Suicide Awareness Voices of Education (SAVE) is a non-profit organization in Bloomington, Minnesota dedicated to preventing suicide by educating people about depression and other brain illnesses that can lead to suicide, and by raising awareness and use of resources for suicide prevention. This evaluation focuses on SAVE’s Linking Education and Awareness of Depression and Suicide (LEADS) curriculum.

The LEADS curriculum is a high school curriculum designed to: 1) increase youths’ knowledge about depression and suicide, 2) increase youths’ ability to identify suicide prevention resources, 3) increase youths’ capacity to seek help, and 4) change social norms (perceived or actual) about depression and suicide.

Teachers implement the curriculum over a three-day period. Each day there is an hour of classroom lecture and small group discussions, as well as outside activities and homework. The curriculum covers depression and its symptoms, the link between depression and suicide, protective and risk factors of suicide, warning signs of suicide, help-seeking behaviors, and suicide prevention resources.

**Evaluation methods**

A non-random “quasi-experimental design,” that is, a study comparing differences over time and between groups, was used to evaluate changes in youths’ knowledge and perceptions of depression and suicide. There were two groups of youth in this evaluation, a “treatment group” who received the LEADS curriculum, and a “comparison group” who did not receive the curriculum.

Youth in the treatment group were from a total of nine schools throughout Minnesota that implemented the LEADS curriculum in spring 2008. Students were administered surveys before and after completing the LEADS curriculum, along with a follow up survey approximately three months later. Most youth were 15 or 16 years old, in 10th grade, and identified their race/ethnicity as White.

A total of 901 pre-tests, 817 post-tests, and 369 follow up surveys were completed by youth in the treatment group. Matched analysis was completed with 599 pre-and post-tests and 171 post-test and follow-up surveys.

Youth in the comparison group attended five additional schools in Minnesota. The comparison group completed the same survey that the treatment group received at follow-up. This group did not receive the LEADS curriculum, but did receive a 50-minute suicide prevention presentation offered by SAVE called, “The SAVE Teen Suicide Prevention Program.” Youth completed the survey before receiving the presentation.

A total of 497 surveys were completed by the comparison group; however, surveys from a comparison school were excluded from this evaluation due to the occurrence of two suicide incidents during data collection. Analysis was completed comparing results from 361 surveys completed by the comparison group and 369 surveys completed by the treatment group.

The implementation of the LEADS curriculum was also evaluated. Volunteer observers completed an implementation checklist to capture the fidelity and consistency of the implementation of the curriculum across classrooms. A total of 15 classrooms instructed by seven teachers at four schools were observed by volunteers. Although none of the classrooms were observed all three days, volunteers observed at least one day of the implementation of LEADS.
Teachers who implemented the LEADS curriculum were also asked to complete a survey to capture their thoughts and opinions of the curriculum. Of the 13 teachers who implemented the LEADS curriculum, seven completed a teacher survey. With regard to the low number of teachers who completed a survey, results are not representative of all teachers’ thoughts and opinions.

**Key findings**

Youth were knowledgeable about depression and suicide before participating in the LEADS curriculum, but made some improvements. At pre-test and post-test, most youth (70% to 98%) correctly identified true and false statements about depression and suicide, except for the statement “People can control their risk factors for depression” (30% at pre-test and 39% at post-test). More youth correctly identified “Having a family history of depression increases someone’s risk of depression and/or suicide” (from 76% at pre-test to 85% at post-test) and “Writing about death can be a warning sign of suicide” (from 79% at pre-test to 91% at post-test) as true statements at post-test.

At post-test, significantly more youth correctly identified trouble concentrating (64% at pre-test and 86% at post-test) and frequent headaches and stomachaches (43% at pre-test and 67% at post-test) as symptoms of depression than at pre-test.

While youth held positive perceptions of depression and suicide before participating in the LEADS curriculum, most changes in perceptions were positive. At post-test, youth were significantly more likely to agree that depression is a medical illness (58% at pre-test and 83% at post-test) and less likely to agree that people who completed suicide are not good at dealing with stress (66% at pre-test and 52% at post-test).

More youth reported they would engage in some help-seeking behaviors at post-test. Significantly more youth reported they would tell an adult, tell the person to see a mental health professional, call a suicide helpline, or look on the Internet for resources at post-test (72% to 92%) than at pre-test (59-82%).

The majority of youth knew someone they could go to for help. At pre-test and post-test, three-quarters or more of youth knew someone in their school (88% at pre-test and 92% at post-test) or community (75% at pre-test and 89% at post-test) that they could go to for help if they knew someone thinking about suicide.

Youth retained what they learned about depression and suicide three months after participating in the LEADS curriculum and increased their knowledge of suicide prevention resources. There were few changes in youths’ knowledge and perceptions of depression and suicide from post-test to follow up. While not significant, more youth were able to identify suicide prevention resources at follow-up (81%) than at post-test (75%).

The treatment group was somewhat more knowledgeable and held more positive perceptions of depression and suicide than youth in the comparison group. The statement “People can control their risk factors for depression” was difficult for all youth to determine as false; however, more youth in the treatment group (42%) than the comparison group (36%) answered correctly. The treatment group (87% to 92%) was also significantly more likely to identify true statements about depression and suicide than the comparison group (76% to 86%).

There were few differences in perceptions between the two groups. Youth in the treatment group were significantly more likely to agree that depression is a medical illness (76% compared to 61% of the comparison group) and less likely to agree that people who completed suicide are not good at dealing with stress (45% compared to 63% of the comparison group).

The treatment group was better able to identify suicide prevention resources; yet, both groups were equally likely to seek help. The treatment group (76%) was significantly more likely to be able to identify at least five suicide prevention resources than the comparison group (62%). Although the comparison group was more likely to have known someone thinking about suicide (27% compared to 19% of the treatment group), both groups were equally likely to have sought help for someone (73% treatment, 77% comparison).
Most youth in the treatment group had positive feedback about the LEADS curriculum, yet not everyone liked the format. Over three-quarters of the youth (80%) felt students should participate in lessons about suicide and depression and more than two-thirds of the youth (69%) felt the LEADS curriculum prepared them for what to do if they knew someone thinking about suicide.

The majority of the youth learned something new (78%) and understood the information (93%). However, fewer youth felt the activities and discussion were interesting (52%) or liked the way the LEADS curriculum was presented (60%).

The majority of the youth also felt that the LEADS curriculum made sense for their cultural community (78%) and that resources from their cultural community were listed during the implementation of LEADS (70%).

Due to the small number of observed classrooms, it is difficult to determine whether the LEADS curriculum was implemented consistently. Although the sample size of classrooms was small, most implementation items were successfully completed by teachers.

Teachers had positive feedback about the LEADS curriculum and were satisfied with the curriculum. All seven teachers felt the LEADS curriculum was appropriate for high school youth. All thought youth were interested in the information, learned something new, and asked relevant questions. Five teachers felt the curriculum was easy for students to understand.

All teachers felt prepared to present the curriculum and answer students’ questions; yet, fewer teachers (5 of 7) felt comfortable teaching the curriculum. Only two teachers found the online resources helpful and at least five teachers felt the curriculum materials and teacher guides were helpful. All teachers reported they would recommend the LEADS curriculum to other teachers and would use the curriculum again.

**Conclusion and recommendations**

Overall, most youth gave positive feedback and all teachers saw value in the LEADS curriculum. We recommend the following to build on the curriculum’s success:

- Focus the LEADS curriculum on components that made the most impact on youth, such as depression as a medical illness and identifying suicide prevention resources.
- Consider format changes. Review and implement some of the youths’ suggestions for improving the curriculum.
- Strengthen LEADS implementation materials and/or provide training opportunities to ensure teachers implement the program as intended.

For more information

This summary presents highlights of the Linking Education and Awareness of Depression and Suicide (LEADS) report. For more information about this report, contact Mao Thao at Wilder Research, 651-280-2664.

Author: Mao Thao
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