



Mental Health Trainings in California’s Higher Education System Are Associated with Increased Confidence and Likelihood to Intervene with and Refer Students

Karen Chan Osilla, Michelle W. Woodbridge, Rachana Seelam, Courtney Ann Kase, Elizabeth Roth, and Bradley D. Stein

California’s Statewide Prevention and Early Intervention (PEI) activities funded by the California Mental Health Services Authority (CaIMHSA) under Proposition 63 included PEI training in mental health for staff and students in California’s higher education systems. RAND evaluated a subset of these PEI trainings using an anonymous survey that asked participants to report their confidence in their ability and likelihood to refer and intervene with students with mental health issues. Participants also reported on their general satisfaction with trainings. Participants completed either a retrospective survey (reporting pre- and post-training responses in one sitting) or a pre-post survey (reporting before and after training).

Reach. RAND evaluated a portion of trainings hosted by the University of California (UC), California State University (CSU), and California Community Colleges (CCC). For UC and CSU, a portion of their standardized, manualized trainings were evaluated, including Mental Health First Aid (MHFA), Question Persuade Refer (QPR), and Applied Suicide Intervention Skills Training (ASIST). For CCC, various PEI trainings hosted by the 30 campuses with campus-based grants were evaluated. Table 1 describes the survey respondents who attended the trainings we evaluated. Across the three higher education systems, survey respondents were 74 percent female and 43 percent White, 31 percent Latino, 11 percent Asian American, 7 percent African American, and 8 percent other ethnicity.¹ About 63 percent were students, and others included faculty/staff as follows: 11 percent full- or part-time faculty, 8 percent administrators, 2 percent mental health or general health professionals, 12 percent other staff, and 4 percent community members (e.g., volunteers). Over 70 percent of respondents reported working with special populations, including lesbian, gay, bisexual, transgender, queer, and questioning (LGBTQ); foster care youth; and ethnic minorities.

Training Satisfaction and Outcomes. Across systems, over 88 percent of respondents were satisfied with their trainings, rating their respective training very favorably, helpful, of high quality, and important to attend. Over 81 percent of survey respon-

Table 1. Sample of Evaluated Trainings

	UC	CSU	CCC
Trainings evaluated	99	436	93
Training participants	2,558	10,669	3,240
Survey respondents [n(%)] ^a	832 (33)	2,021 (19)	1,208 (37)
Students	398 (48)	1,267 (63)	728 (60)
Faculty/staff/admin	434 (52)	754 (37)	480 (40)
Female	607 (73)	1,165 (58)	878 (73)
White	365 (45)	872 (43)	481 (41)
Latino	164 (20)	623 (31)	461 (39)
African American	44 (5)	153 (8)	70 (6)
Asian American	163 (20)	185 (9)	73 (6)
Other	84 (10)	133 (7)	102 (9)

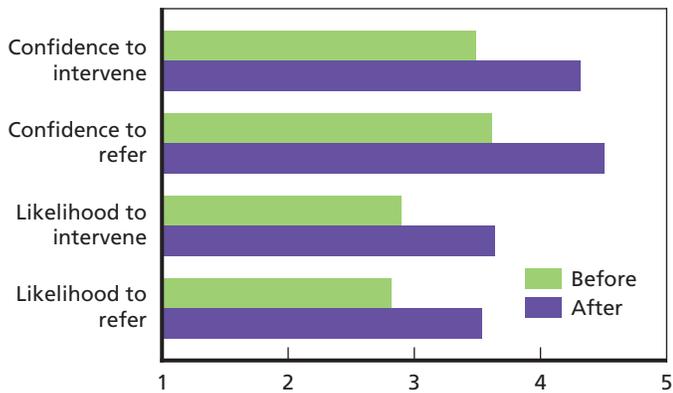
NOTE: Missing responses were excluded from the total count when calculating percentages.

^a Participation numbers based on estimates received from trainers, but may not reflect the true number of trainings that conducted the survey evaluation.

dents reported that the trainings met the unique needs of the students with whom they worked. We examined whether survey respondents reported that their confidence and likelihood to refer and intervene with students changed as a result of attending the trainings. Figure 1 compares the average pre- and post-training ratings across the pre-post and retrospective surveys, with higher scores indicating greater confidence and likelihood to intervene or refer.² Respondents reported statistically significant improvements on all four outcomes after training.

We next examined whether respondents’ ratings of training outcomes varied by race/ethnicity, role/occupation, and system (see Table 2). Latino respondents, who commonly had among the lower pre-training scores across assessed outcomes, reported significantly greater improvements than White respondents in

Figure 1. Training Increased Reported Confidence/ Likelihood of Intervening and Referring



RAND RR954-1

their confidence to refer and intervene, as well as their likelihood to refer. Other ethnicities did not report significantly different responses compared with Whites. We also found that students and faculty reported significantly larger changes in their confidence and likelihood to refer, and students reported significantly larger changes in their confidence to intervene than administrators. However, health/mental health professionals, who commonly had among the highest pre-training scores, reported significantly smaller changes in their confidence to refer and intervene compared with administrators. Finally, within each system, there were statistically significant improvements from before to after the training on all four outcomes. Respondents attending CSU trainings reported larger improvements on all outcomes compared with CCC attendees, and on all outcomes except confidence to refer compared with UC attendees.

Limitations. We evaluated only a selected set of trainings in each system, and the survey responses used in the evaluation were provided by a subset of training participants and excluded data that may have been collected in other trainings. As a result, we do not know if our results are representative of all training participants, or would generalize to all PEI trainings. Response rates could have been affected by barriers to survey administration (e.g., not having time to complete the survey from home, logistical constraints such as lack of access to online survey tools). Furthermore, our outcomes are subjective (e.g., attitudes) and we do not know to what extent they would correlate with more-objective assessments of training outcomes (e.g., intervention skill). Also, while prior studies report the validity of retrospective surveys (Howard, 1980; Rockwell and Kohn, 1989; Pratt, McGuigan, and Katzev, 2000; Lam and Bengo, 2003), a “true” baseline survey was not administered prior to the training. Finally, there was no comparison group in this evaluation, which limits our understanding of the extent which our results are due specifically to the training or due to other factors.

Conclusions. Overall, these results indicate that mental health PEI trainings funded through CalMHSA reached a diverse audience, and that respondents were generally very satisfied with the trainings they attended, indicating that they were helpful and of high quality. Survey respondents attending trainings at UC, CSU, and CCC reported statistically significant improvements in their confidence to refer and intervene with students. Of note, respondents consistently reported being more confident in their ability to intervene and refer a student than they reported being likely do so, which suggests a potential need for continued efforts to increase the likelihood of individuals taking steps to intervene with and/or refer students with mental health problems. CSU respondents reported larger improvements

Table 2. Average Pre- and Post-Training Ratings Across Training Participants

	Confidence to Intervene		Confidence to Refer		Likelihood to Intervene		Likelihood to Refer	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Race/ethnicity								
White	3.6	4.3	3.7	4.6	2.9	3.7	2.8	3.5
Latino	3.4	4.3	3.5	4.5	2.9	3.7	2.8	3.6
African American	3.5	4.4	3.7	4.5	3.0	3.7	3.0	3.6
Asian American	3.4	4.2	3.5	4.4	2.8	3.6	2.7	3.4
Other	3.5	4.3	3.7	4.5	2.9	3.6	2.8	3.4
Role/occupation								
Student	3.5	4.3	3.6	4.5	2.9	3.6	2.7	3.5
Faculty	3.6	4.3	3.6	4.6	2.9	3.7	2.9	3.6
Health/mental health	4.2	4.7	4.3	4.8	3.4	3.9	3.3	3.7
Administrator	3.6	4.3	3.7	4.5	2.9	3.6	3.0	3.5
System								
CSU	3.5	4.4	3.6	4.6	2.9	3.8	2.8	3.7
UC	3.5	4.2	3.7	4.5	2.9	3.6	2.8	3.4
CCC	3.5	4.2	3.6	4.4	2.9	3.5	2.8	3.4

compared with CCC and UC respondents. Further analyses are warranted to examine these system differences, including assessing whether the training content and the selection of specific trainings may have mediated the findings. The results also suggest that trainings had a larger impact on faculty and students, when compared with outcomes reported by administrators. Because faculty and students may be more likely to come into daily contact with a range of students with various strengths and needs, such a finding suggests the trainings may have a positive impact on the support of students with mental health problems. Although mental health and health professionals reported smaller improvements in their confidence to intervene and refer as a result of the trainings, their pre-training scores were higher than other occupations and likely a reflection of these individuals' general baseline level of experience, knowledge, and confidence

in intervening and referring students with mental health issues. Finally, we note that respondents who self-identified as Latino reported differential gains as a result of training compared with White respondents, although Latino respondents tended to have lower pre-training scores. We do not know to what extent these differences are the result of cultural differences, variations in the characteristics of trainee participants or hosts, or other factors, but training organizers should be aware that the impact of trainings may vary across different racial/ethnic groups. In summary, our findings provide preliminary evidence that PEI trainings have been helpful in increasing participant confidence in and ability to intervene and refer, and this finding was consistent across the higher education system and across a diverse group of training participants.

Notes

¹ Values may not total 100 percent because respondents could choose multiple race categories or decline to answer.

² Confidence ratings ranged from 1 (Strongly Disagree) to 5 (Strongly Agree) and likelihood ratings ranged from 1 (Not at All Likely) to 4 (Very Likely).

References

- Howard, G. S., "Response-Shift Bias a Problem in Evaluating Interventions with Pre/Post Self-Reports," *Evaluation Review*, Vol. 4, No. 1, 1980, pp. 93–106.
- Lam, T. C., and P. Bengo, "A Comparison of Three Retrospective Self-Reporting Methods of Measuring Change in Instructional Practice," *American Journal of Evaluation*, Vol. 24, No. 1, 2003, pp. 65–80.
- Pratt, C. C., W. M. McGuigan, and A. R. Katzev, "Measuring Program Outcomes: Using Retrospective Pretest Methodology," *American Journal of Evaluation*, Vol. 21, No. 3, 2000, pp. 341–349.
- Rockwell, S. K., and H. Kohn, "Post-Then-Pre Evaluation: Measuring Behavior Change More Accurately," *Journal of Extension*, Vol. 27, No. 2, Summer 1989. As of January 5, 2015: <http://www.joe.org/joe/1989summer/a5.php>

About the Authors

Michelle W. Woodbridge is a researcher for SRI International. Karen Chan Osilla, Rachana Seelam, Courtney Ann Kase, Elizabeth Roth, and Bradley D. Stein are researchers for the RAND Corporation.

Acknowledgments

The RAND Health Quality Assurance process employs peer reviewers. This document benefited from the rigorous technical reviews of Joshua Breslau and Paul Koegel, which served to improve the quality of this report. In addition, members of the Statewide Evaluation Experts (SEE) Team, a diverse group of California stakeholders, provided valuable feedback on a draft of the report.

RAND Health

This research was conducted in RAND Health, a division of the RAND Corporation. A profile of RAND Health, abstracts of its publications, and ordering information can be found at <http://www.rand.org/health>.

CalMHSA

The California Mental Health Services Authority (CalMHSA) is an organization of county governments working to improve mental health outcomes for individuals, families, and communities. Prevention and Early Intervention programs implemented by CalMHSA are funded by counties through the voter-approved Mental Health Services Act (Prop. 63). Prop. 63 provides the funding and framework needed to expand mental health services to previously underserved populations and all of California's diverse communities.

© Copyright 2015 RAND Corporation

www.rand.org



The RAND Corporation is a nonprofit institution that helps improve policy and decisionmaking through research and analysis. RAND focuses on the issues that matter most, such as health, education, national security, international affairs, law and business, the environment, and more. As a nonpartisan organization, RAND operates independent of political and commercial pressures. We serve the public interest by helping lawmakers reach informed decisions on the nation's pressing challenges. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors. **RAND**® is a registered trademark.



CHILDREN AND FAMILIES
EDUCATION AND THE ARTS
ENERGY AND ENVIRONMENT
HEALTH AND HEALTH CARE
INFRASTRUCTURE AND
TRANSPORTATION
INTERNATIONAL AFFAIRS
LAW AND BUSINESS
NATIONAL SECURITY
POPULATION AND AGING
PUBLIC SAFETY
SCIENCE AND TECHNOLOGY
TERRORISM AND
HOMELAND SECURITY

The RAND Corporation is a nonprofit institution that helps improve policy and decisionmaking through research and analysis.

This electronic document was made available from www.rand.org as a public service of the RAND Corporation.

Support RAND

[Browse Reports & Bookstore](#)

[Make a charitable contribution](#)

For More Information

Visit RAND at www.rand.org

Explore the [RAND Corporation](#)

View [document details](#)

Research Reports

This report is part of the RAND Corporation research report series. RAND reports present research findings and objective analysis that address the challenges facing the public and private sectors. All RAND reports undergo rigorous peer review to ensure high standards for research quality and objectivity.

Limited Electronic Distribution Rights

This document and trademark(s) contained herein are protected by law as indicated in a notice appearing later in this work. This electronic representation of RAND intellectual property is provided for non-commercial use only. Unauthorized posting of RAND electronic documents to a non-RAND website is prohibited. RAND electronic documents are protected under copyright law. Permission is required from RAND to reproduce, or reuse in another form, any of our research documents for commercial use. For information on reprint and linking permissions, please see [RAND Permissions](#).