This is a summary of research conducted between July 2007 and June 2010 evaluating the effectiveness of the Breaking the Silence mental health education program for middle school students.

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Please note that this is only a summary of results. As such, it conveys only the major findings and lacks many details that may be needed for full understanding of the research, its findings, and its limitations. Readers may contact the investigators listed below for more information concerning the study.

Please note also that the findings of this research have not yet been submitted for publication. That means that the study results have not yet received peer review.

Otto Wahl, University of Hartford (owahl@hartford.edu)
Janet Susin, NAMI-Queens/Nassau (jasusin@optonline.net)
Lorraine Kaplan, NAMI-Queens/Nassau (lorkaplan@verizon.net)
Amy Lax, NAMI-Queens/Nassau (amylax@optonline.net)
The importance of education of children about mental illnesses

Substantial research has established that the public holds inaccurate negative beliefs about those with mental illnesses, seeing them as dangerous, unpredictable, unattractive, unworthy, and unlikely ever to be productive members of their communities. The pervasive negative public beliefs about mental illness, in turn, create an environment that impedes both treatment seeking and recovery. Few, if any, of those concerned with the problem of mental illness stigma, however, would argue that the documented negative attitudes toward mental illness emerge full-blown in adulthood. Rather, it seems more likely that these ideas and attitudes are acquired gradually over a lifetime and that their roots are established in childhood. Children also face the stigma of psychiatric labels. For psychiatratically labeled children and adolescents acutely attuned to the judgments of their peers, misunderstandings and negative attitudes about mental illnesses among those peers may be particularly painful. Ostracism, rejection, teasing, and damage to self-esteem, as well as reluctance to seek or accept mental health treatment, are among the possible consequences.

As a result of observations such as those above, efforts are being made to teach children about mental illnesses. Such efforts have been motivated by the recognition not only that mental illness stigma has an impact on children and that children are our next generation of responders to people with psychiatric disorders, but also that it may be easier to prevent negative attitudes than to change them once they have become firmly entrenched for many years. It is reasoned that, by educating children about mental illnesses before (or as) their conceptions about mental health problems are formed, we may be able to prevent the formation of negative attitudes and foster more accurate understanding and acceptance of people with psychiatric disorders.

The Breaking the Silence program

The Breaking the Silence (BTS) program is the result of the efforts of veteran teachers who are also parents of individuals with mental illnesses. It is an innovative teaching package which includes lesson plans, games, and posters on mental illness for three grade levels—upper elementary, middle school, and high school. Through the curriculum, students learn the warning signs of mental illnesses, learn that mental illness can be treated successfully, and learn how to recognize and combat stigma. The Breaking the Silence program also has the relatively unique feature that it is delivered by regular teachers rather than by outside experts. These teachers simply follow a series of pre-designed lesson plans without supervision from others. The program has been available for over 15 years and has been widely used across the United States and in other countries as well.

The BTS curriculum for Middle Schools (which were the settings for this study) involves the following core components, which teachers were asked to use in their class
instruction: 1. A Lesson Plan featuring a story about a family’s struggle with mental illness, which serves as a basis for class discussion. The Lesson Plan also includes a list of “warning signs of mental illness” and a suggested exercise for considering how students would feel if others used slang terms to describe them. 2. A set of poems showing how a girl’s relationship with her friends was affected by her sister’s mental illness. 3. A word search puzzle, “Famous People with Mental Illness.” 4. A story about a girl with Obsessive Compulsive Disorder, along with suggested discussion questions. 5. A board game in which students earn “Stigma Buster” cards and progress to a goal by correctly answering questions related to mental illness. 6. Discussion of names, definitions, and descriptions of a variety of mental disorders as well as information about stigmatizing terms to avoid.

**Purpose of the research**

The BTS program has been around for many years and has received much praise, but it has not received an empirical assessment of its effectiveness. It is important to determine whether this widely used program is accomplishing its goals. Does BTS instruction result in improvements in knowledge, attitudes, and/or behavior related to mental illnesses? The purpose of the present research was to answer this question. Middle school students from different parts of the U.S. were the focus of the research.

**Method**

- Questionnaires were developed to measure knowledge, attitudes, and behaviors related to mental illnesses.

- These measures were then pilot tested at two middle schools in South Carolina and Connecticut.

- Results of pilot tests were used to modify questionnaires for use in the experimental study.

- Students from four different middle schools—in New York, Florida, South Carolina, and New Mexico--were administered the study questionnaires.

- One set of students from each school was given BTS instructions by their teachers (the BTS group) while another set of students from each school received their regular classroom instruction (the control group).

- All sets of students completed the study questionnaires a second time after completion of instruction in the BTS group.

- All sets of students completed the study questionnaires a third time approximately six weeks after completion of instruction in the BTS group.
**Results** (with responses combined across all four schools)

- 106 students from BTS groups and 87 students from the control groups completed questionnaires on all three occasions.

- Students in the BTS groups showed a statistically significant increase in accurate knowledge of mental illness after receiving the BTS instruction. Those in control groups showed no significant improvement in knowledge.
  - Knowledge items showing greatest positive change included the following:
    - People who have had mental illnesses include astronauts, presidents, and famous baseball players.
    - Giving medicine is a useful way to treat mental illness.
    - Psychological therapy is a useful way to treat mental illness.
    - A person with bipolar (manic-depressive) disorder acts overly energetic.
    - Mental retardation and mental illness are the same things. (weaker agreement after BTS instruction)
  - Most improvements in knowledge were maintained through the six-week follow-up period.

- Students in the BTS groups showed a statistically significant improvement in attitudes toward mental illnesses after receiving the BTS instruction. Those in control groups showed no significant improvement.
  - Attitude items showing greatest change included the following:
    - There should be special classes and programs at school for people with mental illnesses.
    - People with mental illness can be helpful to others.
    - Students with mental illness shouldn’t be in regular classes. (greater disagreement after BTS instruction)
  - Most improvements in attitudes were maintained through the six-week follow-up period.
• Students in the BTS groups showed a statistically significant improvement in social distance scores (reflecting greater willingness to interact with someone with a mental illness) after receiving the BTS instruction. Those in the control groups showed no significant improvement.

  o Greatest change occurred in:
    ▪ Willingness to go on a date with someone with a mental illness.
    ▪ Willingness to have someone with a mental illness as a neighbor.
    ▪ Willingness to sit next to someone with a mental illness.

  o Improvements in social distance scores were maintained (and actually increased) through the six-week follow-up period.

• Students in the BTS classes took more positive actions related to mental illnesses after BTS instruction while students in the non-BTS classes showed no change.

  o The actions that showed the greatest increases among BTS students were as follows:
    ▪ Talking with family or friends about mental illness.
    ▪ Reading a book or brochure about mental illness.
    ▪ Looking at a website with information about mental illness.
    ▪ Expressing concern about use of slang terms for mental illnesses.
    ▪ Noticing negative stories about mental illness in the press.
    ▪ Sharing concerns about a friend’s mental health.

**Limitations of change**

Despite the above positive results, there were some areas where change was not as great as hoped. In particular, the following was observed:

• Knowledge gains were more evident than changes in attitude or social distance preferences. Although significant positive changes occurred for attitude and social distance, the changes were smaller than those for knowledge. This suggests that provision of factual information alone is not sufficient to change attitudes and acceptance. The curriculum might benefit from more exercises to specifically target social acceptance.

• There were several pieces of knowledge that did not improve. Some were knowledge items that were already accurately answered before BTS instruction, and thus had little room for change. Items with greater room for improvement that showed little or no improvement include the following:

  a. People with mental illnesses are more likely to lie than other people.
  b. Mental illness is caused by something biological.
  c. People with mental illnesses tend to be violent and dangerous.
• There were many specific attitude items that did not change. Some were attitudes that were already positive before BTS instruction, and thus had little room for change. Items with greater room for improvement that showed little or no improvement include the following:

a. It would be embarrassing to have a mental illness.
b. Only people who are weak and overly sensitive let mental illnesses affect them.
c. I feel I have little in common with people who have mental illnesses.
d. I would be frightened if approached by a person with a mental illness.

• Social acceptance, as indicated by Social Distance scores, was relatively high, even before BTS instruction. Mean scores for most items fell above the mid-point, indicating willingness to accept the role specified. The notable exception was willingness to go on a date with someone with a mental illness. Mean scores were below the mid-point before the BTS instruction (meaning unwilling) and, despite statistically significant improvement, remained below the mid-point after instruction.

Conclusion

The BTS program is effective as a means to improve knowledge, attitudes, and behaviors related to mental illnesses among middle school students. Even brief instruction (2 ½-3 hours) can produce change in how students understand mental illnesses. Given the ease of administration of this program, BTS is a very promising approach to improving the way children perceive and respond to mental illnesses. Although lack of change in some aspects of knowledge and attitudes shows areas where BTS instruction may need to be strengthened, BTS is a successful tool for increasing knowledge and changing attitudes and behavior.