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Does a Gatekeeper Suicide Prevention Program Work in a School Setting? Evaluating Training Outcome and Moderators of Effectiveness

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Abstract

The current study sought to evaluate the suicide prevention gatekeeper training program QPR (Question, Persuade, and Refer) among school personnel using a non-equivalent control group design. Substantial gains were demonstrated from pre- to post-test for attitudes, knowledge, and beliefs regarding suicide and suicide prevention. Exploratory analyses revealed the possible moderating effects of age, professional role, prior training, and recent contact with suicidal youth on QPR participants' general knowledge, questioning, attitudes toward suicide and suicide prevention, QPR quiz scores, and self-efficacy. The need for replication using a more rigorous experimental design in the context of strong community collaboration is discussed.

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Nationally, suicide is the third leading cause of death among 10- to 19-year-olds (Centers for Disease Control [CDC], 2004) with rates increasing as youth move through adolescence (1.5 per 100,000 among 10- to 14-year-olds and 8.2 per 100,000 among 15- to 19-year-olds). However, examining completed suicide as a sole indicator of risk provides an incomplete picture of the problem. Oregon, being the only state in the nation to mandate reporting of youth attempts requiring medical services, provides a unique source of data about frequency of youth suicide attempts. Since 1987, hospitals have been required by law to report attempts to the state health department which systematically tracks and shares the numbers in a data base called the Adolescent Suicide Attempt Data System (ASADS). In 2004, 920 youth in the state attempted suicide, a year in which 10 took their own lives (Oregon Department of Human Services' Center for Health Statistics, 2004). While attempts greatly outnumber completions, they are thought to be drastically under-reported with surveyed emergency room personnel estimating that in this same year at least 1,800 youth made attempts (Oregon Public Health Division, 2006) which is in line with accepted estimates that for every one documented suicide completion, there are approximately 100 to 200 who have attempted (National Center for Health Statistics as cited in King, 2006).

Recent state and national surveys provide an additional source of information about the extent of the problem of youth suicide and generally reveal alarmingly high rates of non-lethal suicidal behavior. For example, the Youth Risk Behavior Survey (YRBS), conducted by the CDC revealed that during the previous year 28.5% of high school students felt "so sad or hopeless every day for 2 weeks or more in a row" that they stopped engaging in usual activities,

16.9% "seriously considered attempting suicide," nearly 13% made a specific plan to attempt, 8.4% reported at least one attempt, and 2.3% made an attempt which required medical attention (CDC, 2004). Taken together, and considering the estimated participation rates in the YRBS (67%), the magnitude of the problem becomes clear.

Although historical trends suggest a decline in youth suicide beginning in the mid 1990s, recent data suggest these rates have stabilized or even increased giving cause for concern (Hamilton, Minino, Martin, Kochanek, Strobino, & Guyer, 2007). The reasons for these trends are not clear. However, some highlight the role of selective serotonin reuptake inhibitors (SSRIs) in decreasing suicidality among youth, citing increasing rates of anti-depressant prescriptions for adolescents prior to and decreasing rates following the 2004 FDA mandated black-box warnings correlating with decreased and increased rates among youth, respectively (Gibbons, Hur, Bhaumik, & Mann, 2006).

Youth suicide prevention programs share the common goals of identifying at-risk youth and referring for treatment or decreasing risk factors while promoting protective factors. These efforts have primarily been implemented in the schools or larger community. The *National Strategy for Suicide Prevention* highlights the need for a multifaceted and collaborative response to youth suicide, including the importance of building community and school partnerships. In addition, it calls for increasing the number of evidence-based suicide prevention programs in schools and for providing awareness and educational programs to key gatekeepers, where a gatekeeper is simply anyone who may recognize and refer someone at risk of suicide. Unfortunately, most schools do not appear to be actively engaged in prevention efforts as less than half of all states require that suicide prevention be taught in at least one school grade (CDC, 2000).

Although an extensive empirical literature has examined risk factors, warning signs, and precipitating factors of youth suicide (Bridge, Goldstein, & Brent, 2006; Gould, Greenberg, Velting, & Shaffer, 2006b), relatively less is known about the efficacy of key prevention strategies, including the extent to which potential gatekeepers possess adequate knowledge of suicide and suicide prevention. The extant research in the area, in fact, suggests that professionals and educators rarely recognize and/or are able to provide assistance to suicidal youth (King, Price, Telljohann, & Wahl, 1999; Pirkis et al., 2003; Schouller & Smith, 2002). Thus, school personnel, given their access and relationship to youth, are important targets for gatekeeper training.

One widely used gatekeeper training program is QPR (Question, Persuade, Refer). Taught by certified instructors, the 1- to 2-hour session trains individuals to recognize warning signs, question suicidal intent, listen to problems, and refer for help. Although limited in scope, outcome-based research suggests that gatekeeper training may improve knowledge and skills (see Gould, Greenberg, Velting, & Shaffer, 2003 for a review). Thus, improving school personnel's ability to detect and appropriately respond to potentially suicidal youth may serve an important role in suicide prevention efforts.

Heeding the U. S. Surgeon General's call for empirical evaluation, the current study evaluates the short-term effectiveness of QPR in changing knowledge and attitudes toward youth suicide prevention, improving upon past studies through inclusion of a control group thereby sharpening interpretation of prevention effects. In addition to testing the hypothesized effect of QPR, we sought to identify factors that may influence effectiveness including age, professional role, prior training, and/or past experience with suicidal youth.

Method

Participants

Participants included 106 school personnel from a small, rural school district in the Pacific Northwest who were recruited by school administrators to be trained in QPR as a county-wide prevention effort. Thirty-five control group participants who self-identified as having contact with youth were recruited from the community through emails and newspaper announcements. The sample characteristics of both groups and statistical comparisons are presented in Table 1.

Measures

The questionnaire was adapted from instruments previously used to evaluate gatekeeper programs and inquired about demographics and other domains (see Table 2). Additionally, QPR participants were asked to evaluate the program (e.g., overall evaluation, effectiveness at meeting training objectives, helpfulness, whether they would recommend the program to others).

Procedure

Not being able to randomly assign schools, or individuals within the schools, to groups, we used a non-equivalent control group design. During an in-service training, 78 school personnel participated in a 2-hour QPR gatekeeper suicide prevention training and completed a paper-and-pencil measure prior to and immediately after training. The QPR certified trainer discussed prevalence of suicide among youth, risk factors for depression and suicidality, appropriate ways to ask if a student is considering suicide, and reviewed the steps that should be taken when intervening and referring a suicidal person for help.

Control participants (n = 24) did not receive training, but completed similar pre- and post-test measures online or via mail, approximately one day apart. No significant differences in

demographic variables were found between participants who completed pre-test measures only and those who completed both pre- and post-test measures.

Additionally, approximately three months after participating in the study, both control and QPR participants were asked to complete a follow-up measure. A limited number of controls (n = 21) and QPR (n = 18) participants completed the follow-up measure online or via mail. Participants who completed follow-up measures were significantly more educated and reported more personal experience with suicidal individuals.

Results

Outcome Evaluation: Indications of Program Effectiveness

Independent-samples t-tests and chi-square tests were used to examine possible pre-existing differences between groups. These preliminary analyses suggested that control group participants were older, more educated, and had more personal experience with suicidal individuals relative to QPR participants (see Table 1). As a result, these variables were used as covariates in all analyses evaluating training effects.

A series of Analyses of Covariance (ANCOVAs) were conducted to evaluate training effects. Participants demonstrated significant gains relative to controls across multiple domains from pre- to post-test, indicating improvements in knowledge, perceived skills, and self-efficacy to intervene (Table 3).

Additionally, QPR participants generally responded positively to the training with 93% rating the program as *good* to *excellent* in meeting its objectives, 90% indicating a belief that the training would be helpful in assisting a suicidal individual and 97% reporting that they would recommend the program to others.

Moderators of Program Effectiveness

A series of repeated-measures Analyses of Variance (ANOVAs) were used to evaluate the possible moderating influence of background factors (e.g., age, professional role, prior training, recent contact with suicidal youth) on gains in knowledge, perceived skills and attitudes toward suicide and suicide prevention. Factors were identified on the basis of their pragmatic importance for informing administrative decision making about school training. There was a significant Age x Time interaction, $F(2, 73) = 3.88$, $p < .05$ (see Figure 1A), suggesting that age significantly influenced QPR participants' attitudes toward identifying youth suicide as a major issue in need of being addressed, with younger groups of school personnel showing positive attitudinal shifts across time, $t(20) = -2.63$, $p < .05$. As shown in Figure 1B, professional role significantly moderated training effects on these same attitudes, $F(1, 58) = 10.93$, $p < .01$, with teachers and administrators demonstrating positive gains, $t(46) = -2.87$, $p < .01$, and support staff showing negative shifts in beliefs about addressing the problem of youth suicide, $t(12) = 2.31$, $p < .05$. Professional role also moderated training effects on perceptions of whether suicide was a major issue in the community, $F(1, 58) = 5.68$, $p < .05$ (see Figure 1C), again with teachers and administrators seeing it as a significantly greater problem after training, $t(47) = -4.11$, $p < .001$, relative to support staff who experienced no shift in attitudes, $t(13) = 0.38$, $p > .05$. Additionally, for knowledge tapped by the QPR quiz, there was a significant Professional Role x Time interaction, $F(1, 58) = 15.67$, $p < .001$, suggesting that teachers and administrators significantly improved their performance on the QPR quiz, $t(46) = -10.21$, $p < .001$, while support staff showed no change in performance (see Figure 1D).

Consistent with the one published study investigating moderating effects of prior training (King & Smith, 2000), the main effect of time, $F(1, 74) = 65.27$, $p < .001$ was significantly

qualified by prior training, $F(1, 74) = 3.17$, $p < .05$, such that individuals with prior suicide prevention training evidenced more modest pre-post changes in questioning about suicide, $t(8) = -3.29$, $p < .05$, relative to those with no prior training $t(66) = -14.36$, $p < .001$ (see Figure 1E). A similar pattern of results was found for general knowledge, with the main effect of time $F(1, 74) = 72.39$, $p < .001$ being qualified by prior training, $F(1, 74) = 5.61$, $p < .05$, such that individuals with no prior training evidenced greater gains across time in their general knowledge of suicide and suicide prevention, $t(66) = -15.93$, $p < .001$ relative to those with some prior training, $t(8) = -3.07$, $p < .05$ (see Figure 1F). However, it should be noted that even for those with prior training significant gains were still noted in both general knowledge and questioning.

Similarly, a main effect of time, $F(1, 61) = 81.41$, $p < .001$ was significantly qualified by prior contact with suicidal youth, $F(2, 61) = 4.25$, $p < .05$, such that individuals with no prior contact with suicidal youth in the past year demonstrated steeper gains in general knowledge, $t(42) = -13.08$, $p < .001$ relative to those with limited, $t(4) = -3.50$, $p < .05$ or more extensive contact, $t(15) = -5.95$, $p < .001$ (see Figure 1G). Finally, a similar pattern was noted for self-efficacy whereby a main effect of time, $F(1, 61) = 26.13$, $p < .001$ was significantly qualified by prior contact with suicidal youth, $F(2, 61) = 4.51$, $p < .05$, such that those with no prior contact evidenced the greatest gains in self-efficacy, $t(42) = -7.74$, $p < .001$, relative to those with limited, $t(4) = -2.83$, $p < .05$ or more extensive contact, $t(15) = -2.57$, $p < .05$ (see Figure 1H).

Follow-up Analyses

A series of repeated-measures ANOVAs were used to evaluate short-term durability of prevention outcomes in the limited sub-sample that completed follow-up measures. As shown in Table 4, prevention training gains were maintained in some domains (self-efficacy, likelihood to intervene, questioning, perceptions of suicide as preventable), but not others (general knowledge,

QPR knowledge quiz). Additionally, control participants also showed limited gains in questioning and likelihood to intervene.

Discussion

The present study describes a preliminary investigation of the effectiveness of a gatekeeper training program among secondary school personnel. It is the first of its kind to evaluate QPR using a non-equivalent control-group design. In general, QPR was positively evaluated and significant gains in suicide-relevant knowledge and attitudes were demonstrated from pre- to post-test, suggesting that QPR is a promising tool in school-based prevention efforts.

Although a public health saturation model of QPR is the penultimate goal (see Quinnett, 2006), pragmatic concerns with school-based intervention may necessitate targeting training to groups who may benefit the most, as administrators are often forced to make practical decisions based upon available resources. The results of the current study suggest that younger teachers, who have not been previously trained in suicide prevention nor had much prior contact with suicidal youth, are the most likely to benefit from QPR. Unpublished reports from the Washington Youth Suicide Prevention Program similarly found that those with less experience with suicide tended to show more substantial changes in knowledge and attitudes about suicide and suicide prevention (Organizational Research Services [ORS], 2002).

Teachers are often identified as individuals in the community in a unique position to identify at-risk youth and refer them for help. Supporting this view, a substantial number of school personnel in our sample reported having had contact with at least one suicidal youth in the past month (20%) or year (39%) and most indicated they were approachable to students who talked with them about their thoughts and feelings. However, there is evidence to suggest that opportunities for identification and referral may be missed due to lack of knowledge about the

signs and symptoms of suicidality (Brown, Wyman, Guo, & Peña, 2005; Schouller & Smith, 2002). Thus, if gatekeeper training is effective, adopting programs that increase knowledge of warning signs and how to appropriately intervene may serve to substantially increase identification and referral of at-risk youth.

Evaluations of prevention efforts typically fail to examine durability of effects. Notable exceptions include two unpublished (Davis, 2001 as cited in Quinnettt, 2006; ORS, 2002) evaluations of gatekeeper training that demonstrated maintenance of training gains in knowledge and attitudes up to 18 months post-training. Although focused on training peer helpers, Stuart, Waalen, and Haelstromm (2003) similarly found that significant gains were maintained across a 3-month period. Consistent with these prior results, we found that training gains persisted across most domains. Changes in knowledge (e.g., warning signs, risk factors), but not attitudes or beliefs, tended to be relatively more ephemeral among our sample. Although the number of participants who completed pre-test and post-test measures following training were respectable, the limited number of QPR participants (23%) who completed all three assessments, restricts conclusions that can be drawn. Stuart et al. (2003) and the ORS group confronted similar problems with high rates of attrition (57% and 39%, respectively) calling for the need to recruit larger samples that are followed over time, as well as more creative ways to prevent participant drop-out. Interestingly, most participants in the control group (75%) completed the follow-up measure and evidenced significant gains in terms of their intent to intervene and question when encountering suicidal youth. Although supporting evidence is anecdotal in nature (e.g., going to online suicide-related resources after completing the online survey), it may be that enhancing awareness can lead to improvements in circumscribed areas for those who are highly educated, motivated, and/or experienced.

Although this study is the first to empirically evaluate QPR in the school setting there are several limitations that should be noted. First, a non-equivalent control group design was used and therefore we cannot attribute gains solely to training. Future studies should attempt to evaluate QPR using a more rigorous design in which random assignment can be employed. Additionally, the significant changes in knowledge, while a positive step toward raising awareness of suicide and increasing opportunities for prevention, do not necessarily translate into effective intervention. We attempted to collect follow-up data, including contact with youth and referral practices, to answer these important questions. Unfortunately, few participants chose to respond. Additionally, several of the follow-up responses included summer months which were not directly comparable to post-test responses that focused on experiences and behaviors occurring during the academic school year. Again, future research should recruit large numbers of participants who are followed across time to examine the self-reported number of youth identified, actual referrals to school and community resources, and the maintenance of the gains in knowledge, attitudes, and beliefs. Such a design may also provide opportunities to incorporate and test whether modifications to the training program (e.g., booster sessions, simulated practice, monthly newsletter) differentially enhance outcomes and/or durability of outcomes.

While QPR training offers one promising tool, several issues highlight the need to widen gatekeeper training to include peers and parents, and to enact additional prevention strategies. First, recent evidence suggests that friends and parents may be particularly effective gatekeepers. Not only are youth most likely to confide in peers, but both friends and parents of youth who completed suicide also reported being aware of unique sets of risk factors (Moskos, Olson, Halbern, Keller, & Gray, 2005). Recent data has also revealed low rates of both formal and informal resource use among completers (Moskos et al., 2005) and high-risk youth (Gould,

Greenberg, Munfaksh, Kleinman, & Lubell, 2006a). Needed are ways to combat stigma and encourage help-seeking, particularly among those who are socially isolated (Moskos et al., 2005).

In conclusion, effectively tackling the problem of youth suicide requires cooperation and involvement from entire communities. Evaluating those efforts in scientifically meaningful ways requires substantial trust and strong partnerships. In reference to the issue of mental health in the schools, Howard Adelman (2006) writes, "true collaboration involves more than meeting and talking. The point is to produce actions that yield important results." (p. 297). Communities must come together to talk about suicide prevention, identify their weaknesses, build upon their strengths, and create plans of action.

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Table 1

Sample Characteristics of QPR and Control Participants

	M		*t*	%		χ^2
Characteristics	QPR	Control		QPR	Control	
Age (in years)	42.10	47.09	- 2.26[a]*			
Personal Experience with Suicide	.57	.89	- 2.60[b]*			
Gender						n.s.
Male				24%	26%	
Female				76%	74%	
Ethnicity						n.s.
Caucasian				93%	100%	
Other				7%	0%	
Education						11.66**
High School or General Equivalency Diploma				16%	3%	
Some College (no degree)				23%	6%	
Bachelor's Degree				29%	43%	
Master's Degree (or above)				32%	48%	

Note. [a] degrees of freedom for the *t* test are (132). [b] degrees of freedom for the *t* test are (127).

*$p < 05$. **$p < .01$.

Table 2

Definitions of Variables, Sample Items and Internal Consistency

Variable	Sample item (number of items)	Scale	α
Self-efficacy	How competent would you feel helping a suicidal person? (3 items)	1=*not at all* to 5=*fully*	.84
Attitudes	1. Suicide among young people is a major issue in my community. 2. The problem of youth suicide should be addressed in my community. 3. Suicide is preventable in the majority of situations.	1=*strongly disagree* to 5=*strongly agree*	.45[a]
General knowledge	Information about local resources for help. (6 items)	1=v*ery low* to 5=*very high*	.92
Questioning	Ask someone if they are suicidal.(5 items)[b]	1=*not very likely* to 3=*very likely*	.84
Intervention knowledge & likelihood to help	I would encourage them to talk about their problems and wish to die. (7 items)[c]	1=*strongly disagree* to 5=*strongly agree*	.71
QPR knowledge quiz	The number one contributing cause of suicide is (15 items)[d]	Multiple-Choice, T/F	
Prior training	Have you participated in any sort of suicide training or workshop prior to today? (1 item)	Y/N	

(Table 2 continued)

Variable	Sample item (number of items)	Scale	α
Personal experience with suicide	Have you had personal experience with suicide? (calculated total count of close others endorsed from list as attempting/completing) (1 item)	Y/N	
Prior contact with suicidal youth	How many young people who showed signs of being suicidal did you have contact with in the last month? Last year? (2 items)	Open-ended	

Note. A copy of all study-related materials may be obtained from the first author [a] Due to low reliability at pre-test individual items were used in all analyses. [b] Four of the five items were measured on 5-point scales (3 items rated from 1 = *Very low* to 5 = *Very high*; 1 item rated from 1 = *Strongly disagree* to 5 = *Strongly agree*). [c] Three of the 7 items were measured on the above 5-point scale; 4 items were rated on a 3-point scale from 1 = *Not very likely* to 3 = *Very likely*. [d]Contact the QPR Institute for a complete measure of the QPR Knowledge Quiz (http://www.qprinstitute.com/)

Table 3

QPR and Control Group Participants' Average Change in Scores from Pre-test to Post-test

Variable	QPR Group (n = 76)		Control Group (n = 24)		F (1, 99)	p
	Mean	SD	M	SD		
General knowledge	7.80	4.43	-0.71	3.01	59.98	.001
QPR test	1.97	2.31	0.13	1.30	13.58	.001
Questioning	5.21	3.12	-0.42	2.98	48.88	.001
Intervention knowledge & likelihood to help	2.71	3.14	.92	2.77	61.59	.001
Self-efficacy	2.16	2.21	-0.29	1.60	20.20	.001
Suicide is a major issue	0.24	0.83	0.13	0.46	0.15	n.s.
Suicide is preventable	0.66	1.03	0.13	.54	4.55	.05
Suicide should be addressed	0.11	0.80	0.04	0.96	0.98	n.s.

Note. Analyses include age, education, and experience with suicide as covariates.

Table 4

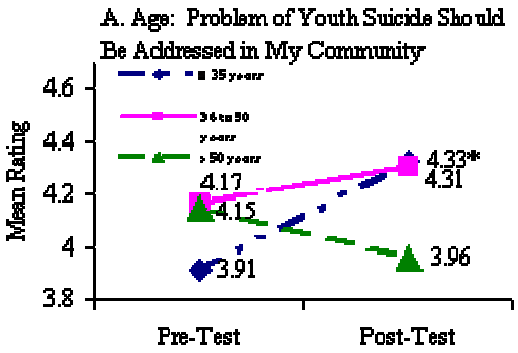
Repeated Measures Analyses of Variance (ANOVA) Results Exploring 3-month Follow-up Prevention Outcomes Across Groups

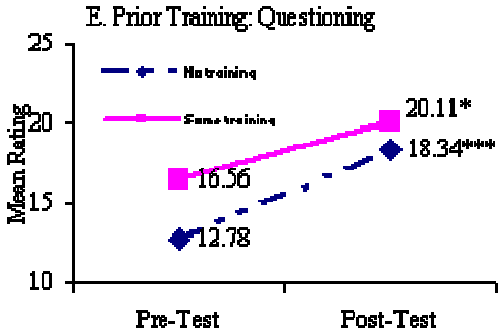
Variable	QPR Participants *M (SD)*	Control Participants *M (SD)*	*F* Time	*F* Interaction
General Knowledge			15.61***	18.89***
Pre-test	16.61 (4.22)$_{a}$	18.38 (4.46)		
Post-test	22.94 (3.78)$_{a}$	17.67 (4.48)		
Follow-up	21.00 (3.74)$_{a}$	19.48 (5.79)		
QPR Knowledge Quiz			7.13**	5.52**
Pre-test	11.21 (1.37)$_{a}$	11.70 (1.22)		
Post-test	13.36 (1.78)$_{a, b}$	11.80 (1.61)		
Follow-up	12.43 (1.22)$_{b}$	12.30 (1.42)		
Self-Efficacy			9.46***	7.43***
Pre-test	8.89 (2.85)$_{a,b}$	10.52 (2.48)		
Post-test	10.95 (2.27)$_{a}$	10.48 (2.36)		
Follow-up	10.68 (2.31)$_{b}$	10.90 (2.10)		
Likelihood to Intervene			12.86***	1.86
Pre-test	18.17 (2.66)$_{a, b}$	18.05 (2.29)$_{a}$		
Post-test	20.11 (.83)$_{a}$	18.76 (1.87)		
Follow-up	20.11 (.96)$_{b}$	19.14 (1.56)$_{a}$		

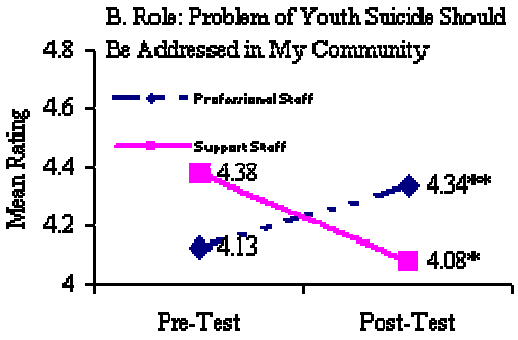
(Table 4 continued)

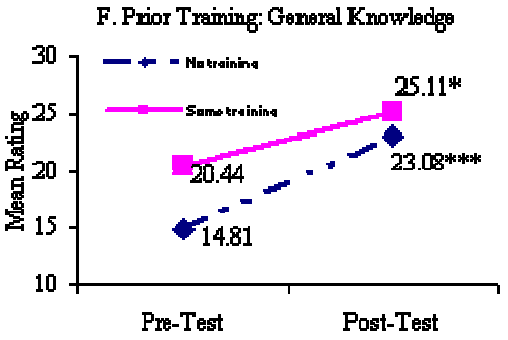
Variable	QPR Participants *M (SD)*	Control Participants *M (SD)*	*F* Time	*F* Interaction
Questioning			20.77***	14.44***
Pre-test	14.39 (3.11)$_{a, b}$	16.95 (2.89)$_{a}$		
Post-test	18.67 (2.33)$_{a}$	16.57 (3.40)$_{b}$		
Follow-up	19.28 (2.44)$_{b}$	17.95 (2.94)$_{a,b}$		
Major Issue			1.70	1.20
Pre-test	3.39 (.98)	4.15 (.59)		
Post-test	3.83 (.86)	4.25 (.64)		
Follow-up	3.78 (.94)	4.10 (.55)		
Address Problem			1.51	.02
Pre-test	4.17 (.51)	4.38 (.97)		
Post-test	4.17 (.51)	4.43 (.60)		
Follow-up	4.33 (.59)	4.57 (.51)		
Preventable			9.23***	4.87**
Pre-test	3.67 (.67)$_{a, b}$	4.05 (.67)		
Post-test	4.39 (.50)$_{a}$	4.14 (.73)		
Follow-up	4.11 (.47)$_{b}$	4.33 (.48)		

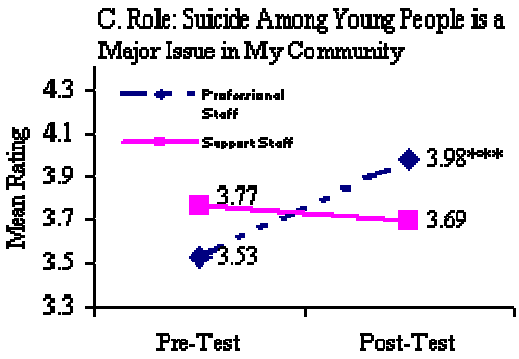
Note. Means in the same column that share subscripts differ at $p < .05$ according to post-hoc paired samples t-tests.

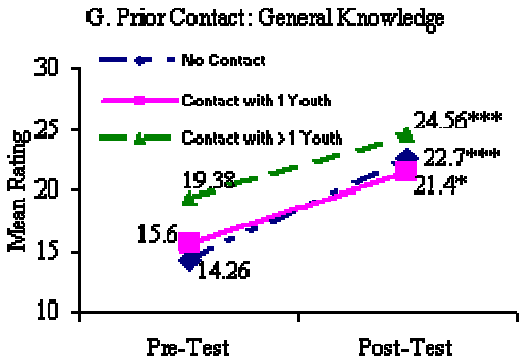

A. Age: Problem of Youth Suicide Should Be Addressed in My Community
Mean Rating
4.6
4.4
4.2
4
3.8
≤ 35 years
36 to 50 years
> 50 years
4.17
4.15
3.91
4.32*
4.31
3.96
Pre-Test
Post-Test

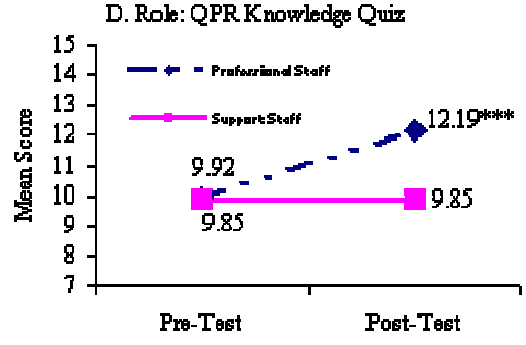

E. Prior Training: Questioning
Mean Rating
25
20
15
10
No training
Some training
16.56
12.78
20.11*
18.34***
Pre-Test
Post-Test

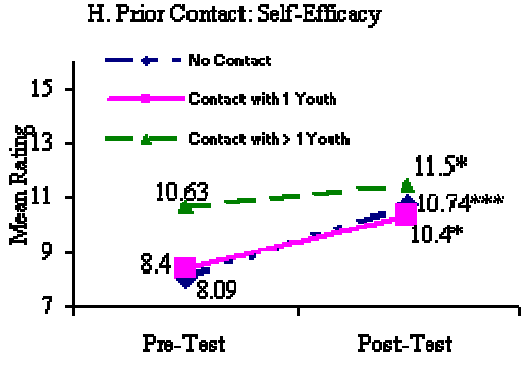

B. Role: Problem of Youth Suicide Should Be Addressed in My Community
Mean Rating
4.8
4.6
4.4
4.2
4
Professional Staff
Support Staff
4.38
4.13
4.34**
4.08*
Pre-Test
Post-Test


F. Prior Training: General Knowledge
Mean Rating
30
25
20
15
10
No training
Some training
20.44
14.81
25.11*
23.08***
Pre-Test
Post-Test


C. Role: Suicide Among Young People is a Major Issue in My Community
Mean Rating
4.3
4.1
3.9
3.7
3.5
3.3
Professional Staff
Support Staff
3.77
3.53
3.98***
3.69
Pre-Test
Post-Test


G. Prior Contact: General Knowledge
Mean Rating
30
25
20
15
10
No Contact
Contact with 1 Youth
Contact with > 1 Youth
19.38
15.6
14.26
24.56***
22.7***
21.4*
Pre-Test
Post-Test


D. Role: QPR Knowledge Quiz
Mean Score
15
14
13
12
11
10
9
8
7
Professional Staff
Support Staff
9.92
9.85
12.19***
9.85
Pre-Test
Post-Test


H. Prior Contact: Self-Efficacy
Mean Rating
15
13
11
9
7
No Contact
Contact with 1 Youth
Contact with > 1 Youth
10.63
8.4
8.09
11.5*
10.74***
10.4*
Pre-Test
Post-Test

Author Note

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Figure Caption

Figure 1.

Average change in scores from pre-test to post-test assessment reported by QPR participants (n = ranges from 34 to 40) as a function of age, professional role, prior training, and prior contact with suicidal youth.

*$p < .05$. **$p < .01$. *** $p < .001$.