.39                 |          |      |
| Total              | 45.43       | 7.79              | 46.83         | 8.23                 |          |      |
| Social Justice     |             |                   |               |                      | 16.42*** | 1.43 |
| ABSL               | 17.37       | 8.98              | 16.88         | 8.61                 |          |      |
| CBSL               | 19.11       | 8.57              | 19.82         | 9.17                 |          |      |
| Experiential Learning | 13.09       | 5.73              | 12.51         | 3.25                 |          |      |
| Total              | 16.62       | 8.44              | 16.35         | 8.11                 |          |      |
| CoBRAS             |             |                   |               |                      | 11.07*** | 11.87*** | .56 |
| White Privilege    |             |                   |               |                      |          |      |
| ABSL               | 21.25       | 5.37              | 19.16         | 5.32                 |          |      |
| CBSL               | 18.90       | 5.67              | 17.52         | 5.50                 |          |      |
| Experiential Learning | 22.07       | 5.17              | 21.06         | 5.61                 |          |      |
| Total              | 20.91       | 5.17              | 19.37         | 5.61                 |          |      |
| Institutional Discrimination | 6.13* | 4.89* | .04 |
| ABSL               | 19.59       | 3.49              | 18.80         | 3.97                 |          |      |
| CBSL               | 18.54       | 3.97              | 17.75         | 4.52                 |          |      |
| Experiential Learning | 20.13       | 3.92              | 19.51         | 3.97                 |          |      |
| Total              | 19.51       | 3.79              | 18.78         | 4.15                 |          |      |
| Racism             |             |                   |               |                      | .79      | 1.12  | .32 |
| ABSL               | 13.33       | 3.71              | 13.40         | 3.70                 |          |      |
| CBSL               | 12.89       | 3.46              | 12.41         | 3.76                 |          |      |
| Experiential Learning | 13.33       | 3.71              | 13.01         | 3.96                 |          |      |
| Total              | 13.21       | 3.63              | 13.00         | 3.81                 |          |      |

Note. ¹Differential change by service-learners and experiential learners, reflected in an interaction of Group by Time, at ***p<.000, **p<.01, *p<.05. ANOVA F ratios are Wilk’s approximation for Group X Time interactions. ²Differential change as a function of group. ³Differential change as a function of time. CASQ rating scale: 1 = strongly disagree; 5 = strongly agree. Higher posttest scores indicate change in interpersonal problem-solving skills and understanding of social justice issues. CoBRAS rating scale: 1 = strongly disagree; 5 = strongly agree. Lower posttest scores indicate awareness and a reduction in denial or negative racial attitudes.
Table 2. (continued). Mean Scores, Standard Deviations, and F Ratios for Pre- and Posttest Scores for CASQ, CoBRAS, MCI, MEI, MEIM, PCRW, SEE, SRLS, TEQ, and Three Aspects of Engagement as a Function of ABSL, CBSL and Experiential Learning

| Measure                        | Time Points       | F ratios |
|--------------------------------|-------------------|----------|
|                                | Pretest | Posttest | Time x |
| Ethnocultural Empathy          |         |         |        |
| Acceptance                     | M       | SD      | M      | SD    | Time | Group | Group |
| ABSL                           | 9.39    | 1.65    | 9.69   | 1.64  | 2.40 | .22   | 7.34*** |
| CBSL                           | 9.25    | 1.69    | 9.18   | 1.64  |       |       |       |
| Experiential Learning          | 10.30   | 2.99    | 8.82   | 3.39  |       |       |       |
| Total                          | 9.68    | 2.22    | 9.34   | 2.39  |       |       |       |
| Awareness                      |         |         |        |
| ABSL                           | 16.92   | 2.72    | 15.74  | 3.59  | 20.70*** | .88 | 14.05*** |
| CBSL                           | 17.89   | 3.64    | 15.40  | 3.18  |       |       |       |
| Experiential Learning          | 15.77   | 3.13    | 16.31  | 3.16  |       |       |       |
| Total                          | 16.69   | 3.19    | 15.88  | 3.35  |       |       |       |
| Feeling                        |         |         |        |
| ABSL                           | 55.50   | 8.60    | 53.25  | 11.27 | .49  | 9.60*** | 1.46 |
| CBSL                           | 56.82   | 9.31    | 57.20  | 8.75  |       |       |       |
| Experiential Learning          | 58.58   | 8.81    | 59.84  | 10.01 |       |       |       |
| Total                          | 56.80   | 8.93    | 56.36  | 10.54 |       |       |       |
| Perspective-Taking             |         |         |        |
| ABSL                           | 16.94   | 4.02    | 16.87  | 4.41  | .30  | 13.82*** | .24 |
| CBSL                           | 18.62   | 4.93    | 18.64  | 3.71  |       |       |       |
| Experiential Learning          | 19.50   | 3.35    | 19.00  | 3.04  |       |       |       |
| Total                          | 18.42   | 4.14    | 18.19  | 3.82  |       |       |       |
| MCI                            |         |         |        |
| Awareness                      |         |         |        |
| ABSL                           | 22.66   | 5.18    | 20.06  | 4.88  | 32.98*** | 1.90 | 6.39*** |
| CBSL                           | 20.65   | 5.53    | 20.34  | 5.77  |       |       |       |
| Experiential Learning          | 24.21   | 5.32    | 19.68  | 5.56  |       |       |       |
| Total                          | 22.51   | 5.40    | 20.05  | 5.23  |       |       |       |

Note. ¹Differential change by service-learners and experiential learners, reflected in an interaction of Group by Time, at ***p<.000, **<.01, *p<.05. ANOVA F ratios are Wilk’s approximation for Group X Time interactions. ²Differential change as a function of group. ³Differential change as a function of time. Higher posttest scores indicate greater empathy and acceptance, awareness, expressing feelings and perspective-taking aspects of ethnocultural empathy.
Table 2. (continued). Mean Scores, Standard Deviations, and F Ratios for Pre- and Posttest Scores for CASQ, CoBRAS, MCI, MEI, MEIM, PCRW, SEE, SRLS, TEQ, and Three Aspects of Engagement as a Function of ABSL, CBSL and Experiential Learning

| Measure                  | Time Points | F ratios |     |     |     |     |     |     |     |     |     |     |     |
|--------------------------|-------------|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|                          | Pretest     |          | Posttest |          |       |       |       |       |       |       |       |       |       |
|                          | M           | SD       | M           | SD       | Time | Group | Group |     |     |     |     |     |     |
| MCI Knowledge            |             |          |             |          |       |       |       |     |     |     |     |     |     |
| ABSL                     | 39.34       | 4.87     | 41.84       | 6.60     | 6.07*| .16   | 1.91  |     |     |     |     |     |     |
| CBSL                     | 40.45       | 5.21     | 41.67       | 5.50     |      |       |       |     |     |     |     |     |     |
| Experiential Learning    | 40.85       | 4.99     | 40.85       | 4.99     |      |       |       |     |     |     |     |     |     |
| Total                    | 40.15       | 5.04     | 41.53       | 5.78     |      |       |       |     |     |     |     |     |     |
| Intercultural Relationships|             |          |             |          | .08  | 10.48***| 3.79* |     |     |     |     |     |     |
| ABSL                     | 16.61       | 4.17     | 15.75       | 4.01     |      |       |       |     |     |     |     |     |     |
| CBSL                     | 18.16       | 3.74     | 18.46       | 4.29     |      |       |       |     |     |     |     |     |     |
| Experiential Learning    | 15.87       | 3.43     | 16.67       | 4.18     |      |       |       |     |     |     |     |     |     |
| Total                    | 16.75       | 3.97     | 16.58       | 4.24     |      |       |       |     |     |     |     |     |     |
| MEI                      |             |          |             |          | .05  | 9.58***| 8.29***|     |     |     |     |     |     |
| Course                   |             |          |             |          |       |       |       |     |     |     |     |     |     |
| ABSL                     | 26.64       | 4.83     | 24.45       | 7.16     |      |       |       |     |     |     |     |     |     |
| CBSL                     | 28.58       | 4.55     | 28.12       | 4.83     |      |       |       |     |     |     |     |     |     |
| Experiential Learning    | 25.05       | 5.65     | 27.35       | 4.79     |      |       |       |     |     |     |     |     |     |
| Total                    | 26.49       | 5.24     | 26.32       | 6.09     |      |       |       |     |     |     |     |     |     |
| Climate                  |             |          |             |          | 7.91**| 6.66**| 5.28**|     |     |     |     |     |     |
| ABSL                     | 27.93       | 4.50     | 31.16       | 5.91     |      |       |       |     |     |     |     |     |     |
| CBSL                     | 29.22       | 4.34     | 29.79       | 4.82     |      |       |       |     |     |     |     |     |     |
| Experiential Learning    | 27.51       | 4.99     | 27.65       | 4.40     |      |       |       |     |     |     |     |     |     |
| Total                    | 28.11       | 4.64     | 29.79       | 5.44     |      |       |       |     |     |     |     |     |     |
| MEIM                     |             |          |             |          | 4.30*| 1.02  | .60  |     |     |     |     |     |     |
| Ethnic Identity Achievement|           |          |             |          |       |       |       |     |     |     |     |     |     |
| ABSL                     | 16.53       | 3.95     | 17.13       | 3.73     |      |       |       |     |     |     |     |     |     |
| CBSL                     | 15.81       | 4.21     | 16.96       | 4.58     |      |       |       |     |     |     |     |     |     |
| Experiential Learning    | 16.96       | 3.95     | 17.17       | 3.70     |      |       |       |     |     |     |     |     |     |
| Total                    | 16.51       | 4.04     | 17.11       | 3.89     |      |       |       |     |     |     |     |     |     |
| Ethnic Identity Commitment|            |          |             |          | .50  | .14   | .86  |     |     |     |     |     |     |
| ABSL                     | 26.48       | 5.28     | 27.13       | 4.70     |      |       |       |     |     |     |     |     |     |
| CBSL                     | 27.53       | 5.87     | 26.48       | 5.55     |      |       |       |     |     |     |     |     |     |
| Experiential Learning    | 27.32       | 4.31     | 27.18       | 4.89     |      |       |       |     |     |     |     |     |     |
| Total                    | 27.10       | 5.17     | 27.01       | 4.92     |      |       |       |     |     |     |     |     |     |

Note. ¹Differential change by service-learners and experiential learners, reflected in an interaction of Group by Time, at ***, *.p<.000, **p<.01, *p<.05. ANOVA F ratios are Wilk’s approximation for Group X Time interactions. ²Differential change as a function of group. ³Differential change as a function of time.
Table 2. (continued). Mean Scores, Standard Deviations, and F Ratios for Pre- and Posttest Scores for CASQ, CoBRAS, MCI, MEI, MEIM, PCRW, SEE, SRLS, TEQ, and Three Aspects of Engagement as a Function of ABSL, CBSL and Experiential Learning

| Measure                          | F ratios       | Time | Group | Group |
|----------------------------------|----------------|------|-------|-------|
|                                 | Pretest        | M    | SD    | M     | SD    | Time | Group | Group |
| PCRW                             | 5.24*          |      |       |       |       | 7.21*** | .27   |
| White Empathetic Reactions to Racism |                |      |       |       |       |       |       |       |
| ABSL                             | 19.15          | 3.33 | 19.66 | 2.97  |      |       |       |       |
| CBSL                             | 20.21          | 2.39 | 21.36 | 3.18  |      |       |       |       |
| Experiential Learning            | 18.70          | 3.81 | 19.50 | 3.22  |      |       |       |       |
| Total                            | 19.23          | 3.35 | 19.95 | 3.15  |      |       |       |       |
| White Guilt                      | 14.26***       |      | 10.71*** | 5.80** |   |       |       |       |
| ABSL                             | 16.37          | 4.30 | 16.84 | 3.95  |      |       |       |       |
| CBSL                             | 13.11          | 5.86 | 13.83 | 4.50  |      |       |       |       |
| Experiential Learning            | 13.75          | 4.82 | 16.84 | 4.05  |      |       |       |       |
| Total                            | 15.09          | 4.86 | 16.32 | 4.21  |      |       |       |       |
| SRLS-Citizenship Subscale        | .05            |      | 6.75*** | 6.06** |   |       |       |       |
| ABSL                             | 32.84          | 4.68 | 33.91 | 5.30  |      |       |       |       |
| CBSL                             | 32.47          | 4.38 | 34.38 | 5.46  |      |       |       |       |
| Experiential Learning            | 32.40          | 5.42 | 29.76 | 5.99  |      |       |       |       |
| Total                            | 32.67          | 4.72 | 33.36 | 5.67  |      |       |       |       |
| TEQ                              | 4.05*          |      |       |       |       | .64  |       | .53   |
| ABSL                             | 32.38          | 5.95 | 33.45 | 8.48  |      |       |       |       |
| CBSL                             | 33.50          | 7.43 | 34.20 | 6.69  |      |       |       |       |
| Experiential Learning            | 31.35          | 8.00 | 33.74 | 7.99  |      |       |       |       |
| Total                            | 32.38          | 7.14 | 33.77 | 7.77  |      |       |       |       |
| Three Aspects of Engagement      | .01            |      | 1.36  |       |       | 2.20 |       |       |
| Community Engagement             |                |      |       |       |       |       |       |       |
| ABSL                             | 8.78           | 1.26 | 8.95  | 1.15  |      |       |       |       |
| CBSL                             | 8.63           | 1.15 | 8.93  | 1.24  |      |       |       |       |
| Experiential Learning            | 8.73           | 1.14 | 8.21  | 1.81  |      |       |       |       |
| Total                            | 8.72           | 1.21 | 8.87  | 1.27  |      |       |       |       |
| Interpersonal Engagement         | .86            |      | 37.08*** | 3.11* |   |       |       |       |
| ABSL                             | 12.80          | 1.66 | 12.90 | 2.04  |      |       |       |       |
| CBSL                             | 16.00          | 4.77 | 16.89 | 4.44  |      |       |       |       |
| Experiential Learning            | 12.77          | 1.52 | 12.37 | 2.57  |      |       |       |       |
| Total                            | 13.85          | 3.39 | 14.14 | 3.64  |      |       |       |       |

Note. ¹Differential change by service-learners and experiential learners, reflected in an interaction of Group by Time, at ***p<.000, **<.01, *p<.05. ANOVA F ratios are Wilk’s approximation for Group X Time interactions. Higher posttest scores indicate greater community and interpersonal engagement, greater psychological costs of racism as measured by empathetic reactions and White guilt.
### Table 3. Posttest Means for Student Learning Outcomes for Students Enrolled in ABSL, CBSL and Experiential Learning Courses

| Measures                        | ABSL (1) | CBSL (2) | Experiential Learning (3) | Post hoc |
|---------------------------------|----------|----------|---------------------------|----------|
|                                 | M        | SD       | M                         | SD       |                      |
| **CASQ**                        |          |          |                           |          |                      |
| ³Interpersonal Skills           | 48.47    | 8.30     | 48.21                     | 7.73     | 41.83                | 6.39     | 3 < 1, 2               |
| ³Social Justice                 | 16.88    | 6.61     | 19.82                     | 9.17     | 12.51                | 3.25     | 3 < 1, 2               |
| **CoBRAS**                      |          |          |                           |          |                      |
| ³White Privilege                | 19.16    | 5.32     | 17.52                     | 5.50     | 21.06                | 5.61     | 3 > 2, 2 < 1           |
| ³Institutional Discrimination   | 18.80    | 3.97     | 17.75                     | 4.52     | 19.51                | 3.97     | 3 > 2                  |
| Racism                          | 13.40    | 3.70     | 12.41                     | 3.76     | 13.01                | 3.96     | 3 = 2 = 1              |
| Empathy                         | 33.45    | 8.48     | 34.20                     | 6.69     | 33.74                | 7.99     | 3 = 2 = 1              |
| **Ethnocultural Empathy**       |          |          |                           |          |                      |
| ²Awareness                      | 15.74    | 3.59     | 15.40                     | 3.18     | 16.31                | 3.16     | 3 = 2 = 1              |
| ²Acceptance                     | 9.69     | 1.64     | 9.18                      | 1.64     | 8.82                 | 3.39     | 3 = 2 = 1              |
| ³Feeling                        | 53.25    | 11.27    | 57.20                     | 8.75     | 59.84                | 10.01    | 3 > 1                  |
| ³Perspective-Taking             | 16.87    | 4.41     | 18.64                     | 3.71     | 19.00                | 3.04     | 3 > 1, 2 > 1           |
| **MCI**                         |          |          |                           |          |                      |
| ²Awareness                      | 20.06    | 4.88     | 20.34                     | 5.77     | 19.68                | 5.50     | 3 = 2 = 1              |
| Knowledge                       | 41.84    | 6.60     | 41.67                     | 5.50     | 40.85                | 4.99     | 3 = 2 = 1              |
| ²Intercultural Relationships    | 15.75    | 4.01     | 18.46                     | 4.29     | 16.67                | 4.18     | 3 < 2, 2 > 1           |
| **MEI**                         |          |          |                           |          |                      |
| ²Course                         | 24.45    | 7.16     | 28.12                     | 4.83     | 27.35                | 4.79     | 3 < 2, 2 > 1           |
| ²Climate                        | 31.16    | 5.91     | 29.79                     | 4.82     | 27.65                | 4.40     | 3 < 2, 1               |
| **MEIM**                        |          |          |                           |          |                      |
| Achievement                     | 17.13    | 3.73     | 16.96                     | 4.58     | 17.17                | 3.70     | 3 = 2 = 1              |
| Commitment                      | 27.13    | 4.70     | 26.48                     | 5.55     | 27.18                | 4.89     | 3 = 2 = 1              |
| **PCRW**                        |          |          |                           |          |                      |
| ³White Empathetic Reactions     |          |          |                           |          |                      |
| to Racism                       | 19.66    | 2.97     | 21.36                     | 3.18     | 19.50                | 3.22     | 3 < 2, 2 > 1           |
| ³White Guilt                    | 16.84    | 3.95     | 13.83                     | 4.50     | 16.84                | 4.05     | 3 > 2, 2 < 1           |
| Three Aspects of Engagement     |          |          |                           |          |                      |
| ³Interpersonal                  | 12.90    | 2.04     | 16.89                     | 4.44     | 12.37                | 2.57     | 3 < 2, 2 > 1           |
| Community                       | 8.95     | 1.15     | 8.93                      | 1.24     | 8.21                 | 1.81     | 3 = 2 = 1              |
| **SRLS**                        |          |          |                           |          |                      |
| ²Citizenship                    | 33.91    | 5.30     | 34.38                     | 5.45     | 29.76                | 5.99     | 3 < 2, 1               |

Note. ¹Tukey HSD post-hoc tests are significant at p < .05. ²Significant interaction effects for time and group. ³Significant main effects for group. CoBRAS rating scale: 1 = strongly disagree; 5 = strongly agree. Lower mean scores indicate greater awareness of and a reduction in negative racial attitudes.
Table 3. (continued). Posttest Means for Student Learning Outcomes for Students Enrolled in ABSL, CBSL and Experiential Learning Courses

| Measures                                      | ABSL (1) | CBSL (2) | Experiential Learning (3) |
|-----------------------------------------------|----------|----------|---------------------------|
|                                               | M        | SD       | M                         | SD       | M             | SD       | Post hoc       |
| PCRW                                          |          |          |                           |          |               |          |               |
| ³White Empathetic Reactions to Racism         | 19.66    | 2.97     | 21.36                     | 3.18     | 19.50         | 3.22     | 3 < 2, 2 > 1  |
| ²White Guilt                                  | 16.84    | 3.95     | 13.83                     | 4.50     | 16.84         | 4.05     | 3 > 2, 2 < 1  |
| Three Aspects of Engagement                   |          |          |                           |          |               |          |               |
| ³Interpersonal                                | 12.90    | 2.04     | 16.89                     | 4.44     | 12.37         | 2.57     | 3 < 2, 2 > 1  |
| Community                                     | 8.95     | 1.15     | 8.93                      | 1.24     | 8.21          | 1.81     | 3 = 2 = 1     |
| SRLS                                          |          |          |                           |          |               |          |               |
| ³Citizenship                                  | 33.91    | 5.30     | 34.38                     | 5.45     | 29.76         | 5.99     | 3 < 2, 1      |

Note. ¹Tukey HSD post-hoc tests are significant at p <.05. ²Significant interaction effects for time and group. ³Significant main effects for group.

Table 4 summarizes significant interaction and main effects. There were main effects for group as shown in Tables 2, 3, and 4. Post hoc analyses indicate that cultural- and academic-based service-learners increased their posttest scores for interpersonal problem-solving skills F (2, 296) = 24.07, p<.001 and social justice attitudes F (2, 328) = 16.42, p<.001 compared to experiential learners. Compared to cultural-based service-learners, experiential learners had higher posttest scores for ethnocultural empathetic feelings F (2, 216) = 9.60, p<.001 and lower posttest scores for White privilege F (2, 231) = 11.87, p<.001, institutional discrimination F (2, 254) = 4.89, p<.01, and White empathetic reactions to racism attitudes F (2, 188) = 7.21, p<.001. Experiential learners and cultural-based service-learners had higher posttest scores for perspective-taking skills F (2, 227) = 13.82, p<.001 compared to academic-based service-learners.

Table 4. A Summary of Interaction and Main Effects

| Type of Effects | High Impact Practices (HIPs) | ABSL | CBCL | EL |
|-----------------|------------------------------|------|------|----|
| Interactions    |                              |      |      |    |
| White Guilt     | Interpersonal Relationships  |      |      |    |
| Civic Responsibility | Interpersonal Engagement |      |      |    |
|                  | Course & Climate            |      |      |    |
|                  | Civic Responsibility        |      |      |    |
| Main Effects - Group | Interpersonal Problem-Solving Skills |      |      |    |
|                  | Interpersonal Problem-Solving Skills |      |      |    |
|                  | Ethnocultural Empathy - Feelings |      |      |    |
|                  | Social Justice Attitudes    |      |      |    |
|                  | Social Justice Attitudes    |      |      |    |
|                  | White Privilege Attitudes   |      |      |    |
|                  | Perspective-Taking          |      |      |    |
Institutional Discrimination Attitudes
Perspective-Taking
White Empathetic Reactions to Racism

Main Effects - Time

Increases:
- Ethnic Identity Achievement
- Empathy
- White Empathetic Reactions to Racism
- White Guilt

Decreases:
- Ethnocultural Awareness
- Multicultural Awareness
- Unawareness of White Privilege
- Unawareness of Institutional Discrimination

Note. Post-hoc analyses were significant at p<.05 for interaction and main effects.

As also shown in Tables 2, 3, and 4, there were main effects for time. Post hoc analyses revealed that students made improvements in their multicultural knowledge $F(1, 159) = 6.07$, $p<.05$, ethnic identity achievement $F(1, 332) = 4.30$, $p<.5$, White empathetic reactions to racism $F(1, 188) = 5.24$, $p<.05$, and empathy $F(1, 161) = 4.00$, $p<.05$. Students also made reductions in their ethnocultural awareness $F(1, 248) = .05$, $p<.001$, multicultural awareness $F(1, 273) = 6.39$, $p<.01$, and unawareness of White privilege $F(1, 231) = 11.07$, $p<.001$ and institutional discrimination $F(1, 254) = 6.13$, $p<.05$ from the beginning to the end of semester, regardless if they were exposed to ABSL, CBSL, or EL.

5. Discussion

The purpose of this study was to measure differences in student learning outcomes from the beginning to the end of the semester for students enrolled in psychology courses that utilize HIPs. The incorporation of different HIPs in undergraduate psychology courses provided us with an opportunity to disentangle impacts from the course content and service or field context on student learning. We were able to make comparisons for students in courses that exposed them to high and low levels of diversity material and community service. In addition, survey data was gathered from a large sample of students exposed to HIPs during the past decade. This study replicates and expands previous service-learning research (Dunlap, Scoggin, Green, & Davi, 2007; Moely et al., 2002; Simons et al., 2012a; 2013). Our findings indicate that students develop their own ethnic-cultural identity and acquire cultural competencies through their service or field experiences regardless if they are exposed to ABSL, CBSL, and EL; however, ABSL, CBSL, and EL do contribute to different and important student learning outcomes.
Students exposed to experiential learning (EL) strategies were required to complete 200 hours of service in which they utilize helping skills and put their knowledge of psychology into practice at a community-based counseling or rehabilitation center. Students exposed to experiential learning reported experiencing more White guilt (i.e., anger, sadness, helplessness) from the beginning to the end of the semester compared to those students exposed to CBSL. This student group evaluated the diversity content as being less integrated into the course and appraised their civic leadership skills as weaker over the semester compared to both service-learning groups. Experiential learners further improved their ability to express their ethnocultural empathetic feelings and acquired greater perspective-taking skills by the end of the semester compared to academic-based service-learners. Experiential learners engaged in extensive work with diverse recipients at a professional setting. For some students, this may have been their first experience in the broader community; while, for other students it may have been an eye-opening experience. Student fieldwork may have contributed to the development of students' White guilt, ethnocultural empathetic feelings, and perspective-taking skills. It is further possible that students may have completed their fieldwork with little understanding of how their profession aligns with social responsibility or civic leadership. Finally, fieldwork is designed to promote student learning rather than reciprocal learning (Sigmon, 1996; Sweitzer & King, 2009). Students may have viewed themselves as emergent professionals rather than volunteers in the community, consistent with previous studies on career development (Sweitzer & King, 2009).

Students exposed to academic- and cultural-based service-learning developed a deeper understanding of social inequities, evaluated the classroom environment as valuing student opinions, and acquired interpersonal problem-solving skills compared to those students exposed to experiential learning, consistent with previous research on service-learning (Eyler & Giles, 1999). Cultural-based service-learners increased their intercultural relationships and interpersonal engagement over the semester compared to experiential learners. Cultural-based service-learners had higher levels of empathy for people from diverse backgrounds who experience systematic oppression and a deeper understanding of White privilege and institutional discrimination compared to experiential learners. This finding is congruent with research that suggests higher levels of racial awareness is related to cognitive attitudes toward racial diversity and ethnocultural empathy (Spanierman & Heppner, 2004; Wang et al., 2003). Exposure to race or cultural concepts in the course content and service context may explain the observed differences in student learning. Cultural-based service-learners were situated in a service context in which they tutored and mentored children who were racially, ethnically, and socioeconomically different from them over the semester. The service experience may
have served as a catalyst for developing their own awareness of racial privilege and understanding the complexities of privilege, power and oppression, thus contributing to empathetic reactions to racism. In addition, cultural-based service-learners were required to think critically about racial issues, White privilege and institutional discrimination in the course. Cultural-based service-learners engaged in dialogues, activities and assignments that challenged their assumptions. Students also completed reflection papers that required them to analyze their thoughts and feelings about their service experiences, connect the service context to the class content, and evaluate how their cognitions did or did not change throughout the semester. The combination of the course content and service context provided students with an opportunity to rethink assumptions and reformulate attitudes about their own privileges (Brody & Wright, 2004; Quaye & Harper, 2007).

Students exposed to courses that utilize ABSL, CBSL, and EL acquire multicultural knowledge through their work with diverse recipients in the University-community or beyond in the broader community. Students exposed to one of these HIPs also develop their own ethnic identity achievement, recognize institutional barriers for racial and ethnic groups, and improve their ability to empathize from the beginning to the end of the semester, congruent with previous service-learning research (Hess, Lanig, & Vaughan, 2007; O'Grady, 2000). Our findings illuminate the importance of exposing students to ABSL, CBSL and EL during their undergraduate studies. In fact, students should be exposed to multiple HIPs because each practice contributes to different learning outcomes. Students exposed to experiential learning acquire perspective-taking skills; while, those students exposed to ABSL and CBSL develop a deeper understanding of social inequities, acquire problem-solving skills, and gain civic responsibility.

Despite the improvements in students' cultural competencies as measured by multicultural knowledge, White privilege attitudes, and perspective-taking skills, students reduced their multicultural and ethnocultural awareness over time. Students exposed to experiential learning and academic-based service-learning had high White guilt scores. White students may enroll in ABSL and EL courses with a perspective of "I don't have a race" or "I don't see color and treat everyone the same" because of their lack of exposure to people of other races and limited awareness of privilege and discrimination (Simons et al., 2011 & 2012b). Once situated in service or fieldwork, students develop an awareness of their Whiteness, experience shame and guilt, and reformulate their attitudes, congruent with previous research (Simons et al., 2011 & 2012b; Spanierman & Heppner, 2004). Spanierman and Heppner (2004) further suggest that participants with high levels of guilt become overwhelmed by their emotions, thus inhibiting them from increasing their multicultural and
ethnocultural awareness. Students exposed to CBSL reported higher scores for the integration of diversity content in the course and White empathetic reactions toward racism, also consistent with previous research (Spanierman & Heppner, 2004; Wang et al., 2003) suggesting that as White students learn about multicultural issues, they increase their levels of empathetic reactions towards those racially oppressed. Students increased their multicultural knowledge which may have led to enhanced feelings of shame and guilt, thus further contributing to their increased awareness of White privilege and empathetic reactions toward institutional discrimination from the beginning to the end of the semester, regardless if they were exposed to ABSL, CBSL, or EL.

Our study replicates and expands previous research. However, there are limitations associated with the results of this study. Data was collected with self-report measures from a large sample of students enrolled in either service-learning or experiential learning courses over the past decade. There were unequal groups of students in service-learning and experiential learning courses who were exposed to high and low levels of diversity content and community service. Slightly more than half of all students had a service experience prior to taking the course which may have influenced their responses. Students reported on measures that inquired about ethnocultural empathy, ethnic identity and color-blind attitudes at different points in time. Most participants were White and female and came from middle-class backgrounds. Students of Color, male and transgender students, and students from diverse backgrounds may have answered the questions inquiring about White privilege and institutional discrimination differently compared to White female students from middle-class backgrounds. Self-report limitations and social desirability effects are most likely associated with reports of student learning. The uniqueness of placement sites for fieldwork and service experiences makes replication difficult. Students exposed to EL spent a great deal of time at different placement sites. It is impossible to control for the culture of the organization and the work in which they engaged at each site. In addition, most students exposed to ABSL and CBSL were paired with children at public elementary and high schools in a metropolitan area. The school-community differed for each school. For example, one school was closed for poor performance scores on state assessment indicators; while, another school had a student walk-out for lack of books and resources. These factors were beyond our control, yet, most likely influenced the learning process for students who were placed at these sites. Finally, during the past decade, Barack Obama was the first African American to serve as President of the United States. Natural disasters such as Hurricane Katrina and Sandy occurred. The death of Freddie Gray coupled with an overwhelming number of police brutality incidents toward African Americans led to the creation of the Black Lives Matter movement and to national discussions
about systematic racism. The legalization of same-sex marriages in the United States furthered national discussions about social justice issues. Historical effects are most likely associated with students’ racial attitudes, ethnocultural empathy and civic responsibility. It would be interesting to measure if these attitudes, cognitions and behaviors are sustained over the next 10-years.

Future researchers may want to extend this study by addressing some of the limitations. Data should be gathered from undergraduate students enrolled in different majors in liberal arts colleges and professional schools. Researchers should include a condition in which students are exposed to low levels of community service and high levels of diversity content to further disentangle the impacts from content and service on student learning. Researchers may also want to identify similarities and differences in student learning outcomes for students in different majors using mixed-method approaches. Student assignments could be analyzed for common themes associated with student learning. Signature assignments or common reflections should be developed so comparisons can be made about student learning in different disciplines. It might be important to assess the impact of more than one HIP on student learning. This analysis would provide researchers with an understanding of how exposure to multiple HIPs contribute to deeper awareness, stronger critical thinking skills, and advance empathy and engagement. More work is also needed on interdisciplinary approaches to service-learning and internship programs. Researchers may want to develop partnerships with agencies so that students can engage in service or fieldwork with students from different majors to gain a broader perspective. Researchers who pursue this line of work will need to assess community partners and service recipients with different methods (i.e., focus groups, surveys) to gather their views of interdisciplinary service-learning and internship programs. Additional efforts that include both quantitative and qualitative data from multiple sources will be crucial if research related to ABSL, CBSL, and EL is to advance.

6. Conclusion

In conclusion, students should be exposed to more than one high impact practice in a liberal arts curriculum as an undergraduate, because ABSL, CBSL, and EL contribute to different yet important learning outcomes. ABSL and CBSL provide students with opportunities to connect the course content to the service context; which in turn, contributes to their deeper understanding of inequities in the community and development of problem-solving skills and civic responsibility. The infusion of diversity content in a service-learning course requires students to examine the relationship between power and privilege in both the course and service context; which in turn, contributes to their racial awareness, the impact of
Whiteness, general cognitive attitudes toward diversity, and empathetic reactions toward racial oppression. EL provides students with opportunities to learn about different careers by immersing themselves in a specific field of psychology. Students who engage in internships develop ethnocultural empathy from the beginning to the end of the semester. Students become aware of their privilege and experience shame and guilt regarding their Whiteness, acquire perspective-taking skills, and develop a sense of personal responsibility for racism. Ethnocultural empathy and cultural competence are learning outcomes for CBSL and EL courses, but only when they are explicit course objectives. The course content and developmental levels of students should be considered when developing course objectives. Faculty will need to align their course objectives with learning outcomes and then decide which high impact practice(s) should be implemented to achieve their goals for student learning. Faculty who include course objectives and learning outcomes about social or civic responsibility may want to incorporate ABSL. Faculty who include critical thinking or cultural competence as objectives in introductory level courses may want to implement CBSL; while, faculty who include similar goals in upper level courses may want to incorporate EL. High impact practices (HIPs) are related to student learning. Student learning can be a transformational process, but only, if there is alignment among the course content, course objectives, HIPs and student learning outcomes.

Acknowledgements

The author(s) declare that there is no conflict of interest.

References

American Psychological Association Committee on Accreditation (2005). Guidelines and principles for accreditation programs in professional psychology. Retrieved from http://www.apa.org/ed/gp2000.html

Bailey, S. F., Barber, L. K., & Nelson, V. L. (2017). Undergraduate internship supervision in psychology departments: Use of Experiential learning best practices. Psychology Learning & Teaching, 16(1), 74-83. https://doi.org/10.1177/1475725716671234

Baldwin, S. C., Buchanan, A. M., & Rudisill, M. E. (2007). What teacher candidates learned about diversity, social justice, and themselves from service-learning experiences. Journal of Teacher Education, 58(4), 315-327. https://doi.org/10.1177/0022487107305259

Bell, C. A., Horn, B. R., & Roxas, K. C. (2007). We know its service, but what are they learning? Preservice teachers’ understanding of diversity. Equity & Excellence in Education, 40, 123-133. https://doi.org/10.1080/10665680701218467
Boyle-Baise, M., & Langford, J. (2004). There are children here: Service-learning for social justice. *Equity and Excellence in Education, 37*, 55-66. https://doi.org/10.1080/10665680490422115

Brody, S. M., & Wright, S. C. (2004). Expanding the self through service-learning. *Michigan Journal of Community Service, 11*(1), 14-24.

Caswell, T. A. (2018). Psychology of poverty: Attitude change via service-learning. *Journal of Service-Learning in High Education, 7*(1), 25-34.

Cipolle, S. B. (2010). *Service-learning and social justice: Engaging students in social change*. Lanham, Maryland: Rowman and Littlefield.

Conley, P. A., & Hamlin, M. L. (2009). Justice-Learning: Exploring the efficacy with low-income, first-generation college students. *Michigan Journal of Community Service, 16*(1), 47-58.

Dugan, J. P. (2006). Involvement and leadership: A descriptive analysis of social responsible leadership. *Journal of College Student Development, 47*(1), 335-343. https://doi.org/10.1353/csd.2006.0028

Dunlap, M., Scoggin, J., Green, P., & Davi, A. (2007). White students’ experience of privilege and socioeconomic disparities: Toward a theoretical model. *Michigan Journal of Community Service, 13*(2), 19-30.

Eyler, J. (2002). Reflection: Linking service and learning - linking students and communities. *Journal of Social Issues, 58*(3), 517-534. https://doi.org/10.1111/1540-4560.00274

Eyler, J. S., & Giles, D. E. (1999). *Where’s the learning in service-learning?* San Francisco: Jossey-Bass.

Gallini, S. M., & Moely, B. E. (2003). Service-learning and engagement, academic challenge, and retention. *Michigan Journal of Community Service-Learning, 10*(1), 5-14.

Green, A. E. (2001). “But you aren’t white:” Racial perspectives and service learning. *Michigan Journal of Community Service Learning, 8*(1), 18-26.

Hess, D. J., Lanig, H., & Vaughan, W. (2007). Educating for equity and social justice: A conceptual model for cultural engagement. *Multicultural Perspectives, 9*(1), 32-39. https://doi.org/10.1080/15210960701334037

Hutz, C. S., Gomes, W., & McCarthy, S. (2006). Teaching psychology in Brazil. *International Journal of Psychology, 41*(1), 10-16. https://doi.org/10.1080/00207590444000401

Kuh, G. D., & O’Donnell, K. (2013). Ensuring Quality & Taking High-Impact Practices to Scale. Washington, DC: AAC&U. Retrieved from www.aacu.org/leap.

Miller, R., Carr, E., Utter, L., Styron, T., & Steiner, J. (2017). A foot in the door: Development of a summer college student internship in community mental health. *Acad Psychiatry, 41*, 282-284. https://doi.org/10.1007/s40596-016-0540-0

Moely, B. E., McFarland, M., Miron, D., Mercer, S., & Ilustre, V. (2002a). Changes in college students’ attitudes and intentions for civic involvement as a function of service-learning experiences. *Michigan Journal of Community Service Learning, 9*(1), 18-26.

Moely, B. E., Mercer, S. H., Ilustre, V., Miron, D., & McFarland, M. (2002b). Psychometric properties and correlates of the civic attitudes and skills questionnaire (CASQ): A measure of student’s attitudes related to service-learning. *Michigan Journal of Community Service Learning, 8*(2), 15-26.

Mitchell, T. D., Richard, F. D., Battistoni, R. M., Rost-Banik, C., Netz, R., & Zaksoske, C. (2015). Reflective practice that persists: Connections between reflection in service-
learning programs and current life. *Michigan Journal of Community Service-Learning*, 21(2), 49-63.

Motiff, J. P., & Roehling, P. V. (1994). Learning while serving in a psychology internship. *Michigan Journal of Community Service-Learning*, 1(1), 70-76.

Neville, H. A., Lilly, R. L., Duran, G., Lee, R. M., & Browne, L. (2000). Construction and initial validation of the Color-Blind Racial Attitude Scale (CoBRAS). *Journal of Counseling Psychology, 47*, 59-70. https://doi.org/10.1037/0022-0167.47.1.59

O’Grady, C. R. (2000). Integrating service learning and multicultural education: An overview. In C. R. O’Grady (Ed.), *Integrating service learning and multicultural education in colleges and universities* (pp. 1-20). Mahwah, NJ: Lawrence Erlbaum Associates.

Phinney, J. (1992). The Multigroup Ethnic Identity Measure: A new scale for use with adolescents and young adults from diverse groups. *Journal of Adolescent Research, 7*, 156-176. https://doi.org/10.1177/074355489272003

Pope-Davis, D. B., Liu, W. M., Nevitt, J., & Toporek, R. L. (2000). The development and validation of the multicultural environmental inventory: A preliminary investigation. *Cultural Diversity and Ethnic Minority Psychology, 6*(1), 57-64. https://doi.org/10.1037.1099-9809.6.1.57

Quaye, S. J., & Harper, S. R. (2007). Faculty accountability for culturally inclusive pedagogy and curricula. *Liberal Education, 93*(3), 32-39.

Reddy, P., & Hill, R. (2002). Learning outcomes and assessment strategies for a psychology sandwich placement year. *Psychology Teaching Review, 10*(1), 102-111.

Sigmon, R. L. (1996). The problem of definitions in service-learning. In R. L. Sigmon and colleagues (Eds.), *Journey to service-learning* (pp. 9-12). Washington: DC: The Council of Independent Colleges.

Simons, L., Fehr, L., Blank, N., Fernandez, D., Georganas, D., Padro, J., & Peterson, V. (2013). A comparative analysis of experiential education and student development: Does the type of service matter? *World Journal of Education, 3*(3), 63-74. https://doi.org/10.5430/wje.v3n3p63

Simons, L., Fehr, L., Blank, N., Connell, H., Fernandez, D., Georganas, D., … & Peterson, V. (2012a). Lessons learned from experiential learning: What do students learn from a practicum and internship? *International Journal of Teaching and Learning in Higher Education, 24*(3), 325-334.

Simons, L., Fehr, L., Blank, N., Barnes, K., Georganas, D., & Manampuram, G. (2012b). Another look at the dissemination of the racial identity interaction model in a cultural-based service-learning course. In J. A. Hatcher, & R. G. Bringle (Eds). *Exploring Service-Learning and Community Engagement: Crossing Boundaries through Research*. (pp. 47-72). Greenwich, CT: Information Age Publishing.

Simons, L., Fehr, L., Blank, N., Russell, B., Goodman, A., DeSimone, R., … & Georganas, D. (2011). Let’s talk about pedagogy, research, and practices centered on racial identity development theory in cultural-based service-learning. In M. W. Ledoux, S. C. Wilhite, & P. Silver (Eds), *Civic Engagement and Service Learning*, invited book chapter (pp. 157-178), Hauppauge, NY: Nova Publications.

Sodowsky, G. R., Taffe, R. C., Gutkin, T. B., & Wise, S. L. (1994). Development of the multicultural counseling inventory: A self-report measure of multicultural
competencies. *Journal of Counseling Psychology, 41*(2), 137-148. https://doi.org/10.1037/0022-0167.41.2.137

Spanierman, L. B., & Heppner, M. J. (2004). Psychological costs of racism to Whites scale (PCRW): Construction and initial validation. *Journal of Counseling Psychology, 51*(2), 249-262. https://doi.org/10.1037/0022-0167.51.2.249

Spreng, R. N., McKinnon, M. C., Mar, R. A., & Levine, B. (2009). The Toronto empathy questionnaire: Scale development and initial validation of a factor-analytic solution to multiple empathy measures. *Journal of Personality Assessment, 91*(1), 62-71. https://doi.org/10.1080/00223890802484381

Sweitzer, H. F., & King, M. A. (2009). *The successful internship: Personal, professional, and civic development.* Belmont, CA: Brooks/Cole.

Torres-Harding, R. R., Diaz, E., Schamberger, A., & Carollo, O. (2015). Psychological sense of community and University mission as predictors of social justice engagement. *Journal of Higher Education Outreach and Engagement, 19*(3), 89-112.

VandeCreek, L., & Fleischer, M. (1984). The role of the practicum in the undergraduate psychology curriculum. *Teaching of Psychology, 11*(1), 9-14. https://doi.org/10.1207/s15328023top1101_2

Von Dras, D. D., & Miller, K. M. (2002). Learning outside of the classroom: The undergraduate gerontology internship. *Educational Gerontology, 28*, 881-894. https://doi.org/10.1080/03601270290099877

Wang, Y. W., Davidson, M. M., Yakushko, O. F., Savoy, H. B., Tan, J. A., & Bleier, J. K. (2003). The scale of ethnocultural empathy: Development, validation, and reliability. *Journal of Counseling Psychology, 50*(2), 221-234. https://doi.org/10.1037/0022-0167.50.2.221

Weiss, R. (2004). Using an undergraduate human-service practicum to promote unified psychology. *Teaching of Psychology, 31*(1), 43-46.

Yeh, T. L. (2010). Service-learning and persistence of low-income, first-generation college students: An exploratory study. *Michigan Journal of Community Service, 16*(2), 50-65.