

**Full Evaluation of the South African Depression
& Anxiety Group's (SADAG) "Suicide
Shouldn't Be a Secret" Program using
"Speaking Books"**



ABSTRACT

Adolescent depression and suicide among adolescents in South Africa are on the increase and children as young as ten have taken their lives. The South African Depression & Anxiety Group's (SADAG), "Suicide Shouldn't Be a Secret" Program was developed to address depression and suicide education as an effective means towards decreasing the morbidity and mortality associated with adolescent depression. The initial program includes an Educational Workshop on depression and suicide. Recently SADAG has added speaking books- a hard backed book featuring a sound track read by well-known local personality in order to make depression and suicide accessible to less literate rural populations. The objective of this study is to assess the effectiveness of both the Educational Workshop and the Speaking Books in increasing adolescent's knowledge about suicide and depression. Prior to the intervention students baseline knowledge was assessed and an identical post survey was administered to the students three weeks following the intervention. Findings indicated a significant gain in knowledge for students who attended the Educational Workshop ($P < 0.001$) and for those who received the Speaking Books ($p < 0.001$).

INTRODUCTION

To this day suicidal behaviour remains a serious public health problem. According to the World Health Organization's (WHO) report on suicide by the year 2000 approximately one million people died from suicide, representing one death every 40 seconds. By 2020 this number is likely to increase to approximately 1.53 million (Bertolote, 1999).

It has been suggested in the past that suicide is a rarity amongst Africans. In South Africa, the rate of suicide is 17.2 per 100 000 people, slightly higher than the world average of 16 per 100 000 people (Burrows et al, 2003). According to the Initial Burden of Disease Estimates for South Africa (2000), suicide is ranked number ten as a cause of the premature mortality burden for men and ranked number nineteen for women (Bradshaw et al, 2000). In South Africa, 9% of all non-natural deaths among young people can be attributed to suicide, with children as young as ten years having taken their own lives (Schelebusch, 2004).

School Based Education Programs

Schools are excellent venues for health education programs as they are recognized to be the most universal setting for delivering services to children and consequently are a major focus of the effort to improve children's mental health services.

However, curriculum approaches to the prevention of adolescent suicide have been criticized for a number of reasons. The most important reason is that the vast majority of these programs appear to subscribe to the viewpoint that suicide is generally a reaction to extreme stress and, therefore, everyone is potentially susceptible (Garland & Zigler, 1993; Shaffer, Garland, Gould, et al., 1988). In their national survey of school-based adolescent suicide curriculum programs, Garland and her colleagues (1989) found that 95% of the programs surveyed (n = 115) endorsed a stress model of suicide. Although stressful experiences may precipitate suicidal behaviour, stress without the presence of psychopathology appears to rarely lead to suicide (Reynolds & Mazza, 1994). Unfortunately, research indicates that a large majority of curriculum programs de-emphasise the notion that most adolescents who commit suicide will have at least one psychological disorder. This misrepresents the facts (Reynolds, 1991). Indeed, some researchers have suggested that by destigmatizing suicidal

behaviour, curriculum programs are normalizing and making more acceptable the very behaviours they wish to prevent, and they may contribute to possible contagion effects (e.g., Shaffer, Garland, Gould, et al., 1988).

One program that endorses the mental illness model of suicide is the ADAP program, which was initiated in 1999 at the Johns Hopkins University School of Medicine, and the Depression and Related Affective Disorders Association (DRADA) in the United States. They have developed a school-based curriculum to educate high school students about suicide and depression. Each time the curriculum is taught, the students are given a pre-test of their depression knowledge before the program is presented. The same survey is given as a post-test approximately 6 weeks after completion of the curriculum to evaluate changes in student's knowledge. The results indicated a significant increase in knowledge of students after attending the program, and the ongoing assessment of the program ensures the group achieves its goals. The South African Depression & Anxiety Group (SADAG) holds similar objectives and the present study utilizes similar methods of assessment to that of the ADAP Program.

South African Depression & Anxiety Group (SADAG)

The South African Depression and Anxiety Group (SADAG) is arguably the nation's leading advocacy and educational voice on mental health. For the last 11 years, SADAG has been at the forefront of providing counselling services, mental health awareness programs, powerful media campaigns and rural outreach initiatives to thousands of patients, families and communities in South Africa. The group is committed to improving the health and well being of hundreds of thousands of South Africans and has been recognized nationally and internationally with a number of prestigious awards and grants.

Since 1997, SADAG has initiated rural development projects in communities where there are little or no mental health care services available. These programs have been recognized and endorsed by the World Federation for Mental Health (WFMH) and the World Health Organization (WHO) (www.sadag.org.za).

SADAG has been presenting workshops for adolescents, in a school setting, called "Suicide Shouldn't Be a Secret", since 1998. This educational workshop promotes the concept that suicide is directly related to mental illness, typically depression and that

suicide is not a normal reaction to stress or emotional upset. Youths learn to recognize the signs of suicide and depression in themselves and in others, and they are taught how to seek help.

The goals of the “Suicide Shouldn’t be a Secret” Educational Workshop is:

- (a) To heighten the awareness of adolescent suicidal behaviour
- (b) To provide students and staff with information about mental health resources and how to access them.

This program offers other possible advantages. The focus on peer intervention is developmentally appropriate for the targeted age group. During adolescence, the peer group becomes the primary sphere of social involvement and emotional investment for most youths. SADAG’s program capitalizes on a key feature of the developmental period by teaching youths to recognize the signs of depression and by empowering them to intervene when confronted with a friend who is exhibiting these symptoms.

SADAG & Speaking Books

SADAG has worked with many schools, educating learners and educators about teen suicide prevention, through the "Suicide Shouldn't be a Secret" Programme. SADAG also distributes literature as well as workshop material to programme participants, however, a major problem has always been the low level of literacy seriously impacting on the effectiveness of any literature distributed to the many thousands in need of health care education. Incwadi Zethemba ~ Books of Hope, in association with SADAG has created a means to present health care issues, by producing hard backed books featuring a sound track read by well-known local personalities in any language, on relevant topics of health care. Each ‘speaking book’ in the Books of Hope series consists of 16 pages of illustrations supported by understandable text. For each page there is a corresponding push button that triggers a sound track of the text, so the information will be seen, read and heard as more of an interactive approach to education about depression and suicide.

The objective of the present study is:

1. To assess the effectiveness of SADAG’s educational workshop.

2. To assess the effectiveness of the “Suicide Shouldn’t Be a Secret” Speaking Book.
3. To assess whether the Speaking Book enhances depression and suicide awareness above the Educational Workshop

METHOD

Participants

SADAG’s “Suicide Shouldn’t Be A Secret” Program on depression and suicide was administered to grade seven classes in four schools in the Kimberley area. Eight classes attended the educational workshop and 4 classes will received the Speaking Book. This is due to the cost of manufacturing the speaking book. The classes that received the latter intervention were chosen randomly.

Procedure

After a brief introduction to the program, and before any teaching on the subject of depression and suicide, the SADAG trainers administered a pre-test to assess baseline knowledge of the topic. An identical posttest survey administered 3 weeks after the intervention to evaluate knowledge retention of the information provided to students. In order to protect anonymity, the students were asked to provide their address in order for us to match pre and post test questionnaire.

Measures

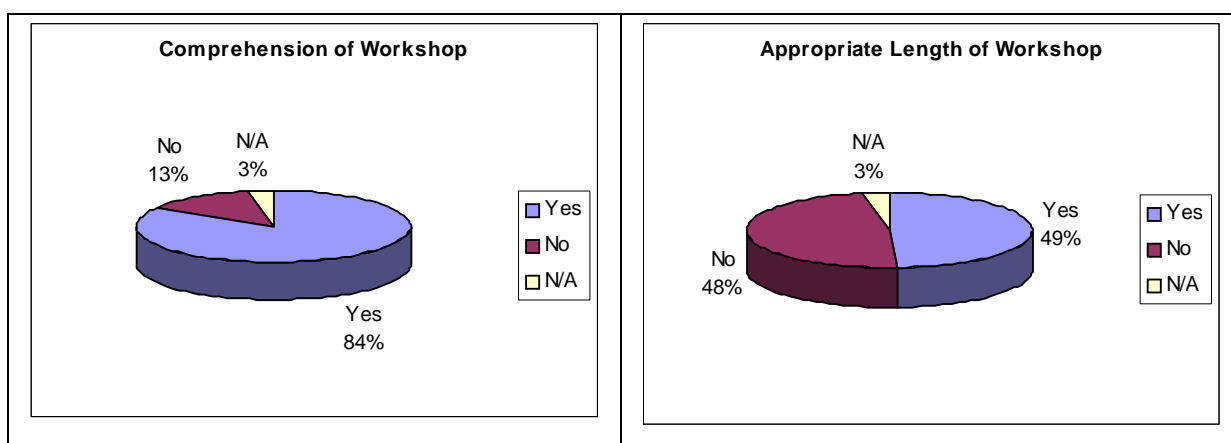
The measure of knowledge about depression and suicide was adapted from instruments previously used to evaluate school base intervention programs. Knowledge of depression and suicide was measured with 9 True/False items that reflect the central themes of the Educational Workshop and the Speaking Book (eg. depression is an illness that doctors can treat) and 2 fill in the blank questions (eg. who in your community can you approach if you need help?). Scores on these variables reflected the number of correct answers. The total score a student can obtain was 15. Qualitative information was obtained in order to get an idea of the opinions of the students regarding the educational workshop and the speaking book.

RESULTS

Effectiveness of Educational Workshop

We were able to match pre and post test scores of 355 students who participated in the Educational Workshop. The study included 40% males and 60% females with ages ranging from 12-17 with the mean age being 13 years old. Overall, 83.7% of the participants reported that the workshop was easy to understand, and 49% reported that the curriculum was long enough (See figure 1).

Figure 1



The 355 students who received the Educational Workshop scored on average 6.46 points out of a possible 15 points. After the Educational Workshop the students scored on average 9.99 points out of a possible 15 points, showing a 58% improvement between the two tests. Please see Table 1 for examples of questions and increase in student's knowledge.

Table 1

Question	% of students on pre-test (who answered correctly)	% of students on post-test (who answered correctly)
Is someone who is depressed weak?	49.6%	65.8%
If the doctor gives you medication can you stop taking it as soon as you feel better?	32.3%	63.7%

This difference in average scores resulted in a test statistic based on positive ranks, with a z-score of -16.05 . This value is highly significant at $p < 0.001$. This statistically significant difference suggests that Educational Workshop has a positive impact on the student's knowledge of suicide and depression.

Effectiveness of the "Suicide Shouldn't Be a Secret" Speaking Book

We were able to match pre and post test scores of 95 students who received the "Suicide Shouldn't be a Secret" book intervention. 82.1% of students reported that they found the book easy to understand. The study included 36.8% males and 63.2% females with ages ranging from 12-18 with the average age being 13 years old.

The 95 students who received the "Suicide Shouldn't be A Secret" Book scored an average of 5.84 out a possible 15 on the pre-test and an average of 9.4 out of 15 on the post-test, showing a 58% improvement between the two tests. See Table 2 for examples of questions and increase in knowledge.

Table 2

<i>Question</i>	% of students on pre-test (who answered correctly)	% of students on post-test (who answered correctly)
Are there support groups for depression	34.7%	65.3%
If you are sad for a day do you have depression?	40.1%	69.9%
Is Depression an Illness that can be treated?	51.6%	81.1%
If the doctor gives you medication for depression you can stop taking it as soon as you feel better	51.6%	81.1%

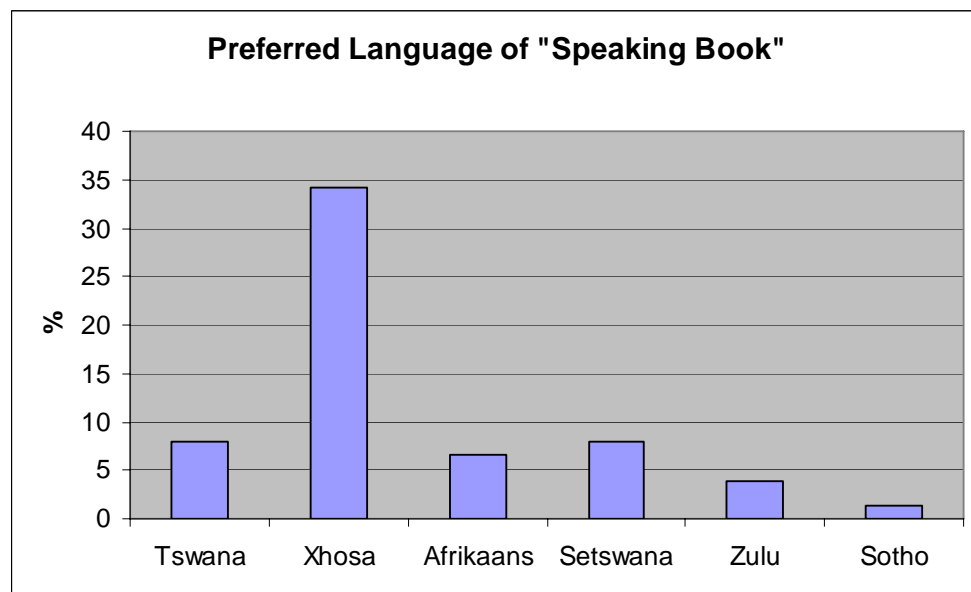
The average difference of 3.57 resulted in a test statistic based on positive ranks, with a z-score of -7.92 . This value is highly significant at $p < 0.001$. This statistically significant difference suggests that the “Suicide Shouldn’t Be a Secret” Book has a positive impact on the student’s knowledge of suicide and depression.

Book Program Recommendations

Language

The distribution of only English versions of the Speaking Book was due to financial constraints. However, it is interesting to note that 45.3% of the participants would have preferred the book in a different language. Please see figure 3 for information on the preferred language of the books. Xhosa was the language most preferred by students in the Kimberley area.

Figure 3

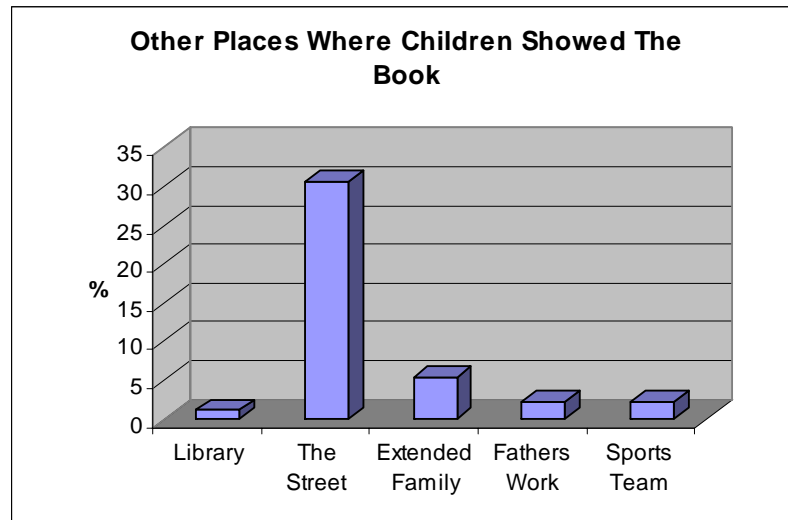


Dissemination of Book

80% of the participants showed the book to other students, while 80.1% showed the book to their family. Furthermore, 43.2% of the participants brought the book to

church with them to share the book with others. Other places where the students showed the book was on the “street” (31.2%), the library and to their extended family. Please see figure 4.

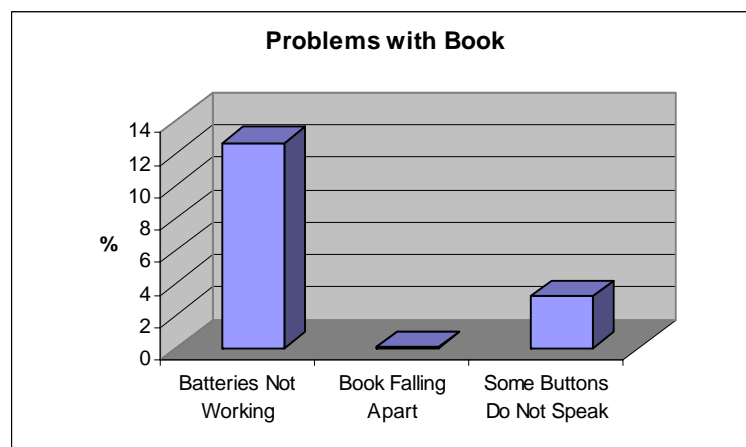
Figure 4



Functioning of Book

78.9% of the students reported that the book was still functioning to its full capacity. Of the 16.8% that reported the book was not working properly the most frequent reported problem was that the batteries were not working (12.6%), while 6.3% reported the actual book was falling apart. See figure 5.

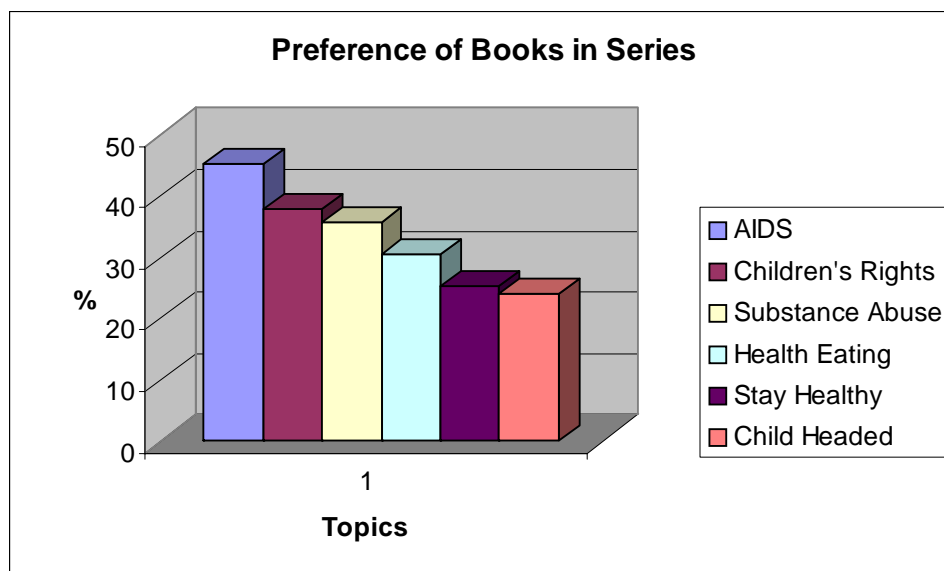
Figure 5



Preference for books on other topics

Participants in the study would prefer receiving the book on AIDS (45.3%), followed by Children’s Rights (37.9%), Substance Abuse (35.8%), Healthy Eating (30.5%), How to Stay Healthy (25.3%), Child Headed Households (24.2%) and TB (21.1%). Please see Figure 6.

Figure 6



Students Comments of Book

See Appendix 1

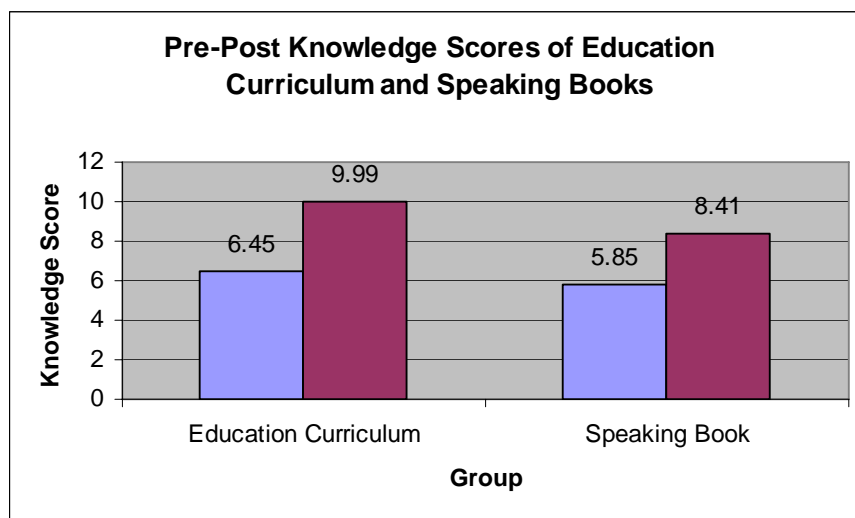
Differences between the effectiveness of the Educational Workshop and the Book “Suicide Shouldn’t be A Secret”

In order to assess whether or not the Educational Workshop or the “Suicide Shouldn’t Be a Secret” book is more effective, a new variable of ‘knowledge gain’ was created by subtracting the Post-Test Score from the Pre-Test Score. The average Knowledge Gain Score for the Educational Workshop is 3.56 and the average Knowledge Gain Score for the book is 3.57.

No reliable difference was found, $Z = -.611$, $P = .541$, between the knowledge gain of the students in the Educational Workshop group or the Speaking Book group.

Therefore, both the Educational Workshop and the “Suicide Shouldn’t be a Secret” book report comparable knowledge gain (See Figure 7)

Figure 7



DISCUSSION

The data indicated that depression and suicide education in schools is necessary as the pre-test scores in both groups were extremely low, with an average score of 6.15 out of a possible 15 correct answers. Clearly, there is a significant gap in depression and suicide knowledge, justifying SADAG’s focus on this type of education in the school setting.

The data showed that SADAG’s “Suicide Shouldn’t be a Secret” School based curriculum has an important and substantial short-term impact on the depression and suicide literacy of youths in high-risk settings. Both the speaking books and educational curriculum led to a significant improvement in depression literacy ($p < 0.0001$). Furthermore, the two interventions proved to be equally effective in increasing knowledge. This finding is of great importance to SADAG’s work as it shows that in instances where the organization cannot send trainers to rural areas, due

to financial constraints, the speaking books will be an effective substitute in increasing depression literacy. Thus, more adolescents can be reached and helped.

It is important to recognize that there are a number of limitations to this study. First, the instrument used to collect the data was developed for this study. Thus, the psychometric properties of the survey need to be evaluated in future studies. Secondly, the assessment should be replicated in more socially and geographically diverse locations. The significant positive impact of the “Suicide Shouldn’t be a Secret” program on high-risk youths in rural settings is certainly an important finding, but replication in urban and suburban settings that contain fewer disadvantaged youths is necessary to determine whether these findings are generalizable to a broader population. Furthermore, the effects of the program were observed over a very short post-intervention period. A longer-term follow-up of youths exposed to the program is necessary to determine whether the observed effects are enduring. Finally, we do not know that an increase in knowledge about suicide and depression will necessarily impact behaviour in this population. Assessing trends in suicidal behaviour is an important future step in evaluating whether depression and suicide literacy translates into behavioural change.

On a related note, future research should assess the degree to which help-seeking behaviours among emotionally troubled adolescents are directed toward friends and siblings. Future research should also assess the impact of the support received from these relationships on suicidal behaviour.

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Appendix 1

“The book you gave me means a lot to me and my family. Good job” (Female, 14)

“The book is interesting, it makes me feel safe. It can change people’s lives” (Male, 16)

“The book is very exciting” (Female, 13)

“I really like the book. It helps if someone is suffering from depression. I can go to the person and give it to him” (Female, 13)

“I love the book, and I love everything that is written in the book. Thank you” (Female, 13)

“The book was very lovely and nice. I will never forget you” (Female, 13)

“The book was very nice, I learn many things” (Female, 14)

“I think the book is incredible and it is helping many people out there” (Female, 13)

“I love the book. It make me to help many people in Kimberley” (Female, 13)

“I like the book. It is teaching about depression so that I can help other people who have depression and I can help myself when I have depression” (Female, 13)

“I love every minute of the fantastic book. Thank you” (Female, 14)

“I want to say thank you for the book. It reads very nice and give me a lot of information and was very clear” (Female, 14)

“I showed the book to someone and he tells me the book did learn him something” (Female, 13)

“The book help me also to learn not to laugh at my friend but to be there for them” (Male, 13)

“It is fun to listen to. When I feel lonely it keeps me company – I love it. I wish you could make more of them, they really help” (Female, 13)

“I want to tell you that you made me to understand what depression is. Thank you, I love the book” (Female, 12)

“I would like to say thank you – it really helps” (Female, 13)

“The book was helping me a lot and my friends also. Thank you a lot for the book” (Female, 13)

“I help someone not to kill herself and I learn people that suicide shouldn’t be a secret” (Male, 13)

“This book is very interesting, please send us more” (Female, 13)

“It helps to stop thinking things that are not right. It is very interesting and I would like more information” (Female, 13)

“It was so great to read the book. I don’t know what would happen to us if you didn’t give us the books” (Female, 12)

“It is a very beautiful book, you must take it to the library to help other children” (Female, 12)

“The book very helpful. I like the book because it learn you not to kill yourself” (Male, 13)

“I love the book very much” (Male, 14)

“The person I show the book said it really help and if there’s someone with depression she will get help right away. I learned that suicide is preventable and to remember your mental health matters” (Female, 14)

“Thank you for the book. It was nice to share it with my family” (Female, 14)