

Abstract

This study is an evaluation of a student suicide prevention training program for school personnel. The sample consisted of 373 trainees who participated in either the Question, Persuade, Refer (QPR) gatekeeper training or Applied Suicide Intervention Skills Training (ASIST), and 249 control group participants (school staff members who did not attend either training program). Study participants completed a survey concerning their case management practices for potentially suicidal students, post-training changes in school policies, and knowledge of suicide risk factors. Training participants made fewer student referrals for mental health services outside the school and reported fewer students who attempted suicide, than control participants. Participants in the ASIST training program made significantly more contracts with students not to hurt themselves than participants in QPR training or the control group.

Rationale

Suicide is the third leading cause of death among children and youth in the United States (CDC, 2002) and nearly one in five high school students report that they seriously considered suicide during the preceding year (Scherff, Eckert, & Miller, 2005). One means of preventing student suicide is to train school personnel to recognize signs and symptoms of a suicidal student and to provide support and referral assistance so that the student receives mental health intervention.

In order to promote student suicide prevention, the Virginia Department of Health initiated a training program on working with potentially suicidal students. Two kinds of training were offered in regional workshops across the state—Question, Persuade, Refer (QPR; QPR Institute, 2005) and Applied Suicide Intervention Skills Training (ASIST; Guttormsen, Hoifodt, Silvola, & Burkeland, 2003). This statewide prevention effort was funded by the Centers for Disease Control and Prevention.

QPR training is a 1-3 hour program that teaches participants how to recognize suicide risk factors and warning signs. Participants are instructed to *question* potentially suicidal students about their intent, to *persuade* them to stay safe and seek help, and to *refer* them to mental health professionals for further services.

ASIST training is a two-day, interactive workshop intended for mental health professionals who might have suicidal students referred to them. The first day covers knowledge about suicide behaviors and risk factors similar to QPR training, and the second day covers intervention strategies.

Study Questions

1. Are there differences between trainees and control participants in working with potentially suicidal students?
2. Are there differences in the ways that teachers, counselors, and other support staff work with potentially suicidal students?

Method

To evaluate the effectiveness of the two training models, we conducted a retrospective survey of 373 school staff members who had completed training in recent months. The staff members included 169 teachers, 117 counselors, and 82 other school personnel.

The control group consisted of 249 school personnel from schools located in regions where training had not yet taken place. School personnel were selected from staff rosters found on school websites. School personnel were selected by occupation to produce a distribution of administrators, counselors, teachers, etc. comparable to the trainee group.

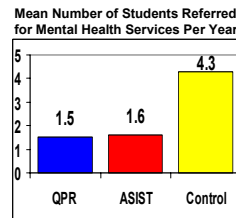
The Student Suicide Prevention Survey was developed in collaboration with the VDH based on a review of the curriculum for the two training programs, results from two focus groups, and pilot testing. The survey covers demographics, changes in suicide prevention practices at the participant's school, the participant's knowledge of suicide risk factors, and staff perceptions of the value of the training and its impact on their work with students.

In planning a survey, researchers must decide whether to contact participants by telephone, postal mail, or Internet. A secondary question investigated in this study was what method of surveying school personnel would yield the best return rate. Participants were randomly assigned to one of three methods—telephone, Internet, or postal mail. Modality comparisons will not be included in this report, but more extensive findings can be obtained from the authors.

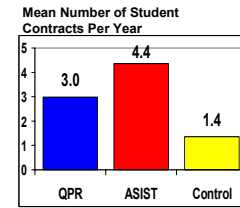
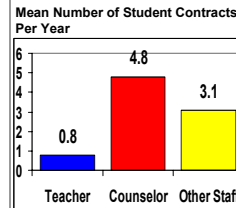
Results

For each outcome, we compared the type of training (QPR, ASIST, and Control) and the occupation of the participant (teacher, counselor, other support staff). For trainees, the follow-up survey was completed on average 6.6 months after completion of the training (range: 1 to 22 months). Control participants were asked to answer the survey question regarding the previous three months. To account for the differences in follow-up period, group comparisons were conducted after covarying for time period, using a 3x3 analysis of covariance (ANCOVA). All means presented are adjusted means.

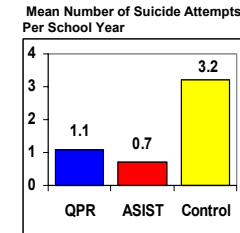
The control group referred more students for mental health services outside of school than participants in either training group. On average, school staff in the control group made 4.3 referrals per year, while QPR and ASIST trainees made similar numbers of referrals (1.5 and 1.6 per year). One possible explanation for this finding is trainees feel more confident in their ability to assist potentially suicidal students within the school and are therefore less likely to refer a student for outside help.



Counselors made significantly more contracts with students not to harm themselves ($M = 4.8$ per year) than did teachers ($M = 0.8$) or other support staff ($M = 3.1$). Participants in the ASIST training program also made significantly more contracts (4.4 per year) than those who participated in the QPR training (3.0) or the control group (1.4).

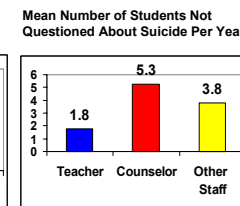
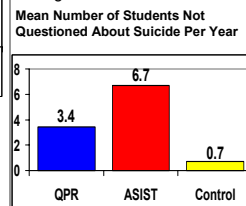


We examined participant reports of the number of students who attempted suicide following training. The control responders reported more students that attempted suicide during the previous school year ($M = 3.2$) than did training participants (QPR $M = 1.1$ and ASIST $M = 0.7$). This a 42 percent reduction in the number of suicide



attempts for training participants. This finding suggests that the training was beneficial in preventing suicide attempts, but requires further study. Since participants were not randomly assigned to training and control groups, it is not possible to conclude that there was a causal effect of training.

There were no significant differences between training and control groups in the number of students that participants reported questioning about possible suicidal ideation. However, one of the goals of training is to encourage school personnel to inquire about suicide anytime they suspected a student might be suicidal. Accordingly, the survey also asked how many times they "wondered if a student might be suicidal, but you decided not to question that student about suicide." This question produced some unexpected results, since trainees reported more such cases when they failed to ask a student about suicide than control participants. It appears that the concept of questioning a student any time there is a concern about suicide should be given more attention during the training. Also unexpected was the finding that counselors ($M = 5.3$) reported not questioning possibly suicidal students more often than did teachers (1.8) or other support staff (3.8). More study is needed to investigate these unexpected findings.



Participant knowledge of suicide prevention was based on seven items drawn from the workshop curriculum, such as factors that increase or decrease the risk of suicide. These seven items were combined to make a total knowledge sum score. There were no significant differences between training groups and the control group on their knowledge sum scores. It is possible that the items did not adequately assess the knowledge that participants gained in training because some were questions were uniformly too easy and so did not discriminate between those who had or had not participated in the training.

Analysis of Covariance Among Training Groups After Controlling for Time Since Training

	F	P	η^2
Students Referred for Mental Health Services			
Time since training	26.29	<.001	.043
Training	15.66	<.001	.051
Occupation	1.33	.267	.004
Training x Occupation	6.42	<.001	.042
Student Contracts			
Time since training	.001	.980	.000
Training	9.29	<.001	.031
Occupation	18.85	<.001	.060
Training x Occupation	3.99	.003	.026
Students Spoken to But Not Questioned			
Time since training	11.87	.001	.020
Training	21.93	<.001	.070
Occupation	9.57	<.001	.032
Training x Occupation	3.83	.004	.025
Students Questioned about Suicidal Ideas			
Time since training	1.53	.22	.003
Training	.81	.45	.004
Occupation	.43	.65	.002
Training x Occupation	.55	.70	.005
Knowledge Score			
Time since training	1.96	.162	.003
Training	2.60	.075	.009
Occupation	2.83	.060	.010
Training x Occupation	.76	.548	.005
Student Suicide Attempts			
Time since training	8.81	.003	.028
Training	31.91	<.001	.174
Occupation	2.23	.110	.015
Training x Occupation	2.71	.030	.035

Conclusions

The survey results provide support for the benefit of gatekeeper training for school personnel to identify potentially suicidal students. Most notably, trainees reported fewer cases in which they referred students for outside mental health services and fewer student suicide attempts than school personnel in the control group. It is important to confirm these findings by examining suicide attempts and referrals using independent sources of information and to conduct a prospective, controlled experiment with random assignment of schools to receive training.

ASIST training was associated with larger effects than QPR training in several domains, such as number of contracts made with students not to harm themselves and fewer reported suicide attempts; however, in most respects, the ASIST and QPR trainees did not differ.

Only selected results are presented here; a complete copy of this study is available from the first author: farah@virginia.edu. We thank the Virginia Department of Health and the Centers for Disease Control and Prevention for their support of this project.