

The Outcomes of Interprofessional Experiential Learning for Underrepresented Racial/Ethnic Minority Students to Address Latino Childhood Obesity

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Pedagogy in Health Promotion: The Scholarship of Teaching and Learning 1–11

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DOI: 10.1177/23733799211021454

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Abstract

Addressing Latino childhood obesity requires effective health promotion programs and culturally resonant health professionals. The current profiles of public health professionals and registered dietitians point to the need to increase the number of Latino students trained in community-based participatory research and engagement of underserved populations. To address this workforce gap, the Center for Latino Community Health, Evaluation, and Leadership Training developed the *Sanos y Fuertes: Healthy & Strong Graduate Research Fellowship* to provide Latino graduate students with research training, professional development, and mentorship. Five cohorts of seven graduate students participated in a yearlong experiential learning program. Graduate research fellows received monthly research and professional development training from faculty, staff, and community health workers. Furthermore, fellows engaged in mentored research through the development and implementation of a Latino childhood obesity prevention curriculum and intervention. A mixed-method evaluation approach was used to assess the effectiveness of the program. Fellows completed baseline, posttraining, and follow-up assessments. Assessment surveys measured training experiences (e.g., research methods, community engagement), confidence (e.g., research methods, health education), and knowledge and skills (e.g., community health program skills). The training resulted in significant increases in skills and confidence between pre- and postassessments that were sustained at follow-up. Based on these findings, we recommend that student training programs include research as experiential learning with multidisciplinary, interprofessional teams and that community-based, community-engaged, or translational research teams include community health workers as integral members for research with marginalized, underserved populations.

Keywords

Hispanic/Latino health, experiential learning, community-based participatory research, community health workers

Inclusion of first-generation-educated minority students in developing and implementing health programming can enhance the skills of future health, public health, and nutrition professionals and the cultural congruence and delivery of community-based research interventions addressing Hispanic/Latino health, including childhood obesity. Latino students embody assets and strengths (e.g., cultural capital) invaluable to tailoring and delivering health interventions to address the cultural and socioenvironmental contexts of Latino families (Rios-Ellis, Becker, et al., 2015). However, first-generation-educated ethnic minority students, particularly Latinos, are gravely underrepresented in the food, agricultural, natural resources, and human sciences disciplines (McKim et al.,

2017). There is a dire need for fully qualified, culturally and linguistically resonant graduates with degrees in food-related sciences to pursue careers in the food and agricultural workforce (Goecker et al., 2015; Stringer et al., 2019) who will tackle our nation's most pressing

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health problems, such as obesity. Increasing the number of qualified Latino public health professionals including registered dietitian nutritionists (RDNs) may be a way to address Latino health through the provision of linguistic and culturally congruent care (Heiss et al., 2012; O'Toole et al., 2019).

The design and delivery of effective health promotion programs for Latinos requires the inclusion of multilevel strategies and communication channels. To effectively meet contextual needs, engaging Latino students in experiential learning opportunities that serve their communities is essential. Experiential learning provides students with career-related training, field experience, and professional development to prepare them to enter the workforce (Gavigan, 2010; Simons et al., 2012). Engaging Latino community members to inform the development and implementation of programs has resulted in significant improvements in Latino health outcomes (Balcazar et al., 2009; Messias et al., 2013).

Promotores de Salud (community health workers [CHWs]) are trusted compassionate leaders in their communities (Elder et al., 2009; Rios-Ellis, Nguyen-Rodriguez, et al., 2015). *Promotores'* insights into their communities' socio-environmental contexts (e.g., barriers and facilitators) related to healthy lifestyles places them in a position to serve as liaisons between interventionists and Latino community members. The CHW model in health promotion involves training of community leaders to conduct community outreach and recruitment, deliver health education, case management, provide social support, and evaluate outcomes (Koskan et al., 2013; Rios-Ellis, Becker, et al., 2015; Swider, 2002).

Given the benefits of Latino students' cultural capital and the effectiveness and success of *promotores* programs paired with academic training in health interventions, the California State University Long Beach's (CSULB) Center for Latino Community Health, Evaluation, and Leadership Training (hereafter CSULB Latino Center) developed *Sanos y Fuertes: Healthy & Strong*, an interdisciplinary graduate education and training project to prevent Latino childhood obesity. The rising trend of obesity among Latino children is concerning as childhood behaviors tend to track into adulthood, increasing the overall sequelae of obesity-related chronic diseases (Biro & Wien, 2010; Ward et al., 2017). Thus, it is imperative to target public health efforts toward prevention of Latino childhood obesity and related comorbidities. The project paired seasoned *promotoras* (female CHWs) with graduate students to deliver the *Sanos y Fuertes* health promotion intervention to Latino families (Frank et al., 2020). This study examined the effectiveness of the experiential training project in preparing Latino graduate students to enter the health and nutrition promotion workforce to address obesity among Latino children and their families.

Methods

Study Setting

CSULB is a diverse, urban Hispanic-serving institution and a national leader in student-centered learning. CSULB enrolls 36,833 undergraduate and graduate students per year; more than half of the students are low-income, first-generation educated, and 42.9% are Hispanic/Latino. The CSULB Latino Center serves as a research and training site for the development of culturally competent young professionals preparing to meet the health needs of the increasingly diverse U.S. population.

Participant Eligibility. Five cohorts (2011–2015) of seven CSULB graduate students were selected annually for the graduate research fellowship. Eligibility criteria included (1) identify as Latino/Hispanic; (2) bilingual in English and Spanish; (3) graduate student enrolled in master of science in nutrition, public health, social work, or other human services-related discipline; (4) first-generation educated; (5) available 20 hours per week for 1 year; and (6) commitment to enroll in fellowship-related graduate coursework.

Recruitment and Selection of Study Participants. Graduate students were recruited from the health sciences and human services-related departments at CSULB through classroom presentations, postings on online course platform, flyers and posters around campus, and direct referrals from faculty or peers. Recruitment took place during the spring semester preceding the start of the fellowship academic year. Students submitted an application, personal statement, transcripts, resume, and one letter of recommendation. Applications were reviewed by the principal investigators (PIs) and project manager. If the applicants met all criteria, they were invited for a panel interview with the PIs and project manager. Final selection of the graduate research fellows (GRFs) was completed by summer each year and was based on the strength of application, face-to-face interview, and interest in addressing Latino childhood obesity. To increase the number of Latino RDNs, at least one GRF had to be a Latino/a student enrolled in the accredited RDN program at CSULB. The GRF training protocol was approved by the CSULB institutional review board, and informed consent was collected prior to participation.

Study Design

The 1-year fellowship was part of a larger childhood obesity prevention study titled, *Sanos y Fuertes*. The fellowship aimed to train graduate students and provide hands-on experience in community-based participatory research (CBPR) and childhood obesity prevention in the Latino community. GRFs received financial support for academic expenses, a travel scholarship to attend a professional

Table 1. Topics for Student Training.

| Orientation and initial training topics ^{a,b} | Ongoing training topics ^{c,d} | Focus areas ^e | Intervention content training topics ^f |
|---|--|--|--|
| 1. Project overview/importance of addressing Latino childhood obesity | 1. Manual of procedures | 1. Adaptation of recipes to Latino culture | <i>Content for adults/caregivers</i> |
| 2. Community-based participatory research | 2. Formative research | 2. Anthropometric measurement | 1. Importance of breakfast |
| 3. Working with Latino communities | 3. Doctoral preparation | 3. Community-based participatory research | 2. MyPlate guidelines |
| 4. Institutional review board | 4. Manuscript development | 4. Faculty and student trainings | 3. Portion sizes |
| 5. Ethical and responsible conduct of research | 5. Motivational interviewing booster | 5. Child curriculum activities for ages 3 to 5 years | 4. Nutrition label reading |
| 6. Data collection protocols and instruments | 6. Curriculum vitae development | 6. Child curriculum activities for ages 6 to 8 years | 5. Calories and daily values |
| 7. Anthropometric measures | 7. Resumes | 7. Social media | 6. Sugar-sweetened beverages/identifying healthier options |
| 8. Adult intervention curriculum | 8. Public health fellowships | 8. Eating on a budget | 7. Sugar intake |
| 9. Child intervention curriculum | 9. Grant writing | 9. Focus group transcription and analysis | 8. Grocery shopping tips |
| 10. Motivational interviewing for dietary changes | 10. Reference works/EndNote | 10. Health intervention | 9. Culturally relevant ingredient substitutions |
| 11. Mock <i>Charla</i> (intervention session) | 11. SPSS basics and data entry | 11. Manual of procedures | 10. Importance of physical activity |
| 12. Focus areas overview | 12. Quantitative analysis | 12. Manuscript development | 11. Sedentary behavior |
| 13. Intervention logistics | 13. Qualitative analysis | 13. Recruitment | <i>Content for children</i> |
| 14. Effective health education delivery | 14. Abstract development | 14. SPSS data entry and management | 1. Eating the alphabet: Fruits and vegetables from A to Z |
| | 15. Scientific poster development | | 2. Eat right with MyPlate |
| | 16. Oral presentations | | 3. Keeping your body healthy |
| | 17. Adult intervention curriculum review | | |
| | 18. Child intervention curriculum review | | |

^aOrientation training topics included 1 to 3.

^bInitial training topics included 4 to 14.

^cOngoing training occurred during project meetings, research hours, and in the field.

^dAdditional booster trainings were conducted on initial training topics as needed.

^eFocus areas were assigned to different students and overseen by project staff.

^fStudents received training on all intervention topics and content delivery.

conference, training (research, professional, and academic development), experiential learning, and mentorship from project faculty and staff, including *promotoras*. Each cohort participated in a 1-to-2-week orientation and training with minor variations in focus based on the intervention time line (e.g., formative research during Year 1, development and piloting in Year 2, and intervention implementation in Years 3-5). Additionally, GRFs were engaged in ongoing trainings throughout their 1-year fellowship. Trainings were facilitated by project PIs, staff including *promotoras*, and faculty.

Focus areas were assigned to each GRF based on their interests to allow students to receive more in-depth training during their fellowships; nutrition-specific and childhood obesity-related research was embedded throughout the various trainings and focus areas. Students in Year 1 increased their knowledge on Latino childhood obesity and prevention through the formative research process, while students in Year 2 learned to develop the curriculum and piloted the intervention. GRFs in Years 3 to 5 were trained to deliver the curriculum and learned the content through implementation of the intervention. See Table 1 for overall training, intervention content, and focus area topics. *Sanos y Fuertes* study details,

intervention curriculum details, and outcomes have been published elsewhere (Frank et al., 2020).

Procedures

GRFs completed confidential assessments at scheduled times per standardized protocols and scripts. Paper-and-pencil baseline surveys were completed on the first day of orientation. The two-part (paper, quantitative; electronic, qualitative) post assessments were administered during their last week in the fellowship. Follow-up surveys were administered in summer 2019 via online survey (Qualtrics v.XM; Qualtrics, 2005). Survey items were created specifically for the project based on the goals and training content, with one being adapted from an existing validated measure.

Measures

Knowledge and skills regarding community health intervention (11 items, $\alpha = .848$) and professional outcomes (professional and community dissemination subscale: 7 items, $\alpha = .705$; community health promotions skills subscale: 3 items, $\alpha = .793$) were assessed. Response

options ranged from 5 = *completely true* to 1 = *completely false*. Scale scores were calculated by taking the mean of responses.

Self-efficacy was evaluated for research methods (4 items, $\alpha = .621$), community health promotion (3 items, $\alpha = .861$), and professional development skills (4 items, $\alpha = .825$). A 100-mm visual analog scale measured confidence to engage in behaviors; anchors were 0 = *not at all confident* and 100 = *completely confident*. Scales scores were computed based on mean values for responses.

Professional development assessments evaluated receipt of training/support using the stem, "I have experienced each of the following" in five areas: application preparation (4 items, $\alpha = .825$), interdisciplinary work (1 item, single-item analyzed), conference participation (4 items, $\alpha = .853$), research methods workshops (4 items, $\alpha = .839$), and community-related experiences (9 items, $\alpha = .890$). Responses were along a 5-point Likert-type scale, ranging from 1 = *never* to 5 = *all of the time*; mean scores were calculated to create scale scores.

For CBPR attitude change, four items were adapted from the Student Subjective Science Attitude Change Measure (Stake & Mares, 2001). Assessed at posttest only, responses ranged from 1 = *not at all* to 7 = *a great deal*. Scale score was computed from the mean of items ($\alpha = .751$).

Personal development change was assessed at post-only quantitatively and qualitatively. Three items assessed change in self-efficacy regarding career goals; responses were yes or no. One item asked, "Have you researched, pursued, or obtained any health-related professional/job-related positions as a result of your participation in the *Sanos y Fuertes* project?" Responses were yes/no, with descriptions requested for a response of yes. Open-ended qualitative items included the following: "List three life skills you learned through participating in the *Sanos y Fuertes* project that you feel will help you address academic and professional challenges"; "List two reasons you are more interested in completing your degree, pursuing a certificate, traineeship, doctorate or other terminal degree"; "What are the three most important things you learned about yourself as a result of your participation in the *Sanos y Fuertes* project?" Please list and explain why; and "What is the *one* most important thing you learned from participating in the *Sanos y Fuertes* project?"

Perceptions about opportunities. On the follow-up survey only, GRFs were asked, "In what ways did your participation in the *Sanos y Fuertes* Graduate Research Fellowship help you gain academic and professional opportunities? Provide specific examples of your personal experience for each item." Nine items were listed, with responses ranging from 1 = *completely false* to 5 = *completely true*, with space provided to fill in examples.

Program evaluation measured utility of program components and program improvement feedback. On the

posttest, GRFs listed the three components they liked the most or felt were most rewarding with an explanation of why. On the follow-up survey, GRFs were asked to identify which components had prepared them best for their academics or career and to describe why.

With regard to influence of *promotoras*, follow-up items asked how the *promotoras* affected the GRF's research in the community (11 items) and personal development (3 items). Responses ranged from 1 = *completely disagree* to 5 = *completely agree*; individual items were analyzed. A final open-ended item asked, "In what ways did the *promotoras* affect or influence what you've done since the fellowship?"

Analysis

Quantitative. Descriptive statistics summarized sample characteristics, posttest, and follow-up data. Paired-samples *t* tests assessed pre-to-post changes. Repeated-measures analysis of variances with post hoc tests assessed changes across pre, post, and follow-up. Alpha level was set at .05, and Cohen's *d* values provide estimates of effect size. All quantitative analyses were performed using IBM SPSS v.24 (IBM Corp., 2016).

Qualitative. Content analysis of open-ended responses by question to identify common themes in the participant responses (Hsieh & Shannon, 2005) was performed using Excel. Themes were categorized based on the fellowship aims. All study investigators met to review data, themes, and categories to ensure consensus in qualitative findings and reporting. Concept mapping facilitated data interpretation and clarified relationships with respect to having CHWs as part of the research training staff, particularly because CHW involvement was integral to all components of the project (Butler-Kisber & Poldma, 2010).

Results

Demographic Characteristics of the Sample

A total of 37 GRFs participated across the five cohorts. All students earned their master's degree in public health ($n = 18$), social work ($n = 11$), nutritional science ($n = 5$), health science ($n = 2$), or education ($n = 1$). One student earned dual degrees in public health and nursing, while another student earned it in public health and doctor of medicine. The majority were female ($n = 34$). Among the 28 follow-up respondents, current/recent positions included clinicians, health educators, and program managers/coordinators (e.g., community, preventive health). In addition, two were licensed clinical social workers, three were RDNs, and one a registered nurse.

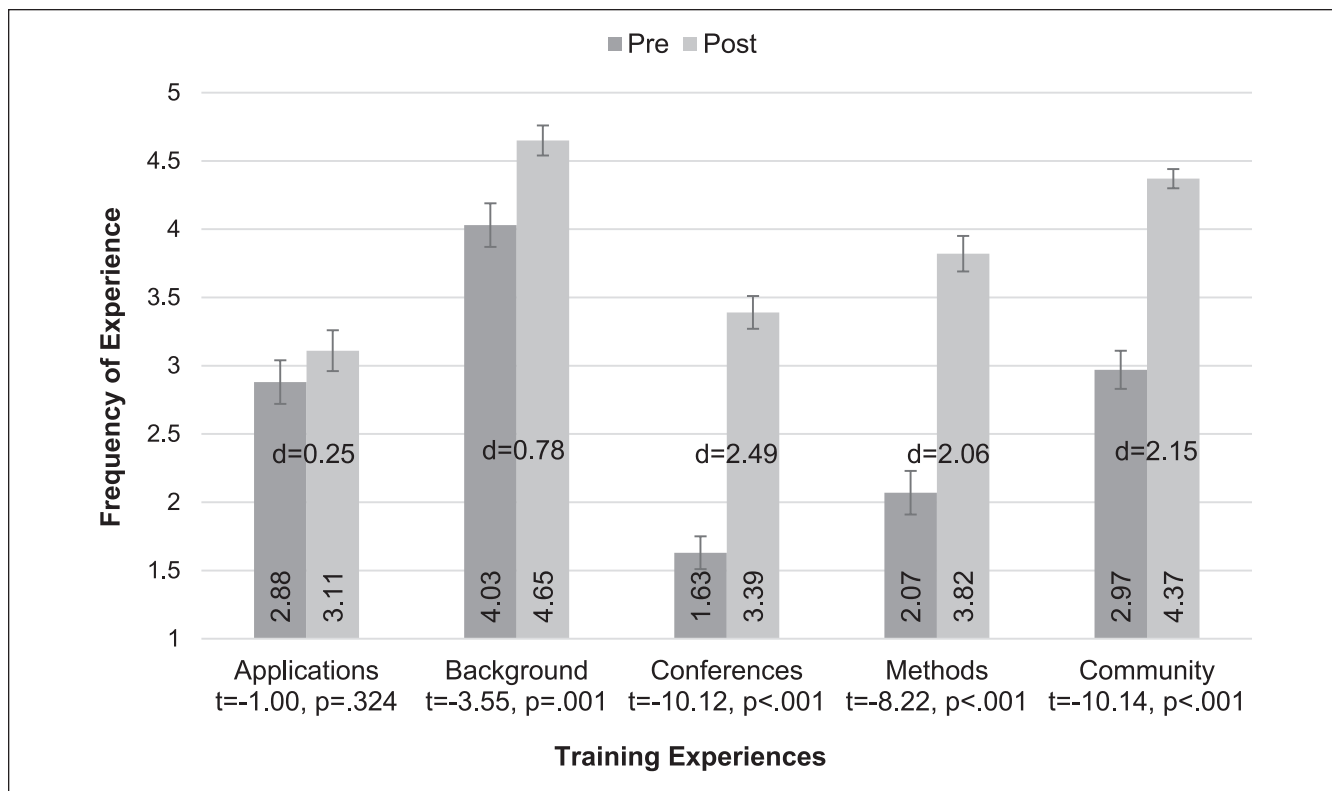


Figure 1. Training experiences: Changes between pre- and post-assessments.

Note. Error bars represent standard errors; Cohen's *d* values provide estimates of effect size. Applications: Preparation for PhD applications; Background: Working with peers from different backgrounds; Conferences: Attend and present at professional conferences; Methods: Research methods workshops; Community: Community-related experiences.

Pre–Post Changes

As displayed in Figure 1, the fellowship training significantly increased opportunities to work in interprofessional teams, enhanced ability to engage in research dissemination, increased skills in research methods, and afforded experience working with community members.

Post and Follow-Up Descriptives

Personal Development. As a result of the training experience, GRFs had more positive feelings about working in the Latino community and use of CBPR methodology ($M = 6.60 \pm 0.46$, possible range: 1 to 7). Students reported greater confidence in their ability to face academic and professional challenges and find a job aligned with their career goals. When asked to list two reasons why they were more interested in completing their degrees or continuing with higher education, most students reported wanting to make a positive impact on the community and engage in research. When asked about what, if anything, they had learned would help them overcome academic and professional challenges, the GRFs reported teamwork, presentation skills, and applying CBPR methods as being the top three life skills gained. Students improved

their presentation skills “by learning how to read a room better in order to deliver content in a way that would be received by the audience.” Students saw the “importance of camaraderie and respect when working with peers” and learned how to “work with community leaders and stakeholders and how important they are for project success.” Other skills mentioned included time management, communication, and problem solving.

GRFs were asked to name the three most important things they learned about themselves resulting from their participation. Increased self-esteem and self-confidence were the most commonly listed. Students shared, “I often undervalue my work and have low academic self-esteem—I am learning to accept and believe that my work is good and competitive due to my supportive environment.” When noting the value of professional Latinas, one student stated, “I am valuable and needed. Many times, throughout the fellowship there were reminders of why we as Latinas are important, valuable, and needed in our communities.” Students mentioned increased academic aspiration and the recognition of their ability to pursue a doctorate: “I have the capacity to get a doctoral degree. This was not something I had thought about before. Now I feel capable and motivated

to get my PhD or DrPH, thanks to inspiration from fellow students and my mentors.”

Professional Outcomes. GRFs were asked to describe if their career aspirations had changed as a result of their participation. The majority stated that their career aspirations had not changed but that their involvement in the project had opened their eyes to wider possibilities within the field, most notably their ability to pursue a doctoral degree. One student noted,

Prior to the project, I did not feel that I was qualified to apply for a doctoral degree. While completing my application for a doctorate in Public Health, I was able to use my experience in *Sanos y Fuertes* as a basis as to why I wanted to pursue the degree. *Sanos y Fuertes* provided me with an introduction to SPSS, data management, curriculum development, and health education. In addition, I was able to apply for a job and the position was offered to me. I was able to use this project to hone my skills. It provided me with several appealing options at the closing of the project.

More than half (57.7%) reported pursuing or obtaining job positions as a result of the fellowship. GRFs provided ratings for how the fellowship helped them obtain academic and professional opportunities. Highest rated items were experience working in the community ($M = 4.93 \pm 0.22$), improved collaborative skills ($M = 4.89 \pm 0.42$), and the ability to present research and/or health education information ($M = 4.86 \pm 0.45$).

Fellowship Evaluation. At post-assessment, the top three rated components of the fellowship were implementing the health education intervention (40%), professional development activities (25%; e.g., abstracts, presentations, networking with professionals), and related travel opportunities (44%; e.g., professional conferences). At follow-up, the same components were rated highest: intervention implementation (100%), professional development (96.6%), and professional conferences (96.4%).

Within each fellowship component several themes emerged in the qualitative analysis that supported the quantitative data. Working with the community and experiential learning emerged from the intervention implementation component. One of the fellows shared that working with the community “prepared me to implement programming in the community” and gain “confidence in my public speaking and facilitation skills.” Implementing the intervention provided experiential learning advantages to many of the fellows, such as gaining “hands-on experience that has made me a stronger candidate for health education job positions.” Another student shared, “I really enjoyed this component because I felt it was the most technical and the one where I learned the most skills that I could carry on to my future career.”

Abstract and poster development, networking, and mentorship emerged from the professional development component. One of the fellows wrote, “I enjoyed having the opportunity to work on a poster and learn how to develop an abstract.” The opportunity to engage professionally “reinforced the idea of networking and how important it is to get your work out there.” Mentorship was valued by the fellows because it gave them “access to staff that would assist me with questions regarding resumes” and “preparation of my thesis defense.”

Exposure to other health research, networking opportunities, and invaluable experience emerged from the travel opportunities component. The opportunity to travel to conferences allowed fellows to see “the big picture side of health equity and how we can work together to change policies and promote health equity.” Additionally, fellows “enjoyed being able to interact with individuals from different professions” at conferences and to “meet with people who are in my profession and see future career opportunities.” Fellows shared that they were “grateful to receive funding to travel to the American Public Health Association (APHA) annual conference . . . because I come from a low-income family, the only times that I have traveled have been when I have received funding” and “traveling enhanced me both professionally and personally . . . allowing me to become independent and pushing me out of my comfort zone.”

Influence of Promotoras. Working with *promotoras* was not listed as a separate component of the training, as collaborative activities were integrated throughout the fellowship. However, at follow-up, GRFs were asked specifically about working with *promotoras*, and 92.6% agreed that these interactions prepared them to move forward in their academic and/or career aspirations. GRFs reported that *promotoras* helped families feel at ease as research participants ($M = 4.98 \pm 0.09$), were instrumental in recruiting participants ($M = 4.97 \pm 0.019$), and helpful in improving communication with community members ($M = 4.96 \pm 0.19$).

The GRFs reported the lasting influence that the *promotoras* had on their training in CBPR methods (see Figure 2). Through their close collaboration with the *promotoras*, the GRFs reported increases in knowledge regarding the CHW approach to reaching marginalized populations and the value of involving CHWs in participant recruitment and retention. One GRF shared, “Because of my experience working with the *promotoras*, I understand wholeheartedly the crucial role they play in efforts to better serve underserved communities.” Another student shared, “They were the key to recruiting families. I learned how to build rapport with the Latino community from watching them talk and interact with families.”

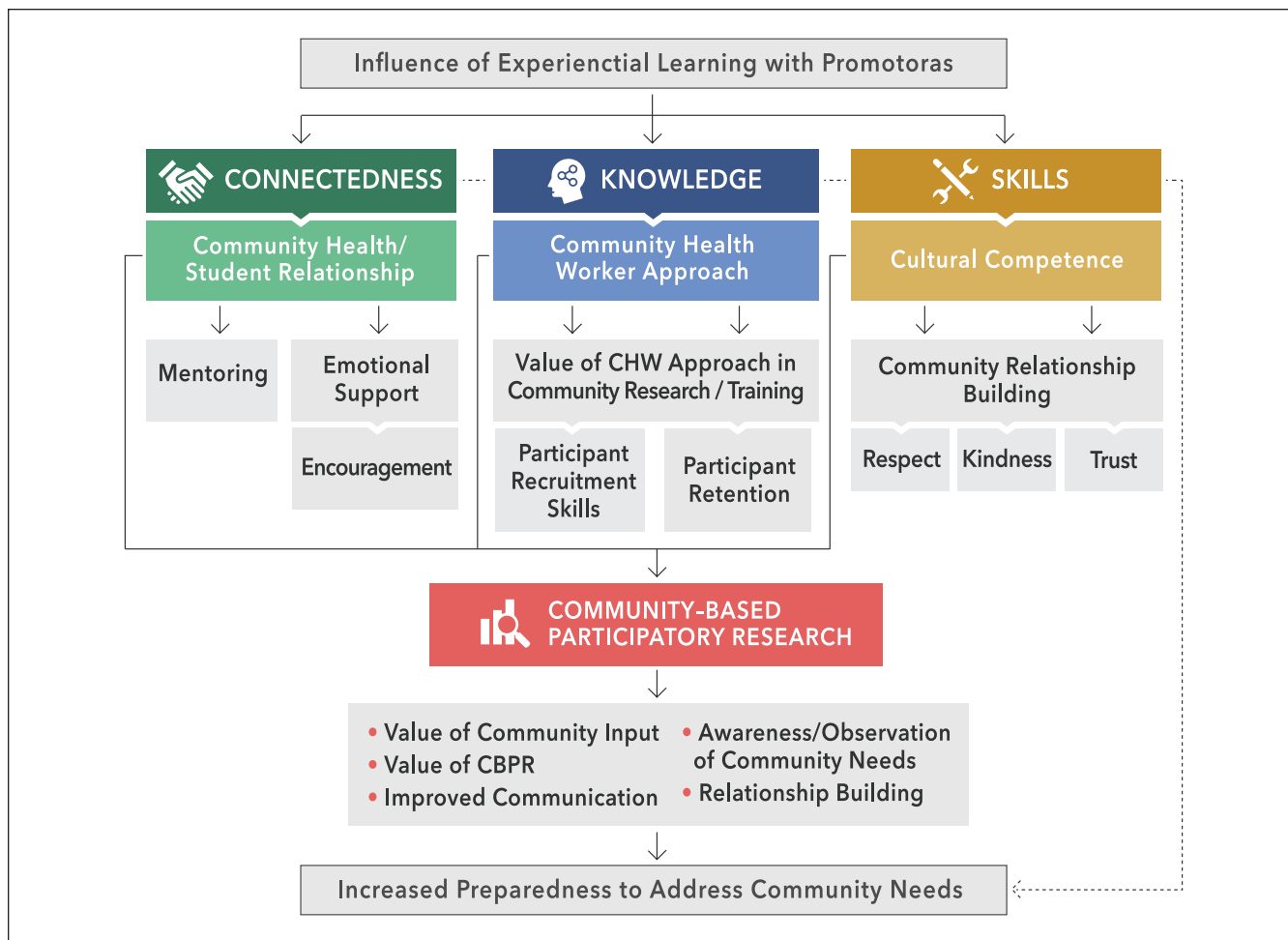


Figure 2. Influence of experiential learning with *promotoras*.
 Note. CHW = community health worker; CBPR = community-based participatory research.

The GRFs reported gaining cultural competency. One GRF shared, “I always keep the *promotoras* passion and heart in mind. They motivated me to be a better provider, one who is kind and understanding.” Another shared, “They showed me that respect is of utmost importance and this has influenced my work with families.”

Pre–Post–Follow-Up Changes

There were significant increases in skills (Figure 3) and confidence (Figure 4) between pre- and post-assessments, which were sustained at follow-up. Increases in community health skills included understanding of research ethics and considerations when working with the Latino community, age and culturally relevant health education techniques, and CBPR methods. Dissemination skills gained encompassed improving oral presentations at professional conferences and in the community and using both English- and Spanish-language skills. Community health promotion involved independent and team work to address community needs and implement health promotion programs.

Students reported increased confidence in planning culturally resonant interventions and administering evaluations, contributing to obesity prevention in Latino communities, and successfully writing an abstract for conference presentation.

Discussion

The findings of this experiential fellowship are consistent with the literature on best practices for CBPR and provide a model training platform for practical application of National Standards for Culturally and Linguistically Appropriate Services in health and health care (Office of Minority Health, 2013). The integration of CHWs into the research and training team affirms their effectiveness and contributions to building a healthy society (Kangovi et al., 2018).

Duran et al.’s (2019) National Study of Promising Practices in CBPR noted that “bridging social capital” or the ability of community and academic partners to effectively interact across differences as one of seven factors most likely to contribute to community health in the short and long term. In the fellowship training, disciplinary and

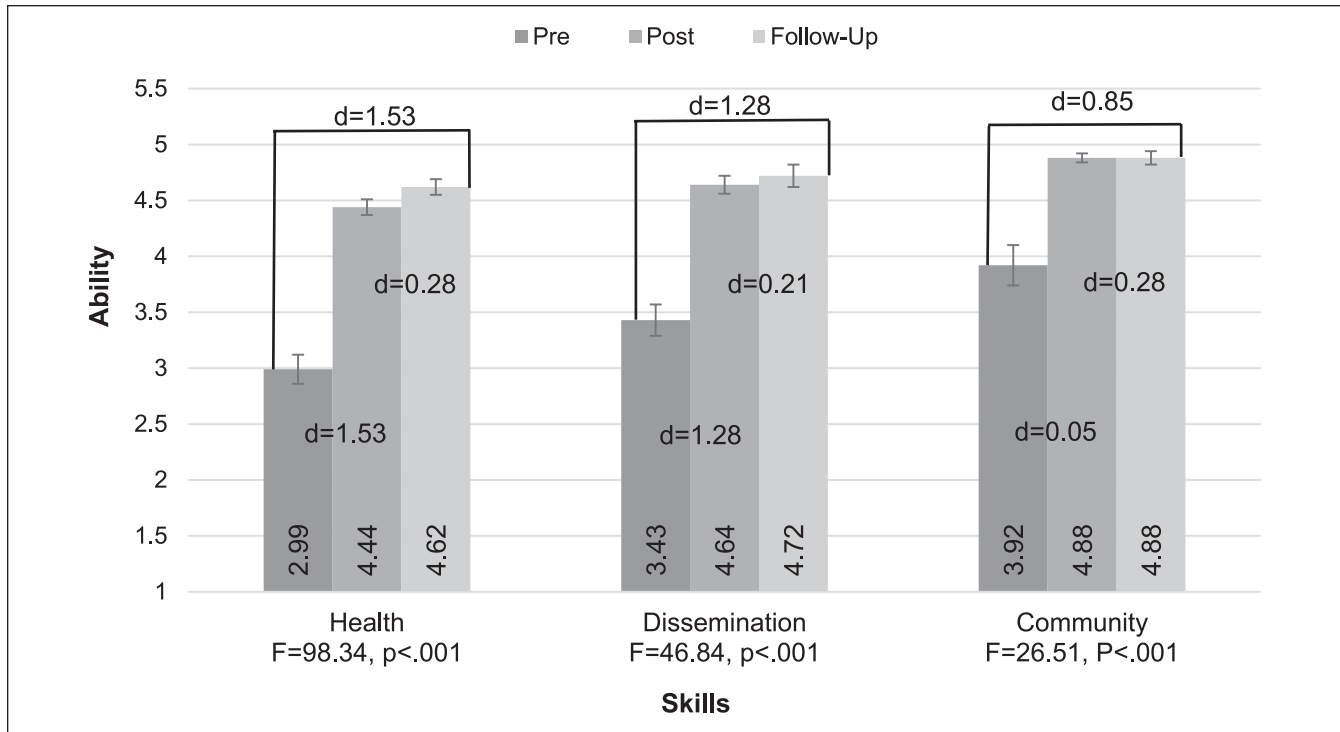


Figure 3. Skills: Changes across pre-, post-, and follow-up assessments.
 Note. Error bars represents standard errors; Cohen's *d* values provide estimates of effect size. Health: Community health intervention; Dissemination: Presentation of research results; Community: Address community needs.

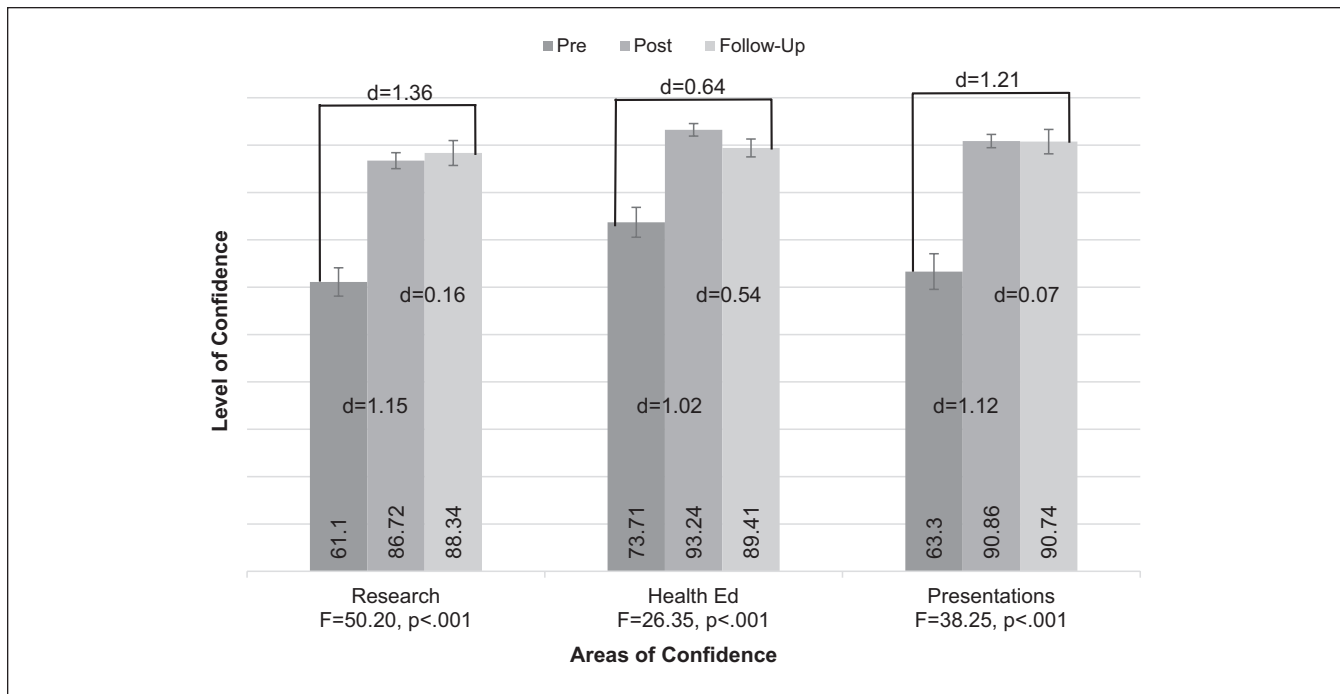


Figure 4. Self-efficacy: Changes across pre-, post-, and follow-up assessments.
 Note. Error bars represents standard errors; Cohen's *d* values provide estimates of effect size. Research = Community research; Health Ed = Community health education; Presentations = Write abstracts and present research results.

life circumstances were bridged, and trust and respect were established among the research team as well as within and among the community participants. Students reiterated the importance of being involved throughout all aspects of the research process and highlighted knowledge gained from experiential learning (intervention implementation) as boosting their discipline-specific confidence and self-efficacy. Academic learning was reinforced by sharing across disciplines and using their formal learning in real-life situations. Networking and professional presentations exposed them to research sharing within professional conference settings, an aspect that they considered invaluable in preparing them for future professional roles. The opportunity to attend and participate in professional conferences appeared to spark epiphanies for some GRFs about their capacities to contribute to health equity. This outcome far exceeds project expectations, as it planted the potential to improve health and well-being in many arenas.

Promotoras provided mentorship and actively modeled community engagement, culturally resonant intervention delivery, and how shared values can be communicated. Notably, they provided another layer of social and emotional support for the students' academic and life goals, affirming that the community values highly prepared and respectful professionals. Both components strengthened students' recognition of their cultural and linguistic capital as improving the health of Latino communities. While not the focus, this finding contributes to research on the positive impact of CHWs, including their role as citizen scientists (Baezconde-Garbanati et al., 2020).

Implications for Practice and/or Policy and Research

Based on these findings, student training programs that aim to train students to work with underserved communities should include research as experiential learning with multidisciplinary teams. Community-based, community-engaged, or translational research teams should include CHWs as integral members for training students and research with marginalized and underserved populations. Inclusion of opportunities to share research findings within both professional and community settings are important for seeding future relationships. While this interdisciplinary fellowship focused on the challenge of childhood obesity, which disproportionately affects Latino children, the methods and skills learned apply to other health disparities being faced by communities.

Limitations

There are several limitations to note. The small sample size calls into question whether the results obtained can be generalized to other training programs. The GRF

population was predominantly female; however, this disproportion is generally observed in the student pools from the disciplines of nutrition, social work, and health sciences. Findings from this project are specific to CBPR research among Latinos and may not apply to research in other cultures or contexts. There is great diversity within and among Latino communities in the United States, which may lead to distinct outcomes elsewhere. Most of the fellows, *promotoras*, and research participants in this study were of Mexican origin, for example. Notwithstanding these limitations, the positive, mutually reinforcing results across the training components suggest that the model merits replication and further testing.

Lessons Learned

There are several lessons learned from the implementation of the 5-year training program.

1. Student trainees require a multiday orientation to become familiar with different aspects of community-based research and the health topic of interest (i.e., risk factors for Latino childhood obesity) and regular refresher trainings to provide support for continued learning and problem solving based on current research assignments (e.g., focus groups, health education delivery, participant recruitment).
2. Engaging graduate students and faculty from different disciplines results in an interprofessional approach to community health interventions; however, this collaboration requires close communication with all departments to ensure student success in academics and individual program requirements (e.g., degree-specific internship requirements).

Conclusion

Interprofessional training with CHWs as an integral part of the research and mentorship team provided graduate students with increased confidence and hands-on experience to serve Latino communities in their future careers as health and human service professionals. Given the success with this model, the CSULB Latino Center continues to use multitiered, nested mentoring, experiential learning, and interdisciplinary cohorts as best practices for student training programs.

Acknowledgments

The authors thank the staff and participants of the program for their important contributions.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The authors disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This study was funded by the U.S. Department of Agriculture, Grant #2011-67002-30152.

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