In a 1989 study, published in the journal Social Work in March 1993, Jerry Ciffone, the developer of the SEHS Suicide Prevention Program, compared attitudinal change between a test and control group. Significant change was observed in most areas targeted for attitudinal change. A copy of the 1993 publication follows this page.

Since the 1989 study, the message presented to student participants of the SEHS program has been modified to include new information and current statistics. Some of the original concepts have remained or been enhanced. To remain within the time constraints of two consecutive days of information some of the concepts delivered during the 1989 study have been completely deleted to make way for other concepts deemed more important. However, since its inception in 1987, Jerry Ciffone has continuously promoted the concept that suicide is directly related to mental illness, typically depression, and that it is not a normal reaction to stress or emotional upset.

Suicide Prevention: A Classroom Presentation to Adolescents

Jerry Ciffone

The increase in attention given to adolescent suicide has led to a proliferation of suicide prevention programs in schools throughout the United States. Concern is mounting over the benefits of these programs. The author, with the same concern about his own suicide prevention program, subjects his program to a statistical analysis of effectiveness. Results show that a disturbingly high proportion of adolescents had undesirable attitudes about suicide in the baseline period. The program appears to have caused a significant shift from undesirable to desirable attitudinal responses in six of eight targeted areas. In addition, the results seem to dispel a commonly held belief that associating mental illness with suicide will diminish self-disclosure.

Adolescent suicide warrants continuous attention. Even though the rate of adolescent suicide has plateaued over the past 10 years (Blumenthal, 1990; Elkind, 1989), and for the moment the media has decreased its sensationalism of cluster incidents, there are no indications that the current suicide rate among teenagers will decline in the future. Currently three times as many adolescents (in rate per population) have committed suicide than in the 1950s (Blumenthal, 1990; Elkind, 1989), and mental health practitioners and school personnel who work with troubled adolescents are well aware of the devastating effects of suicide attempts and completions.

The awareness, concern, and perhaps fear of a suicide completion in a school and community have been the driving force behind the call for prevention programs. Although the clamor is well intended, there is no guarantee that some seemingly benign but hastily planned programs will be effective (Harvard Graduate School of Education, 1987). Flax (1988) reported that a "psychologically naive" prevention program might actually facilitate suicide and suicidal behaviors. Therefore, those who work in the field of suicide prevention must look closely at their own and other programs. Until there is greater collaboration between practitioners and those involved in the research of adolescent suicide there will be no model or standard from which programs can be designed and measured against.

The suicide prevention program in this article bridges the field of practice and research knowledge. Although there are indications that this program is effective, the author does not maintain that this program is more effective than other programs. Furthermore, it is not within the realm of this article to review and evaluate other programs (see Garland, Shaffer, & Whittle, 1989, who examined 115 school-based suicide prevention programs; although the author's program was not included in their study, the theoretical orientation of this program is similar to only 4 percent of the programs they studied).

In addition, there have been few other scientifically evaluated prevention programs (Wodarski & Harris, 1987). Moreover, there is currently no known consensus of what constitutes effective program content (Harvard Graduate School of Education, 1987), and there is no widely accepted measurement of the actual effectiveness of suicide prevention programs. This study uses an attitudinal survey to evaluate program effectiveness. The drawback to this method is that it implies that attitudes and behavior are causally linked, and this is not always true. Therefore, it must be said that a suicide prevention program based solely

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on an education format is limited in its scope of effectiveness.

Program Description

All students who attend Larkin High School in Elgin, Illinois, are exposed to a suicide prevention program while taking a required sophomore-level health class. The students are introduced to the program by their health teachers a day before the author, a school social worker, enters the classroom. The teachers distribute and review written material on the warning signs of adolescent suicide and basic intervention strategies with suicidal peers.

The following day the school social worker presents a 15-minute video filmstrip, "Teens Who Choose Life: The Suicidal Crisis, Part II. Gail Chooses Life" (1986). The filmstrip depicts adolescents who are lonely and need to belong, thereby showing the adolescent viewers that their emotional experiences are not unique. This allows for a discussion about the hazards of compromising one's sense of personal integrity for the sake of social acceptance or to avoid loneliness.

The filmstrip tells the story of a girl who attempted suicide and a boy who completed suicide, allowing for a discussion about the differences between the two types. In addition, the appeal of the suicide attempt is devalued; it is appropriately portrayed as a manipulative and unheroic act of poor judgment. The filmstrip shows how the boy's death did not prove or communicate anything to the survivors, and in fact the viewer is led to believe (after later discussion) that the boy was mentally ill and took his life over something that most adolescents can cope with.

The filmstrip also distinguishes between two types of peer responses to talk of suicide: One is clearly ineffective, and the other is appropriate and helpful. This segment allows for a discussion about appropriate and inappropriate ways to intervene with a distressed friend.

A 40-minute structured discussion follows the viewing of the filmstrip. The discussion exposes erroneous messages and reinforces healthy messages. The differences between normal and abnormal adolescent feelings and stresses are explained. Focus is placed on self-image concerns; the finality of death; the relationship between mental illness and suicide; friendship values; and more adaptive ways of coping with loneliness, rejection, and other loss-related stresses. Listening skills and other intervention tools for distressed peers are also discussed with some attention given to school and community resources available to assist students in crisis.

At the end of the presentation a positive self-esteem checklist is distributed. The students are encouraged to have it filled out within the next two days by someone who knows them well. The purpose of the handout is to restore any feelings of positive self-esteem that may have been diminished by an overidentification with the girl who attempted suicide.

Study Design and Procedures

Students in sophomore-level health classes at three suburban high schools in the Chicago metropolitan area were selected for the study. A test group of 203 students (119 males and 84 females) and a control group of 121 students (53 males and 68 females) completed a short survey one day before the suicide prevention presentation and again about 30 days later. Before both groups completed the surveys, all received the same verbal instructions from their health teachers. The teachers then administered both surveys on their own.

The survey was anonymous and limited to a single page of pertinent, sensible questions so as to obtain a high rate of compliance. Demographics such as birth date, race, classroom, and teacher were given at the top of the survey, and this information was used to match surveys. Only those that could be matched were included in the cohort.

The selection and phrasing of survey questions were influenced by a study of three school-based suicide prevention programs in New Jersey done by Shaffer, Garland, and Whittle (1987). The researchers' results showed the persistence of undesirable attitudes held by a minority number of students despite their exposure to the prevention programs studied. Shaffer et al. reported a persistent number of students who would counsel a suicidal friend without obtaining help from someone else (question 1 on the survey), who would keep suicidal confidences a secret (question 2), and who would not take suicidal threats seriously (question 3). The number of students who believe that people who talk about suicide never attempt suicide (question 4) remained the same as did the number of those who feel it is best to keep depressed or suicidal thoughts to oneself (question 5). There was no increase in the desire to seek help from a mental health professional (question 6). Finally, there was no reduction in the number of students who feel that suicide can be a good or possible thing to do (question 7).

Because Shaffer et al. (1987) indicated that the programs they studied did not sufficiently influence students in these necessary areas, the author considers these areas to be guideposts of effectiveness. Therefore, the questions on the author's survey were written to address these same undesirable attitudes. Shaffer et al. (1987) also questioned the wisdom of most suicide prevention programs that advance the normalization

theme despite the apparent abundance of research indicating that suicidal thinking and related behavior are not normal:

> The generalization that most teenagers hold a sensible or accurate view does not apply to views on whether or not suicide is a manifestation of mental illness. Very few of the teenagers (around 12 percent), either before or after exposure to a program believed that this was true. We are in no doubt that the weight of research indicates that suicide is strongly related to other manifestations of psychiatric disturbance but this information was not used in prevention programs. . . . The reluctance of suicide prevention programs to advance the mental illness model is deliberate. As indicated above, the goal of most programs is to encourage self-disclosure and given that view, it is reasonable to take the view that associating suicide with mental illness will discourage self-disclosure. However, it is not improbable that presenting a medical model of mental illness might actually increase self- and parent-generated referral rates. (p. 38)

The author agrees and believes that not acknowledging the relationship between mental illness and suicide gives adolescents an illogical message, that adolescents must come forth and talk to others about an involvement with something that is purported to be "normal." Many adolescents would understandably be suspicious of adults who beckon their disclosure. Moreover, if suicidal thoughts and behavior are typical or normal, it does not make sense to refer a distressed friend to a mental health professional.

Clark (1990) stated that

> deaths by suicide almost always occur in the context of a psychiatric illness (often unrecognized and undiagnosed). Failure to address this fact, and failure to use this knowledge to identify a subset of students at elevated risk for suicide, are points where the identified school-based programs seem out of touch with current scientific knowledge. (p. 2)

Yet 96 percent of the 115 programs studied by Garland et al. (1989) do not promote the relationship between mental illness and suicide completions. Therefore, a question was included (question 8) to explore the effects of the author's program, which clearly advances the medical model of mental illness.

Method of Analysis

Because the programs in the New Jersey study showed "no significant reduction" of undesirable attitudes among a "resistant minority," the author believes that one test of a program's effectiveness would be to measure to what degree the program reduces the prevalence of undesirable attitudes. Because this persistence or lack of change has been identified as a major concern, the proportions of those who have switched in their responses (from undesirable to desirable or vice versa) are what this study focused on.

The method of analysis used was logistic regression. The dependent variable is the probability of giving the desired response 30 days after exposure to the program. The desired responses to each survey question were those oriented toward soliciting help from adults, demonstrating self-disclosure, showing supportive behavior toward a distressed peer, demonstrating knowledge consistent with research findings, and otherwise showing antisuicidal responses. The analysis has seven independent variables and explores the relationship of the probability of giving the desired response to three variables: baseline response (desired or undesired) at the first exposure, gender (male or female), and group (control or test). The analysis also considers all possible interactions of the three variables: baseline by gender, baseline by group, gender by group, and baseline by gender by group. The observed effect of the treatment is then measured by the four comparable differences between the test and control groups. The p value, which measures the statistical significance of this observed effect, is taken from an analysis of variance table within this logistical regression analysis.

Results

Table 1 shows an analysis of the responses to the survey. To demonstrate the effect of the program, the overall p value for each survey question is given. The corresponding independent variable analysis of gender, group, and baseline differences for each question was considered insignificant or expected with the exception of question 6.

To determine the impact of advancing the association of suicide with mental illness on self-disclosure, the behavior of those adolescents who switched from a no to yes response on question 8 ("Teenagers who kill themselves are usually mentally ill") was analyzed. Of the 78 in the test group and 13 in the control group who switched to a desired response, Table 2 examines the behavior of this subgroup on question 5 (willingness to disclose personal thoughts of suicide to a peer) and gives the raw data for the logistic regression analysis of student responses. In this analysis each test group is compared with its relevant control group. Because there was no significant gender difference the logistic regression analysis is baseline by group only.

In each comparison the test group gave a greater desired response proportion than its relevant control

Table 1

Analysis of Program Survey Responses (*N* = 324)

Survey Questions (abbreviated)	Number of Adolescents Giving an Undesirable Response in the Baseline Period			Desired Response to Survey Questions	Undesired Response to Survey Questions	Significance (*p* value) of Test Group Giving a Desired Response 30 Days Later
	N	*n*	%			
1. I would counsel a suicidal friend without obtaining help from someone else.	323	130	43	No	Yes	<.0034
2. If a suicidal friend asked me not to tell anyone I would—	321	80	25	Tell someone anyway	Not tell	<.0046
3. If someone is talking about suicide and it seems obvious they just want attention, I would—	319	141	44	Get them help from a mental health professional	Ignore or joke about	<.0001
4. If a friend came to school in a bad mood and casually mentioned "my family would be better off without me," I would encourage him or her to get help from a mental health professional.	323	171	53	Yes	No	<.0001
5. If suicidal thoughts crossed my mind I would seek out and talk to a friend about those thoughts.	320	102	33	Yes	No	<.0067
6. If I felt very upset, I would seek a mental health professional.	320	175	55	Yes	No	<.036[a] males only
7. For people who have a lot of problems, I think suicide is—	323	54	17	Never a solution	A possible solution	<.13
8. Teenagers who kill themselves are usually mentally ill.	322	237	74	Yes	No	<.0001

[a]Because there was a significant difference ($p < .034$) with the baseline-by gender-by-group interaction in question 6, an analysis of baseline by group (males only) was done. For males there was a desirable effect of the exposure to the program with regard to question 6 ($p < .036$).

Table 2

Number of Students Who Maintained a Desirable Response or Switched from an Undesirable Response to Question 5

Group (Male and Female) and Baseline Response	Number of Adolescents Who Switched to or Maintained a Desired Response 30 Days Later		
	N	*n*	%
Switched			
Undesired control	4	1	25
Undesired test	28	15	54
Maintained			
Desired control	9	6	67
Desired test	50	46	92

group (those who switched to a desired response, .54 versus .25, and those who maintained their desired response, .92 versus .67). With regard to question 5, exposure to the program increased the desired responses among teenagers, who now see suicide as a manifestation of a mental illness ($p < .041$).

Table 3 examines the behavior of the same sample with regard to question 6 (willingness to seek out a mental health professional if very upset). The overall p value for the two proportion differences is .099. Although this p value is not statistically significant, it represents a strong trend in the desired direction. Furthermore, this group of adolescents ($n = 72$) were more willing ($p . < 099$) to seek out a mental health professional than the total test group ($n = 203$) ($p < .38$).

Discussion

Shaffer et al. (1987) asserted that "most teenagers hold sensible or accurate views" (p. 38) on suicide. However, the results of this study showed that in five key areas, a sizeable group of adolescents surveyed did not hold a sensible or accurate view of suicide in the baseline period: 74 percent did not believe teenagers who kill themselves are usually mentally ill, 55 percent would not seek out help for themselves if they felt very upset, 53 percent would not encourage a suicidal friend to obtain help from a mental health professional, 44 percent would ignore or joke about a peer who threatens suicide, and 43 percent would counsel a suicidal friend without obtaining help from someone else.

Garland et al. (1989) concluded that because most of the adolescents in their study held a sensible view of suicide, suicide prevention programs should be aimed exclusively at those "adolescents already identified as at-risk for suicidal behavior" (p. 933). However, adolescents not at risk should not be overlooked. Clark (1990) discussed the benefits and risks of "inoculating" all students through a prevention program versus focused intervention with at-risk students. Inoculating all adolescents with appropriate information seems more efficacious than intervening with at-risk students, whose suicidal ideation may change without warning.

Garland et al. (1989), in reference to Shaffer et al. (1987), stated that "those students with unfavorable attitudes, who are more evidently in need of assistance, were not influenced to change their attitudes in a positive direction after participating in a suicide prevention program" (p. 933). However, exposure to the author's program elicited a desired attitude in six of the eight targeted areas. Therefore, these results suggest that this program was able to have a positive impact on the resistant minority of adolescents who hold disconcerting views on suicide.

Brent et al. (1988) showed that in their study approximately 66 percent of the adolescents who completed suicide were never interviewed by a mental health professional. Also, approximately 41 percent of these adolescents communicated their grave intentions only to a person their age in the week before their deaths. These findings suggest that until the access barriers to mental health professionals are understood and reduced, the front line of prevention lies in the hands of adolescents themselves. It is encouraging to see that the author's program significantly influenced those adolescents who would otherwise counsel a suicidal friend without obtaining help. It is also encouraging to see a similar effect on those adolescents who would otherwise keep suicidal confidences a secret. The same can be said about the significant results with questions

Table 3

Number of Students Who Maintained a Desirable Response or Switched from an Undesirable Response to Question 6

Group (Male and Female) and Baseline Response	Number of Adolescents Who Switched to or Maintained a Desired Response 30 Days Later		
	N	*n*	%
Switched			
Undesired control	10	2	20
Undesired test	33	20	60
Maintained			
Desired control	4	4	100
Desired test	39	38	97

3 and 4, which address the willingness to refer a friend to a professional counselor.

With regard to question 5, the presentation encouraged rather than discouraged the disclosure of personal thoughts of suicide to a peer. Self-disclosure is highly desirable because it increases the likelihood that someone will intervene. Although several possible theories exist for this positive outcome, in this presentation associating suicide with mental illness did not discourage self-disclosure.

The results from question 6 were also interesting. There was a gender difference in the effect of the filmstrip presentation on the willingness to seek help from a mental health professional. The boys were more likely to seek help. One explanation could be identification, boys with the boy who completed suicide and girls with the girl who attempted suicide. Because the viewers of the filmstrip were led to believe that the deceased boy was probably mentally ill and was mistaken by not obtaining the necessary professional help, there would be a greater sense of urgency and willingness to seek help from a mental health professional with those adolescents who identified with him.

Another point to consider is that question 6 is phrased differently than question 5. Question 6 diminishes the adolescent's feeling to "very upset" instead of "suicidal" as in question 5. This phrasing may have created a scenario in the mind of the female respondent that is less serious and accordingly suggests less of a need for professional help. The words "very upset" may connote a state of mind that is more familiar and tolerable to a girl and her friends than it is to a boy and his friends. There may be other reasons why adolescents generally avoid mental health professionals. Subsequent presentations have included a discussion about common fears and various concerns.

The author's presentation did not seem to change the minds of about half of the adolescents who already consider suicide as a possible option (question 7, $p <$ .13). Of the 203 adolescents in the test group, 31 had this undesirable attitude in the pretest. Of those 31, 14 presumably gave up the idea that suicide remains a possible option; the other 17 did not. It is improper to say that these 17 individuals were unreachable. This lack of change should be addressed by thoughtful consideration of an addition to, or an alteration in, the program.

Most prevention programs promote the stress model (that is, anyone can theoretically become suicidal) as the pathway to suicide (Garland et al., 1989). It is plausible that this scare tactic contributed to the cause of the "noxious effect" (described by Clark, 1990) on some of those students in the Garland et al. study. Nevertheless, many programs (96 percent) promote the stress model out of concern that associating mental illness with suicide will discourage self-disclosure (Garland et al., 1989).

In this program, 78 of 88 adolescents who switched responses subsequently believed that those teenagers who kill themselves were mentally ill. To determine the effects of the association of mental illness, the behavior of the 78 adolescents who switched was examined in relation to their responses on self-disclosure and seeking professional help. A significant number of these individuals were more (as opposed to less) willing to seek help from a mental health professional. On the basis of these results, the hesitancy to advance the association of mental illness with suicide cannot be justified.

Adolescents must understand that suicidal attempts and completions are usually symptoms of treatable psychiatric illnesses.

Conclusion

Overall the author's program appears to have a positive impact on the resistant minority of adolescents who hold disconcerting views on suicide. However, there is a demonstrated need for improvement in one important targeted area: A more effective message needs to be developed that will help identify and dissuade more of the adolescents who have already considered suicide as a possible option. To address this, subsequent presentations have included a discussion about the suicide-inhibiting influences of "near death experiences" (Moody, 1981).

It has been said that most adolescents "hold very reasonable and favorable attitudes about seeking help for suicide related problems" (Garland et al., 1989, p. 933). This study revealed that a sizeable number of adolescents held undesirable attitudes about suicide in the baseline period. This sizable group of the sample studied cannot be overlooked. Suicide prevention should therefore continue to be directed at all adolescents.

The author believes that at least two messages should be delivered to all adolescents. First, adolescents must understand that suicidal attempts and completions are usually symptoms of treatable psychiatric illnesses. The hesitancy to advance the association of mental illness with suicide is unjustified. In this study making such an association increased self-disclosure. Self-disclosure also increased among the subgroup of

adolescents who now believe that suicide is a manifestation of mental illness. Second, adolescents should prepare themselves for emergency emotional situations. Adolescence is a normative period of disequilibrium, uncertainty, increased impulsivity, and recklessness. Given adolescents' tendency to seek out one another when in a psychosocial crisis, preparing them with the knowledge of basic intervention and referral skills seems sensible. However, this information should be presented in the context of safety education as opposed to what a good friend does for another friend. This would minimize manipulative attempts to test friendships. Follow-up contact with such peer-generated referrals must be the primary outcome of any prevention program.

The filmstrip "Gail Chooses Life" seems to be an excellent medium that is neither overly clinical nor too elementary. In every health class the majority of the students raised their hands to indicate that they believe there are students among them who are like Gail, suggesting that the filmstrip is realistic and easy for them to relate to. Consequently, the story serves as a springboard for an engaging discussion. However, a remake of the filmstrip script is suggested so that indications of substance abuse, disruptive behavior, and symptoms of mental illness such as major depression are more clearly attributed to the boy who completed suicide.

Finally, the usefulness of a suicide prevention program is best judged on the basis of the extent to which it has actually prevented suicide or suicide attempts. One method of judging the effectiveness of a program is to study the change of attitudes thought to influence suicidal outcomes. Another assessment of effectiveness might be obtained by simply adding a new question to the list of questions to ask a school official in a post-mortem study or a suicide-related hospital admission study, for example, "Did the boy who killed himself (or attempted to kill himself) participate in a suicide prevention program at his school?" and if so, "What messages did the program communicate?" ■

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A remake of the video, now entitled "Choosing Life" was done in 1995.