



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](http://www.rand.org) as a public service of the RAND Corporation.

Skip all front matter: [Jump to Page 1](#) ▼

## Support RAND

[Browse Reports & Bookstore](#)

[Make a charitable contribution](#)

## For More Information

Visit RAND at [www.rand.org](http://www.rand.org)

Explore the [RAND Corporation](#)

View [document details](#)

## 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](#).

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.



# Findings from the School-Based Theatrical Performance *Walk In Our Shoes*

Eunice C. Wong, Jennifer L. Cerully, Rebecca L. Collins, Elizabeth Roth

A number of studies have evaluated interventions aimed at reducing mental illness stigma among children and adolescents (Yamaguchi, Mino and Uddin, 2011). These stigma and discrimination reduction (SDR) interventions typically involve an educational presentation in the classroom that is often delivered by individuals with experience with mental health challenges (Chisholm et al., 2012; Pinfold et al., 2005; Pinto-Foltz, Logsdon and Myers, 2011). A smaller number of studies have examined the effects of theatrical presentations designed to educate youth about mental illness. We identified three theater-based youth SDR intervention evaluations, all conducted outside the United States—two in the United Kingdom (UK) (Essler, Arthur and Stickley, 2006; Roberts et al., 2007) and one in Canada (Pitre et al., 2007). In the Canadian study, Pitre et al. (2007) utilized a single-session puppet theater presentation targeting elementary school children (8–12 years old). Essler et al. (2006) targeted 13–14 year old students, and Roberts et al. (2007) had a broader audience aged 14 to 22 years.

Each of these theater-based presentations had different goals. Pitre et al. (2007) presented three separate 15-minute puppet shows, addressing schizophrenia, depression/anxiety, and dementia. Two weeks prior to and one day after the performance, participants completed the *Opinions about Mental Illness* scale (Pitre et al., 2007). Participants who viewed the puppet show had improved attitudes about social inclusion, dangerousness, and shame compared to a control group that did not see the puppet show. In contrast, there were no significant changes in recovery beliefs, stereotypes, or benevolence toward people with mental illness. Roberts et al. (2007) exclusively focused on psychosis, with an emphasis on increasing mental health knowledge, reducing stereotypes, and increasing help-seeking behavior. Roberts et al. (2007) conducted one-week, one-month, and six-month follow-up assessments and found some significant long-term effects, including improved mental health knowledge, recovery beliefs, and dangerousness attitudes. In contrast, Essler et al. (2006) addressed mental health problems more broadly, and focused exclusively on knowledge outcomes. At one-month follow-up,

participants showed increased knowledge of symptoms, incidence of mental disorders, and risk of violence among people with mental health problems, but decreased knowledge of rates of discrimination experienced by people with mental health problems.

The present study evaluates the effects of a school-based theatrical performance *Walk In Our Shoes* on a group of predominantly Latino youth in Santa Barbara County, California. The performance follows the lives of four (fictional) high school students and introduces their various experiences with both mental health challenges and stigma. The theater performance was developed and presented as part of California's Prevention and Early Intervention (PEI) activities, funded under Proposition 63. The goal of the performance is to fill key gaps in knowledge that might lead to stigmatizing beliefs about people with mental health challenges.

## Methods

Participants were students who attended a performance of *Walk In Our Shoes* at a Santa Barbara County middle school. A total of 466 students completed a survey developed by RAND immediately before (pre-test) and immediately following the performance (post-test). Where possible, measures were drawn or adapted from previous studies of stigma reduction interventions in youth (Livingston et al., 2013; Pinfold et al., 2005; Rahman et al., 1998; Schulze et al., 2003; Spagnolo, Murphy and Librera, 2008; Watson, Miller and Lyons, 2005; Watson et al., 2004; Yap and Jorm, 2012). Participants' mean age was 12.51 years (SD = 0.60), and 55 percent were female, 43 percent male, and 2 percent other. With respect to racial/ethnic background, 89 percent were Latino, 6 percent White, 1 percent American Indian, 2 percent multiracial, and 2 percent other (e.g., African American, Asian American, other race). A substantial proportion (81 percent) of participants reported speaking a language other than English at home. To test for changes in pre-test and post-test scores, *t*-test statistics were used for mean estimates and chi-square statistics were used for percentage estimates ( $p < 0.05$  was considered significant).

## Results

### Perceptions of the Performance

The large majority of participants reported that the presentation was a good experience (93 percent) and that they got very involved and felt what it must be like to have a mental health challenge (81 percent) (see Table 1). A majority (84 percent) felt that the presentation taught them how to listen to kids with a mental health challenge who may be from a different culture. Moreover, 81 percent endorsed a “yes” response when asked if they would recommend the presentation to someone of their cultural background (not shown in Table 1). A smaller group (42 percent) strongly or sort of agreed the presentation was sensitive to their cultural background, with many participants (33 percent) neither agreeing nor disagreeing with this item (also not tabled).

**Table 1. Perceptions of the Theatrical Presentation**

	<b>Strongly or Sort of Agree (%)</b>
Attending the presentation today was a good experience	93
I got very involved in the presentation and felt what it must be like to have a mental health challenge	81
The presentation taught me how to listen to kids with a mental health challenge who may be from a different culture	84

### Attitudes

The following attitudinal items were assessed: social distance (i.e., degree of willingness to interact with a person with a mental health problem), blame, perceived dangerousness, and beliefs about whether someone with mental illness should serve as a childcare provider. This latter item was included because people tend to have more negative responses to individuals with mental health problems being in proximity to children and families (Pescosolido et al., 2013).

Table 2 provides pre- and post-test responses to the questions on social distance (first four items) and blame (last item). After seeing the performance, participants endorsed more positive responses to situations involving inviting a hypothetical student with a mental health problem to their house and working on a project with the student. In contrast, participants were also more likely to blame the student for his/her mental health problem after viewing the performance.

**Table 2. Changes in Social Distance and Blame from Pre- to Post-Performance**

<b>Imagine that there is a student at your school who has a mental health problem. Would you:</b>	<b>Pre-test Mean (SD)</b>	<b>Post-test Mean (SD)</b>	
Be happy to invite the student to your house	3.70 (0.90)	4.07 (0.98)	***
Be happy to work on a project with the student	4.06 (0.87)	4.22 (0.94)	***
Be upset or disturbed to be in the same class with the student	1.86 (1.05)	1.92 (1.24)	
Feel embarrassed if you were seen talking to this student	1.78 (1.02)	1.88 (1.20)	
Think this student is to blame for his/her mental health problem	1.48 (0.92)	1.69 (1.19)	***

NOTE: Definitely No = 1; Probably No = 2; Unsure = 3; Probably Yes = 4; Definitely Yes = 5.

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

In Table 3, the pre- and post-test responses are provided for the perceived dangerousness item and the childcare provider role item. For perceived dangerousness, no significant changes were observed: perceptions of people with mental health problems as being more violent did not change after viewing the performance. However, there was a significant shift for the childcare provider item, with participants tending to disagree more with the statement that people with mental health problems should not have a job taking care of children.

**Table 3. Changes in Beliefs About Dangerousness and Childcare Provision from Pre- to Post-Performance**

<b>How much do you agree or disagree with these statements:</b>	<b>Pre-test Mean (SD)</b>	<b>Post-test Mean (SD)</b>	
People with mental health problems are more violent than other people	2.64 (1.17)	2.52 (1.23)	
Someone who has a mental health problem should not have a job taking care of children	2.77 (1.19)	2.59 (1.22)	**

NOTE: Strongly Disagree = 1; Sort of Disagree = 2; Neither Agree or Disagree = 3; Sort of Agree = 4; Strongly Agree = 5.

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

### Emotional Responses

To assess shifts in emotional reactions to people living with mental health challenges, participants were asked how they would feel having the hypothetical student with a mental health problem at their school. Participants were provided with a list of emotions and instructed to check off any that applied. Participants could also check off the response “None of these feelings.” Only a small proportion endorsed negative emotions (see Table 4). Less than 4 percent of participants reported feeling angry, scared, or disgusted either at pre-test or post-test. Approximately one-half of the participants expressed feeling interested, calm, sorry for, or caring at pre-test, and significant positive shifts were observed for all of these emotions after the performance. Most notably, 56 percent of participants reported feeling sorry for the student with a mental health problem at pre-test, and at post-test this decreased to 45 percent.

**Table 4. Changes in Emotional Responses to a Student with a Mental Health Problem from Pre- to Post-Performance**

	Pre-test (%)	Post-test (%)	
Interested	47	49	***
Calm	56	58	***
Angry	1	1	
Sorry for him/her	56	45	***
Scared	4	2	
Caring	54	57	***
Disgusted	2	1.5	
None of these feelings	10	9	***

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

### Help-Seeking and Support-Giving Intentions

No significant changes were observed for the help-seeking and support-giving items. On average, participants agreed that they would tell an adult if they had a mental health problem at both pre-test and post-test, and they would also tell an adult if a friend had a mental health problem, though agreement was slightly lower on this item at both time points. To measure support-giving intentions (not shown in Table 5), participants were asked, “What if one of your friends was having a mental health problem? Would you provide emotional support, like listening to or helping to calm him/her?” Response options ranged from 1 (*definitely*) to 4 (*definitely not*). No significant changes occurred for support-giving intentions. On average, participants reported that they would “definitely” provide emotional support to a friend with a mental health problem at pre-test ( $M = 1.38$ ;  $SD = 0.57$ ) and post-test ( $M = 1.35$ ;  $SD = 0.60$ ).

**Table 5. Help-Seeking Intentions Pre- and Post-Performance**

How much do you agree or disagree with these statements:	Pre-test Mean (SD)	Post-test Mean (SD)
If I thought I might be having a mental health problem, I would tell an adult	4.35 (0.92)	4.38 (0.94)
If one of my friends was having a mental health problem, I would tell an adult	4.16 (1.05)	4.24 (1.01)

NOTE: Strongly Disagree = 1; Sort of Disagree = 2; Neither Agree or Disagree = 3; Sort of Agree = 4; Strongly Agree = 5.

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

### Knowledge

A set of true/false questions was administered to assess knowledge about mental health problems. As seen in Table 6, the percentage of correct responses across all of the knowledge items increased significantly and substantially from pre-test to post-test. At pre-test, only about one-quarter to one-third of participants had correct responses to items about the prevalence of mental health problems and signs of mental illness, which increased to 36 percent and 59 percent, respectively, at post-test. At pre-test, a greater proportion of participants had correct responses to questions about ADHD, the effectiveness of treatment, and recovery outcomes. At post-test, knowledge in all three areas increased. Still, 35 percent of participants still erroneously believed that there are no effective treatments for most mental illnesses and that people with mental illness cannot do normal things like go to school or work.

**Table 6. Changes in Knowledge About Mental Illness from Pre- to Post-Performance**

	Pre-test % Correct	Post-test % Correct	
One in four people will develop a mental health problem over the course of their lives	27	36	***
A person with Attention Deficit Hyperactivity Disorder (ADHD) has trouble focusing and following directions	61	70	***
Poor sleep, appetite, and excessive sadness for long periods may be signs of mental illness	31	59	*
There are treatments that work for most mental illnesses	51	65	***
Most people with mental illness can do normal things like go to school or work at a job	60	65	***

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

## Discussion

This study examined the impact of a theatrical presentation on mental illness stigma, help-seeking and support-giving intentions, and knowledge of mental illness with a group of predominantly Latino youth. The immediate goal of the presentation was to increase knowledge about mental illness and we observed substantial improvements in this area from pre- to post-performance. After the theatrical presentations, youths showed a greater understanding of key symptoms, prevalence of mental illness, and the possibility of recovery.

Although the program did not aim to reduce stigmatizing attitudes, increase help-seeking, or improve provision of support, these outcomes are central to the ultimate goals of California's PEI initiative. Overall findings show that relatively low levels of stigma were present before viewing the presentation. With respect to social distance, for example, survey responses at pre-test indicate that participants on average held somewhat positive attitudes toward interacting with students with a mental health challenge in a variety of social situations. Only a very small proportion of participants (less than 4 percent) endorsed negative emotions toward students with mental health problems before the presentation. Consistent with previous research (Pescosolido et al., 2013), the most negative responses at pre-test were regarding people with mental health problems taking on a job as a childcare provider and their perceived dangerousness.

Despite the relatively low levels of stigma, there was clearly room for improvement in some attitudes observed at pre-test, presenting an opportunity for *Walk In Our Shoes* to affect this outcome. Indeed, significant positive shifts occurred after the performance for most of the domains assessed. For social distance, participants expressed a greater willingness to interact with students with a mental health problem in their home or on a project. After the performance, participants exhibited less opposition to having people with mental health problems serving in a childcare profession. With respect to emotional responses to a student with a mental health problem, a greater proportion of participants endorsed feeling interested, calm, and caring after viewing the performance. In particular, participants felt less pity for a hypothetical student with a mental health problem. Although most shifts were small, they took place after only a short theater presentation.

Domains in which significant shifts were not observed were help-seeking and support-giving intentions. However, participants had very positive responses to these items before the

performance, leaving less room for improvement. Perceived dangerousness also remained unaltered and was not strongly positive at pre-test, suggesting the theatrical presentation did not address this issue effectively, or that this perception is more difficult to change. The only domain that appeared to shift negatively in response to the performance was perceived blame. Participants were more likely to blame a hypothetical student with a mental health problem for his/her problem after viewing the performance than before. It may be that the performance's emphasis on recovery and the ability to control mental illness suggested to students that people with mental illness can recover if they try harder and are thus to blame for their situations. Responsibility for causing a problem and responsibility for solving it are often confused, and this may be the case here (Brickman et al., 1982). The distinction is important because it is likely to affect both whether people seek help and whether they provide help for a problem (Brickman et al., 1982). It might be that the presentation could be revised to effectively address this issue.

Nearly all participants responded positively to the presentation and reported getting involved in the presentation. Although views on the cultural sensitivity of the presentation were somewhat mixed, the large majority would recommend it to someone else of their cultural background.

A few limitations of our research must be noted. We cannot be certain the effects observed are causal because of the absence of a control group. Although we can compare pre and post data, completing the pre-test before the performance may have increased participants' focus on the relevant elements of the performance and thus been partly responsible for their improved responses at post-test. Also, the longer-term effects of this theater-based SDR youth intervention are unknown and warrant further investigation. Finally, we were only able to test the intervention in a group of predominantly Latino youths. Effectiveness for other audiences needs to be examined.

Despite these limitations, the results are promising. Research on health interventions shows that using a fictional narrative to present educational information can be more effective than a non-narrative presentation at increasing viewer knowledge and improving attitudes (Murphy et al., 2013). The results of this study suggest that *Walk In Our Shoes*, a theater-based SDR intervention for youth, is associated with immediate improvement in mental health knowledge and attitudes and shows promise as a method of increasing knowledge and reducing the stigma of mental illness among youth.

## References

- Brickman, P., V. C. Rabinowitz, J. Karuza, E. Cohn, and L. Kidder, "Models of helping and coping," *American Psychologist*, Vol. 37, No. 4, 1982, pp. 363–384.
- Chisholm, K. E., P. Patterson, C. Torgerson, E. Turner, and M. Birchwood, "A randomised controlled feasibility trial for an educational school-based mental health intervention: Study protocol," *BMC Psychiatry*, Vol. 12, 2012, p. 23.
- Essler, V., A. Arthur, and T. Stickley, "Using a school-based intervention to challenge stigmatizing attitudes and promote mental health in teenagers," *Journal of Mental Health*, Vol. 15, No. 2, 2006, pp. 243–250.
- Livingston, J. D., A. Tugwell, K. Korf-Uzan, M. Cianfrone, and C. Coniglio, "Evaluation of a campaign to improve awareness and attitudes of young people towards mental health issues," *Social Psychiatry and Psychiatric Epidemiology*, Vol. 48, No. 6, 2013, pp. 965–973.
- Murphy, S. T., L. B. Frank, J. S. Chatterjee, and L. Baezconde-Garbanati, "Narrative versus non-narrative: The role of identification, transportation and emotion in reducing health disparities," *J Commun*, Vol. 63, No. 1, 2013, doi: 10.1111/jcom.12007.
- Pescosolido, B. A., T. R. Medina, J. K. Martin, and J. S. Long, "The 'backbone' of stigma: Identifying the global core of public prejudice associated with mental illness," *American Journal of Public Health*, Vol. 103, No. 5, 2013, pp. 853–860.
- Pinfold, V., H. Stuart, G. Thornicroft, and J. Arboleda-Flórez, "Working with young people: The impact of mental health awareness programs in schools in the UK and Canada," *World Psychiatry*, Vol. 4, No. Suppl 1, 2005, pp. 48–52.
- Pinto-Foltz, M. D., M. C. Logsdon, and J. A. Myers, "Feasibility, acceptability, and initial efficacy of a knowledge-contact program to reduce mental illness stigma and improve mental health literacy in adolescents," *Social Science & Medicine*, Vol. 72, No. 12, 2011, pp. 2011–2019.
- Pitre, N., S. Stewart, S. Adams, T. Bedard, and S. Landry, "The use of puppets with elementary school children in reducing stigmatizing attitudes towards mental illness," *Journal of Mental Health*, Vol. 16, No. 3, 2007, pp. 415–429.
- Rahman, A., M. H. Mubbashar, R. Gater, and D. Goldberg, "Randomised trial of impact of school mental-health programme in rural Rawalpindi, Pakistan," *The Lancet*, Vol. 352, No. 9133, 1998, pp. 1022–1025.
- Roberts, G., J. Somers, J. Dawe, R. Passy, C. Mays, G. Carr, D. Shiers, and J. Smith, "On the Edge: A drama-based mental health education programme on early psychosis for schools," *Early Intervention in Psychiatry*, Vol. 1, No. 2, 2007, pp. 168–176.
- Schulze, B., M. Richter-Werling, H. Matschinger, and M. C. Angermeyer, "Crazy? So what! Effects of a school project on students' attitudes towards people with schizophrenia," *Acta Psychiatrica Scandinavica*, Vol. 107, No. 2, 2003, pp. 142–150.
- Spagnolo, A. B., A. A. Murphy, and L. A. Librera, "Reducing stigma by meeting and learning from people with mental illness," *Psychiatric Rehabilitation Journal*, Vol. 31, No. 3, 2008, pp. 186–193.
- Watson, A. C., F. E. Miller, and J. S. Lyons, "Adolescent attitudes toward serious mental illness," *The Journal of Nervous and Mental Disease*, Vol. 193, No. 11, 2005, pp. 769–772.
- Watson, A. C., E. Otey, A. L. Westbrook, A. L. Gardner, T. A. Lamb, P. W. Corrigan, and W. S. Fenton, "Changing middle schoolers' attitudes about mental illness through education," *Schizophrenia Bulletin*, Vol. 30, No. 3, 2004, pp. 563–572.
- Yamaguchi, S., Y. Mino, and S. Uddin, "Strategies and future attempts to reduce stigmatization and increase awareness of mental health problems among young people: A narrative review of educational interventions," *Psychiatry and Clinical Neurosciences*, Vol. 65, No. 5, 2011, pp. 405–415.
- Yap, M. B. H., and A. F. Jorm, "Young people's mental health first aid intentions and beliefs prospectively predict their actions: Findings from an Australian National Survey of Youth," *Psychiatry Research*, Vol. 196, No. 2–3, 2012, pp. 315–319.

## Acknowledgments

The RAND Health Quality Assurance process employs peer reviewers. This document benefited from the rigorous technical reviews of Donna Farley and Joshua Breslau, 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 2014 RAND Corporation

[www.rand.org](http://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.

RR-683-CMHSA