

STUDENT LEARNING OUTCOMES

An Evaluation of Academic- and Cultural-Based Service-Learning as Critical Pedagogies for Enhancing Student Learning

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ABSTRACT

A cross-sectional study was conducted to evaluate differences in students learning outcomes for 328 undergraduate students enrolled in psychology courses that utilize academic- and cultural-based service-learning as primary pedagogical methods. Results from a repeated measures analyses of covariance indicate that students improve their awareness of White privilege and understanding of gender and racial discrimination from the beginning to the end of the course. Cultural-based service-learners also had a deeper understanding of White privilege, gender and racial discrimination, and racial and economic disparities in the community, as well as stronger perspective-taking skills, ethnocultural empathy, and interpersonal engagement compared to academic-based service-learners. Results from a repeated measures analysis of variance further indicate that upperclassmen develop a racial-cultural-ethnic identity; while, underclassmen develop ethnocultural awareness over time. Implications for incorporating critical service-learning pedagogies in beginning, middle, and ending psychology courses are discussed.

AN EVALUATION OF ACADEMIC- AND CULTURAL-BASED SERVICE-LEARNING AS CRITICAL PEDAGOGIES FOR ENHANCING STUDENT LEARNING

During the past decade, institutions of higher education (IHEs) have developed and implemented elaborate assessment strategies to measure student learning outcomes (SLOs). Student learning outcomes are used for program review and institutional accreditation (Landrum, 2011). The American Psychological Association (APA) has established guidelines for developing high quality undergraduate programs in psychology (APA, 2013). Psychology Departments develop program outcomes that align with the curricula based on these guidelines and assess student attainment (APA, 2016). Departments use assessment results to revise the curricula in order to improve student learning. Multiculturalism and social responsibility have been emphasized in the revised guidelines for undergraduate psychology programs (APA, 2016;). Bringle, Ruiz, Brown and Reeb (2016a) describe how incorporating service-learning in an undergraduate psychology curriculum can be used to promote student learning in academic, personal and civic domains. The aim of this study is to assess service-learning impacts on student learning for students enrolled in undergraduate psychology courses.

The University established an academic service-learning faculty development program (ASLDFP) that trained faculty how to develop course objectives, connect with the community, incorporate reflection activities and assignments, and assess student learning in 2001 (i.e., this program was considered ad hoc until 2004) (Dowshen & Pickron-Davis, 2011). The Educational Psychology course was one of the first service-learning courses offered at the University. Assessment of student learning in the Educational Psychology course was used for course improvement. Pilot data indicated that students increased their understanding of diversity and interest in working with diverse recipients. This finding led to the refinement of the Educational Psychology course and the development of a Multicultural Psychology course, which was developed to fill a void in the undergraduate curriculum (i.e., the Psychology Department did not offer a specific course in diversity). Both Educational and Multicultural Psychology courses included developmentally-appropriate practices for sophomores and juniors (Dunn, Wilson, Freeman, & Stowell, 2010) and service-learning pedagogies (Amsel, Cheshire, Massen, Kowalewski, & Winniford, 2011); while, the multicultural psychology course also included APA's standards emphasizing cultural diversity and instructional strategies to engage students in discussions about cultural privilege and social responsibility (Eyler & Giles, 1999; Prieto, 2011).

In the psychology curricula, there are beginning (i.e., Introduction to Psychology) and ending (i.e., Capstone) courses (Dunn et al., 2010). Students take courses from a variety of content areas taught by faculty representing diverse orientations and sub-disciplines. Academic-based service-learning (ABSL) is one pedagogical method that is used in undergraduate psychology courses and combines academic study with community service (Eyler, 2002). Educators debate about whether ABSL should be incorporated into beginning or ending courses (Amsel et al., 2011); while, other scholars suggest ABSL should be embedded in multiple courses throughout the undergraduate curriculum (Bringle, Reeb, Brown, & Ruiz, 2016b), because of the pedagogical benefits related to student learning. The few studies that have measured differences in student learning for freshmen and seniors suggest that there are different learning outcomes for underclassman and upperclassmen (Eppler, Ironsmith, Dingle, Erickson, 2011; Molee, Henry, Sessa, & McKinney-Prupis, 2010). Molee et al. (2010) evaluated reflections for 39 undergraduate students and found that seniors demonstrated greater critical thinking and civic engagement skills than freshmen. Additional research is needed to understand the influence from development on service-learning and student learning.

Several scholars suggest that ABSL is an effective pedagogy for developing culturally competent critical thinkers and civic leaders in undergraduate students (Bell, Horn, & Roxas, 2007). Students who participate in service-learning are often immersed in a cultural that differs from their own. Students learn about community, forge relationships with service recipients, and acquire information that negates preconceived views. In contrast to this perspective, several other researchers propose that students retain stereotypes through participation in service activities that reinforce their preconceived views (Dunlap, Scoggin, Green, & Davi, 2007; Hess, Lanig, & Vaughan, 2007). In fact, students are likely to leave service experiences with their stereotypes intact unless their assumptions are challenged. Mitchell (2008) suggests that ABSL does not challenge students to rethink assumptions or reexamine attitudes. Therefore, students who participate in ABSL are likely to retain their preexisting views unless they are required to systematically analyze their service experiences and connect them to diversity content.

Cultural-based service-learning (CBSL) is an extension of ABSL in which students are required to connect the diversity content to the service context (Baldwin, Buchanan, & Rudisill, 2007; Sterling, 2007). CBSL requires students to examine their personal biases, think critically about power, privilege, and oppression, and systematically analyze the conditions that lead to racial and economic disparities in the community (Baldwin et al., 2007). Students who participate in CBSL reformulate their attitudes and acquire a deeper understanding of their own systems of privilege than those students who participate in ABSL, but only if diversity and social justice issues are explicit course objectives and outcomes. Additional scholarship is necessary to disentangle impacts from the service context and diversity content on student learning for underclassmen and upperclassmen in psychology courses. The next step in this area of research is to measure differences in student learning outcomes for students enrolled in psychology courses that utilize ABSL and CBSL as primary pedagogical methods using a cross-sectional research design. Our study was guided by two primary questions:

- (1). Are there differences in student learning outcomes as measured in interpersonal problem-solving, social justice attitudes, awareness of White privilege, racism and institutional discrimination, ethnocultural awareness, acceptance, perspective-taking, and expression of feelings, ethnic identity, course content and climate, multicultural awareness, knowledge and relationships, interpersonal and community engagement, and socially responsible leadership from the beginning to the end of the semester for students enrolled in psychology courses that utilize ABSL and CBSL as primary pedagogical methods?
 - a) Are there differences in student learning outcomes for students who have taken previous service-learning courses?
 - b) Are there differences in student learning outcomes for students who have taken previous diversity courses?
- (2). Are there differences in student learning outcomes from the beginning to the end of the semester for underclassmen and upperclassmen in psychology courses?

METHOD

Participants

A secondary analysis of 1,500 undergraduate students enrolled in psychology courses during 2002-2015 at a private teaching university in a northern metropolitan area took part in the study. Of these students, 329 of them took part in either ABSL (75%) or CBSL (25%) courses. Most students in this subsample of service-learners were White (79%) and female (75%) with a mean age of 19.22 years ($SD = 2.83$). The remaining students self-identified as African-American (17%), Latino/a (4%), Asian-American (5%), Indian (3%), and Biracial or Multiracial (2%) and male (21%). There were no significant differences for gender and race. Thirty-six percent were freshmen, 32% were sophomores, 19% were juniors, and 13% were seniors. Slightly more than half (60%) of the students reported volunteering outside of school. Sixty-two percent of students reported taking at least one service-learning course and 21% of them reported taking at least one diversity course prior to the current service-learning course.

Course Content

Academic-Based Service-Learning (Simons et al., 2011). Educational Psychology: Early Learners is a three-credit course intended to prepare students to work with children at a public school. 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 may differ from them in race, ethnicity, and/or socioeconomic status. Students are also required to answer structured reflection questions before, during, and after their service site visits. 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 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.

Cultural-Based Service-Learning (Simons et al., 2012). 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. Students are required to complete 15 hours of service in which they tutor or mentor children who may differ from them in race, ethnicity, and/or socioeconomic status in either elementary or secondary public schools in either the Chester Upland or Philadelphia School Districts. The rest of the course is devoted to lecture, reflective and experiential activities, and discussion. 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 designed as 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. Next, students 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.

Measures and Procedure

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, Ilustre, 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 et al. (2002) 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 Sadowsky, 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 ($\alpha = .81$) 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 **Scale of Ethnocultural Empathy**, developed by Wang, Davidson, Yakushko, Savoy, Tan, and Bleier (2003), 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 α 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 I 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 ($\alpha=.90$).

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.

A cross-sectional research design was used to measure differences in student learning for students enrolled in psychology courses that utilize ABSL or CBSL as their primary pedagogical strategy 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 Socially Responsible Leadership Scale (SRLS), and the Three Aspects of Engagement. 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. Students were given a link to access the survey at the beginning and end of the term.

RESULTS

A repeated measures analyses of covariance (ANCOVAs) was conducted to measure differences in student learning outcomes (i.e., CASQ, CoBRAS, MCI, MEI, MEIM, SEE, SRLS, and Three Aspects of Engagement) between academic- and cultural-based service-learners from the beginning to the end of the semester. The type of service-learning course (i.e., ABSL, CBSL) was used as the independent variable, pretest and posttest scores were used as dependent variables, and previous service-learning courses served as the covariate. The significant interaction and main effects are shown in Tables 1 and 2.

Bonferroni *t* tests were conducted to detect differences in adjusted means for academic- and cultural-based service-learners while controlling the Family Wise (*FW*) Error Rate (Howell, 1992). Results from pairwise comparisons ($p < .05$) indicate that cultural-based service-learners had greater awareness of White privilege and understanding of gender and racial discrimination by the end of the semester compared to academic-based service-learners after controlling for prior service-learning. One-Way Analyses of Variance (ANOVA) were conducted on posttest scores to further control for Type I errors. ANOVAs are shown in Table 3. Cultural-based service-learners had higher posttest White privilege, social justice, multicultural relationship, ethnocultural empathetic expression, perspective-taking and interpersonal engagement scores compared to academic-based service-learners. Finally, main effects for time indicate that students increased their awareness of White privilege, understanding of gender and racial discrimination, and awareness of institutional discrimination from the beginning to the end of the semester regardless if students are exposed to ABSL or CBSL.

Independent *t*-test were conducted to measure differences in post-test student learning outcomes for students with and without prior service-learning. Students with prior service-learning ($M = 51.11$, $SD = 20.96$) had higher post-test scores for interpersonal problem-solving skills $t(238) = -3.91$, $p < .001$ and social justice attitudes $t(251) = -4.21$, $p < .05$ compared to those students without prior service ($M = 47.01$, $SD = 16.24$). Students with prior service ($M = 15.61$, $SD = 17.32$) also

had higher post-test interpersonal engagement $t(178) = -3.26, p < .001$ and multicultural relationship $t(243) = -2.28, p < .05$ scores compared to those students without prior service ($M = 13.71, SD = 16.01$). In addition, independent t-tests were conducted to measure differences in post-test student learning outcome scores for students who did and did not participate in a diversity course. Students who took part in a diversity course ($M = 9.66$) had higher post-test community engagement scores $t(35) = -2.86, p < .001$ compared to those students who did not take part in a diversity course ($M = 8.92$).

A repeated measures analyses of variance with orthogonal contrast were conducted to measure differences in student learning outcomes for underclassmen and upperclassmen from the beginning to the end of the semester. Freshman and sophomore categories were combined and recoded as underclassman; while, junior and senior were combined and recoded as upperclassman. Sixty-eight percent of students were underclassmen and 32% of them were upperclassmen. The significant interaction effects for MEI, MEIM, and SEE scores are shown in Table 4. Orthogonal contrasts that were significant for Group x Time interaction effects indicate that upperclassmen develop a racial-cultural-ethnic identity and evaluate the diversity content as less integrated into the service-learning course over the course of the semester compared to underclassmen. Underclassmen also improve their ethnocultural awareness of racial and ethnic stereotypes by the end of the semester compared to upperclassmen. Finally, main effects for time indicate that both student groups increase their interpersonal problem-solving skills, awareness of White privilege and institutional discrimination, understanding of gender and racial inequality, appraise the course as encouraging student perspectives, interpersonal and community engagement, and socially responsible leadership from the beginning to the end of the semester.

DISCUSSION

The first objective of this study was to measure differences in student learning outcomes (i.e., CASQ, CoBRAS, MCI, MEI, MEIM, SEE, SRLS, and Three Aspects of Engagement) from the beginning to the end of the semester for students enrolled in psychology courses that utilize ABSL and CBSL as primary pedagogical methods. Students increased their awareness of White privilege and understanding of general and racial inequality from the beginning to the end of semester. Students with prior service-learning did not significantly differ in awareness of White privilege and understanding of racial inequality from those students without prior service-learning. In addition, students with prior service improved their interpersonal problem-solving skills and understanding of social and economic disparities in the community by the end of the term compared to those students without prior service, congruent with previous research on service-learning and student learning (Caswell, 2018; Eyler & Giles, 1999). Compared to students without prior service, students with prior service expanded their intercultural relationships and improved their interpersonal engagement skills. Students who participated in service-learning prior to the current course formed relationships with their peers and service recipients and were more likely to interact with them outside of the course, thus possibly contributing to their enhanced intercultural relationships and interpersonal engagement. Therefore, service-learning appears to be a potential strategy for promoting student engagement, also consistent with previous service-learning research (Gallini & Moely, 2003).

A second objective was to assess differences in student learning outcomes for students exposed to ABSL and CBSL over the semester. Although the two groups of students did not differ at the

beginning of the semester, cultural-based service-learners made more positive appraisals of their own attitudes and skills by the end of the semester compared to academic-based service-learners. Compared to academic-based service-learners, cultural-based service-learners increased their intercultural relationships, understanding of social justice issues in the community, and interpersonal engagement by the end of the course. This group of service-learners also increased their awareness of White privilege, acquired perspective-taking skills, and improved their ability to express empathetic feelings. Academic- and cultural-based service-learners mentored and tutored children who culturally differed from them throughout the semester and connected their service experiences to the course content through reflections, discussions and assignments. Unlike students in the ABSL course, students in the CBSL course were required to systematically analyze race and class concepts in each class. Experiential and reflection activities were used daily to challenge assumptions; while, documentaries, role-playing and other connective activities were used to demonstrate how students are similar to and different from each other. The combination of the diversity content and service context may have contributed to cultural-based service-learners' improved attitudes and skills. It is further possible that students formed relationships with peers because of class assignments also contributing to their interpersonal engagement skills. For instance, some students visited each other's religious organization as part of the multicultural observation assignment; while, other students interviewed each other for the multicultural interview assignment. In addition, White privilege was a major topic covered in the Multicultural Psychology course. Cultural-based service-learners learned and practiced perspective-taking skills through small and large group activities. Cultural-based service-learners also learned how to address stereotypes through role-playing and reflection activities. It is not surprising that cultural-based service-learners increased their awareness of White privilege, improved their perspective-taking skills, and acquired an ability to recognize and challenge stereotypes, because these skills reflect the diversity content and instructional strategies that were used in the Multicultural Psychology course. Our findings are consistent with previous research that suggests service-learning is a promising pedagogy for student engagement in courageous conversations about cultural privilege, but only if diversity is intentionally addressed in the course through the content, activities, and assignments (Baldwin et al., 2007; Dunlap et al., 2007).

Critical service-learning is another term that is used to describe the combination of service-learning, course content, and instructional strategies to intentionally challenge students to think critically about diversity and social justice issues (Mitchell, 2008). Critical service-learning is related to student learning outcomes of cultural competence and civic engagement (Harkins et al., 2018). Student learning outcomes related to cultural competence and civic engagement are also known as critical benefits (Harkins et al., 2018). Within this context, CBSL is a form of critical service-learning and student learning outcomes are considered critical benefits. In contrast to critical service-learning, there were no significant differences in student learning outcomes between students who did and did not take diversity courses as part of their undergraduate studies except for community engagement. Students who participated in a diversity course reported feeling more connected to the community and were more likely to change their perceptions as a result of the course compared to students who did not participate in a diversity course, incongruent with previous research suggesting that diversity courses foster an enriched learning environment that challenges students to examine issues related to cultural privilege (Case, 2007; Prieto, 2010). Few students in the current study reported taking a diversity course

which may explain the discrepancies in the findings from the current study and in previous research. It is further possible that students who reported taking a diversity course may have taken a didactic course in a discipline outside of psychology as part of their liberal arts studies (i.e., Modern Language, Art History). Didactic courses may not challenge students to examine their own assumptions related to cultural privilege.

A third and final objective was to measure differences in student learning outcomes for underclassmen and upperclassmen. Upperclassmen enrolled in ABSL and CBSL courses showed an expected change in their racial-cultural-ethnic identity development compared to underclassmen from the beginning to the end of the semester, congruent with previous research on racial identity interaction paradigms (Cross, 1991; Helms, 1990). Helms (1990) proposes that White students transform their White racial identity development through intercultural interactions with others who are racially and culturally different from them. Intercultural interactions enhance identity development for White students. White students transform their views of themselves as privileged and colorblind to racialized and less racist. Upperclassmen may have had more opportunities for formal and informal intercultural interactions, thus contributing to their development of their racial-cultural-ethnic identity development.

In addition, underclassmen enrolled in ABSL and CBSL courses showed unexpected changes in their evaluation of the integration of diversity content and ethnocultural awareness of racial and ethnic stereotypes over the semester compared to upperclassmen. It is conceivable that freshmen and sophomores had limited exposure to diversity and social justice issues prior to college. These students may have rated the integration of such material in both Educational and Multicultural Psychology courses stronger than upperclassmen because of their limited knowledge. Underclassmen also increased their ethnocultural awareness of racial and ethnic stereotypes compared to upperclassmen. Underclassmen's exposure to diversity content in undergraduate psychology courses may have contributed to their increased ethnocultural awareness, consistent with previous research on multicultural and ethnocultural awareness (Sodowsky et al., 1994; Wang et al., 2003).

Congruent with previous service-learning research (Eyler & Giles, 1999), upperclassmen and underclassmen increased their interpersonal problem-solving skills, interpersonal and community engagement, and civic responsibility scores from the beginning to the end of the term. Both student groups also evaluated Educational and Multicultural Psychology courses as encouraging student perspectives and increased their awareness of White privilege, institutional discrimination, and gender and racial inequality over time. Our findings indicate that there are different yet important critical benefits from service-learning for upperclassmen and underclassmen. Freshmen and sophomores acquired ethnocultural awareness; while, juniors and seniors developed their cultural-ethnic-racial identity. These student learning outcomes indicate that the developmental levels of students influence how students engage in ABSL and CBSL courses. Therefore, beginning and ending psychology courses should incorporate service-learning pedagogies to address the different development levels and learning needs of upperclassmen and underclassmen.

Engaging students in courageous conversations about cultural privilege is more than getting students to be active learners in class (Prieto, 2010). Educators need to challenge students to

examine their own privilege, as well as their assumptions about oppression. They will also need to teach active listening and perspective-taking skills so students can engage in open dialogues about racial and cultural privilege. ABSL and CBSL are pedagogical techniques that can be used to foster student engagement in discussions about cultural privilege. However, CBSL intentionally addresses diversity and may be more effective for nurturing student engagement in these discussions. Educators should consider infusing both service-learning (i.e., ABSL) and critical service-learning (i.e., CBSL) pedagogies in undergraduate psychology curricula and courses. It may be advantageous to use a developmental approach for infusing service-learning in undergraduate psychology courses. ABSL could be used in beginning and CBSL could be incorporated in ending psychology courses, because the combination of the course content and service context contributes to different student learning outcomes. Educators should also develop psychology courses that are specific for juniors and seniors. Middle-level psychology courses should include student learning objectives and outcomes that align with critical benefits. Critical service-learning pedagogies should be infused in middle-level psychology courses. Exposing students to service-learning and critical service-learning pedagogies in beginning, middle-level, and ending psychology courses may contribute to sustained engagement beyond their academic studies.

Our findings add to the research on service-learning as a critical pedagogy for underclassmen and upperclassmen in psychology courses; however, the results should be viewed considering a few limitations. An overwhelming number of participants in this study were freshmen and sophomores, and, as a result, there is the potential for Type I errors to be associated with the results for underclassmen and upperclassmen. In addition, there were unequal groups of students who did and did not take a diversity course as part of their undergraduate studies. In fact, very few students reported taking a diversity course. Type II errors may be associated with student learning outcomes. It is possible that there are differences in students learning outcomes beyond community engagement for students who do and do not take diversity courses. More research is needed on diversity learning and student learning outcomes. Data was collected with self-report measures from a large sample of students enrolled in service-learning courses taught by the same instructor over the past decade. Students reported on measures that inquired about color-blind attitudes, intercultural relationships, and ethnocultural empathy at different points in time. Most participants were White and female and came from middle-class backgrounds. Students of Color and students from diverse backgrounds may have answered the questions inquiring about White privilege, intercultural relationships, and perspective-taking 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. Researchers may want to expand this study by having an equal number of upperclassmen and underclassmen in ABSL, CBSL, and diversity courses to draw more definitive conclusions.

In conclusion, teaching psychology courses that promote the goals of cultural competence and social responsibility is both challenging and rewarding. ABSL has the potential; while, CBCL is a promising pedagogy that promotes student learning. Students increased their intercultural relationships, acquired an understanding of White privilege and social justice issues in the community, developed perspective-taking skills, and improved their ability to express empathetic feelings through participation in a CBSL course. Engaging students in courageous conversations about cultural privilege is also a demanding yet an enriching experience. CBSL and ABSL can foster student engagement in these discussions for underclassmen and upperclassmen. Freshmen and

sophomores acquired ethnocultural awareness; while, juniors and seniors developed their cultural-ethnic-racial identity after engaging in a service course. It may be advantageous to use a developmental approach for infusing service-learning in beginning, middle, and ending psychology courses. The developmental approach for infusing critical service-learning pedagogies in the psychology curricula needs to be further explored to understand its' impact on student learning.

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Table 1. Repeated Measures Analysis of Covariance of Pretest and Posttest Scores as a Function of Type of Service-Learning with Prior Service-Learning Courses as Covariates

Source	df	SS	MS	F
CoBras				
White Privilege	1	190.19	190.19	8.61**
Prior Service-Learning (SL)	1	3.50	3.50	.09
Course	1	285.44	285.44	7.68**
WP x Prior SL	1	86.38	86.38	3.91*
WP x Course	1	.00	.00	0.00
Error	151	3332.45	22.06	
CoBras Total Score	1	501.83	501.83	7.53**
Prior SL	1	99.27	99.27	.38
Course	1	1098.53	1098.53	8.53**
CoBras Total x Prior SL	1	280.91	280.91	4.11*
CoBras Total x Course	1	.45	.45	0.00
Error	141	18146.96	128.70	

Note. ¹Differential change by service-learners, reflected in an interaction of Group by Time, at **<.01, *p<.05. ANOVA F ratios are Wilk's approximation for Group X Time interactions. ²Differential change as a function of group, p<.05. ³Differential change as a function of time, p<.05. CoBRAS rating scales 1 strongly disagree; 6 strongly agree). Lower posttest scores indicate an increase in awareness of racial privilege, institutional discrimination, and blatant racial issues. MEIM rating scales: 1= strongly disagree; 5 = strongly agree.

Table 2. Pretest and Posttest Mean Scores and Standard Deviations as a Function of Type of Service-Learning

Variable	Pretest		Posttest	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
CoBras				
ABSL	21.26	5.39	19.21	5.33
CBSL	18.91	5.72	17.38	5.43
Total	20.35	5.62	18.50	5.42
CoBras Total Score				
ABSL	54.34	8.95	51.52	10.10
CBSL	49.54	9.60	47.50	11.47
Total	52.51	9.47	49.99	10.79

Table 3. Means, Standard Deviations and One-Way Analysis of Variance for Posttest Student Learning Outcomes as a Function of ABSL and CBSL

Variables	M	SD	df	F
CASQ				
Interpersonal Problem-Solving			251	.01
ABSL	48.49	8.30		
CBSL	48.35	7.75		
Social Justice			263	4.53*
ABSL	17.30	8.67		
CBSL	19.92	9.09		
CoBras				
White Privilege			175	4.03*
ABSL	18.88	5.54		
CBSL	17.16	5.31		
Institutional Discrimination			184	1.90
ABSL	16.63	3.98		
CBSL	17.74	4.64		
Racism			177	1.61
ABSL	13.07	3.75		
CBSL	12.32	3.32		
Total Scale			169	3.63
ABSL	50.92	10.19		
CBSL	47.70	11.22		
MCI				
Awareness			250	.11
ABSL	20.11	4.82		
CBSL	20.35	5.89		
Interpersonal Relationships			253	24.68***
ABSL	15.61	4.13		
CBSL	18.54	4.23		
SRLS				
Citizenship			234	1.18
ABSL	33.78	5.26		
CBSL	34.61	5.33		

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

Table 3 (continued).

Variables	<u>M</u>	<u>SD</u>	<u>df</u>	<u>F</u>
MEI				
Course			250	8.14**
ABSL	25.86	6.29		
CBSL	28.43	4.80		
Climate			249	.05
ABSL	30.12	5.92		
CBSL	29.92	4.75		
SEE				
Acceptance			101	1.57
ABSL	9.68	1.63		
CBSL	9.12	1.66		
Awareness			162	.06
ABSL	15.64	3.66		
CBSL	15.50	3.24		
Empathetic Expression			177	4.13*
ABSL	53.43	11.11		
CBSL	57.86	8.66		
Perspective-Taking			173	7.77**
ABSL	17.52	4.32		
CBSL	18.87	3.77		
Three Aspects of Engagement				
Community Engagement			191	4.03
ABSL	8.87	1.23		
CBSL	8.98	1.24		
Interpersonal Engagement			187	75.58***
ABSL	12.80	2.15		
CBSL	17.03	4.50		

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

Table 4. Means, Standard Deviations and F Ratios for Pretest and Posttest Scores for CASQ, CoBras, MCI, MEI, MEIM, SEE, SRLS, and Three Aspects of Engagement as a Function of Year in School

Measures	Time Points				df	Time	F ratios	
	Pretest M	SD	Posttest M	SD			Group	Time x Group
CASQ								
Interpersonal Problem-Solving					225	9.11**	12.73***	.00
Underclassmen	47.71	7.81	49.43	8.80				
Upperclassmen	44.36	5.55	46.01	7.85				
Total	46.68	7.34	48.36	8.15				
CoBras								
White Privilege					151	10.94***	12.64***	.41
Underclassmen	21.55	5.78	19.37	5.82				
Upperclassmen	18.71	5.01	17.25	4.64				
Total	20.36	5.63	18.48	5.44				
Institutional Discrimination								
Underclassmen	19.14	3.38	18.85	3.99	170	7.89**	.75	3.76
Upperclassmen	19.35	4.13	17.75	4.43				
Total	19.23	3.72	18.37	4.21				
Total Scale								
Underclassmen	53.80	8.70	51.98	10.96	141	7.79**	8.32**	.93
Upperclassmen	50.81	10.29	47.06	10.00				
Total	52.55	9.48	49.92	10.81				
MEI								
Course					156	7.86**	4.32*	10.10**
Underclassmen	27.01	4.70	27.24	5.61				
Upperclassmen	27.54	4.95	23.87	7.83				
Total	27.25	4.81	25.72	6.71				
Climate								
Underclassmen	27.98	4.61	29.96	5.13	152	24.99***	6.69*	1.73
Upperclassmen	28.81	4.38	32.21	5.50				
Total	28.34	4.51	30.92	5.39				

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

Table 4 (continued).

Measures	Time Points		Posttest		df	F ratios			
	Pretest M	SD	M	SD		Time	Group	Time x Group	
MEIM									
Ethnic Identity Achievement						240	9.00**	4.85*	5.02*
Underclassmen	16.25	4.09	16.51	3.86					
Upperclassmen	16.41	3.96	18.22	4.05					
Total	16.30	4.04	17.08	3.99					
SEE									
Awareness					152	38.08***	.15	18.39***	
Upperclassmen	16.61	2.88	16.05	3.42					
Underclassmen	18.06	3.16	14.95	3.38					
Total	17.19	3.07	15.61	3.44					
SRLS									
Citizenship					213	11.62***	.90	2.55	
Upperclassmen	33.09	4.76	34.00	5.44					
Underclassmen	31.74	4.05	34.24	5.24					
Total	32.72	4.61	34.06	5.37					
Three Aspects of Engagement									
Community Engagement					177	5.84*	.43		2.44
Upperclassmen	8.74	1.22	8.83	1.27					
Underclassmen	8.67	1.24	9.10	1.06					
Total	8.71	1.22	8.95	1.19					
Interpersonal Engagement									
Upperclassmen	14.55	3.96	14.65	4.10	167	4.75*	2.18		2.69
Underclassmen	13.43	2.95	14.19	3.23					
Total	14.06	3.59	14.45	3.74					

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