



A Multi-Center Study of the Effectiveness of an 8-hour Suicide Risk Assessment and Risk Management Course (QPRT) in Increasing Knowledge about Suicide

Date: 2006

Published by the QPR Institute.

Authors: Matthew Schumacher, MA, Doctoral Candidate, Northern Illinois University, Department of Psychology, Peter M. Gutierrez, Ph.D., Associate Professor, Northern Illinois University and Paul Quinnett, Ph.D., CEO, the QPR Institute.

Introduction

The current report is a program evaluation of the effectiveness of the standardized 8-hour QPRT Suicide Risk Management Inventory© assessment course in producing suicide related knowledge gains. The manual-driven 8-hour QPRT course is intended for clinicians, covering suicide risk assessment and management. The course is skill oriented, focusing on interviewing suicidal clients to elicit clinically relevant information in a therapeutic manner. General knowledge of suicide risk assessment and management facts was measured before and after QPRT instruction using the Suicide Risk Management Inventory (SRMI). The SRMI is a 25-item, multiple choice and true/false test of suicide risk assessment and management information. The SMRI asks questions about factual information presented during the QPRT program. The SMRI results in a 100-point total score. Delivery of the SRMI before and after instruction in QPRT is required of all licensed instructors.

The present study assesses the global effectiveness of QPRT training program in producing meaningful knowledge gains as measured by the SRMI. Additionally, this analysis will evaluate the extent to which QPRT training is reliably delivered across

instruction centers. That is, quality of instruction by center will be evaluated to assess fidelity to the manualized program.

Results

Total scores on the SMRI before instruction were available for 1136 participants at 28 instruction centers. Centers averaged 44.3 participants each (range = 1-197). To determine if centers differed on pre-instruction knowledge of suicide, a one-way ANOVA was completed comparing mean scores for pre-instruction knowledge by instruction center. Sample mean pre-instruction SMRI score was 53.0 ± 12.8 . Mean pre-instruction SMRI scores by instruction center are shown in Table 1 of the appendix. A main effect was found for instruction center. Sites rated “lower knowledge” at pre-instruction had mean scores that were (i) lower than the average site and (ii) statistically lower than at least 2 other sites based on post-hoc comparison (pairwise comparison). The criterion for “higher knowledge” sites was, similarly, that they were (i) higher than the average site and (ii) statistically higher than at least 2 other sites based on post-hoc comparison (pairwise comparison). Post-hoc mean comparisons indicated the following significant pre-instruction differences by instruction center:

Pre-instruction knowledge levels by instruction center:

Lower knowledge	Higher knowledge
Connecticut	Day School
Philadelphia	Deerhaven
Maryland	Cleo Wallace, CO
New York	Gateway

To determine if QPRT instruction was globally effective in increasing knowledge of suicide, mean SMRI pre- and post-instruction scores were compared across all teaching centers. Total scores on the SMRI before and after instruction were available for

1136 and 1285 participants respectively at 28 instruction centers. The average pre-instruction score on the SMRI was 52.9 ± 12.7 compared to 81.4 ± 10.7 at post-instruction, a significant difference at the $p < .01$ level. Further analysis revealed a mean increase of 28.2 ± 13.4 points, or 53.9%, on the SMRI following instruction for the overall sample. All instruction centers achieved at least a 20.8-point increase on the SMRI, corresponding to a minimum 39.3% increase above the sample pre-instruction mean.

To determine if centers differed on post-instruction knowledge of suicide, a one-way ANOVA was completed comparing mean scores for post-instruction knowledge by instruction center. Sample mean post-instruction SMRI score was 81.4 ± 10.7 . Mean post-instruction SMRI scores by instruction center are shown in Table 1 of the appendix. A main effect was found for instruction site. Sites rated “lower knowledge” at post-instruction had mean scores that were (i) lower than the average site and (ii) statistically lower than at least 2 other sites based on post-hoc comparison (pairwise comparison). The criterion for “higher knowledge” sites was, similarly, that they were (i) higher than the average site and (ii) statistically higher than at least 2 other sites based on post-hoc comparison (pairwise comparison). Post-hoc mean comparisons indicated the following significant post-instruction differences by instruction center:

Post-instruction knowledge levels by instruction center:

Lower knowledge	Higher knowledge
Comm. Svcs. - Paoli	Brandywine
Georgia	Connecticut
Maryland	Day School
NJCA	ICTR
Philadelphia	Mapleton
	Kanner

Two of the four centers (50%) who were classified as lower knowledge at pre-testing remained among the lower knowledge sites at post-test, suggesting that limited knowledge prior to QPRT training may have contributed to lower (but still significantly higher) knowledge level following instruction. By contrast, those sites with the highest overall suicide knowledge at post-test were not merely those with highest knowledge prior to QPRT training. Thus, it is possible to achieve a high level of post-instruction knowledge among even those generally more knowledgeable about suicide.

To determine if centers differed on net knowledge change, a one-way ANOVA was completed comparing mean scores for post-instruction changes in SMRI by instruction center. As noted above, sample mean post-instruction SMRI change score for all centers was 28.2 ± 13.4 . Mean post-instruction changes in SMRI scores by instruction center are shown in Table 1 of the appendix. A main effect was found for instruction site. Sites rated “lower knowledge gains” at post-instruction again had mean change scores that were (i) lower than the average site and (ii) statistically lower than at least 2 other sites based on post-hoc comparison (pairwise comparison). The criterion for “higher knowledge gains” was, similarly, that sites had mean change scores that were (i) higher than the average site and (ii) statistically higher than at least 2 other sites based on post-hoc comparison (pairwise comparison). Post-hoc mean comparisons indicated the following significant change score differences by instruction center:

Pre- to post-instruction knowledge changes by instruction center:

Lower knowledge gains	Higher knowledge gains
Santa Barbara, CA	Connecticut
Deerhaven	Day School
Maryland	New York
DC Hurt Home	San Diego, CA
Gateway	

Three of four centers (75%) scoring high on pre-instruction SMRI failed to achieve the sample mean for post-instruction change. By contrast, low pre-instruction suicide knowledge did not correspond with lesser or greater changes in suicide related knowledge.

Summary

These data suggest strongly that the manualized training program in the use of the QPRT Suicide Risk Management Inventory© is effective in increasing clinician knowledge of suicide assessment and risk management as measured by the SMRI. Participants in the 8-hour QPRT training course increased their average suicide related knowledge by over 50%. Seventy five percent (3/4) of high baseline knowledge centers failed to produce the mean change in knowledge, suggesting that subjects high in suicide knowledge may be slightly less appropriate for QPRT training, and may benefit from more advanced instruction. Still, even participants from these better-educated centers achieved almost 40% improvement in suicide knowledge, suggesting meaningful knowledge gains regardless of baseline knowledge. Moreover, sites highest in baseline knowledge did not remain highest in knowledge following instruction. Nor did low pre-instruction suicide knowledge appear to affect the magnitude of knowledge gains. These findings suggest that limited pre-instruction suicide knowledge does not reduce the benefits to be obtained from the QPRT training program. Those with lower suicide

knowledge may potentially close the gap with the more knowledgeable following instruction with QPRT training.

Statistically significant differences were found for knowledge changes across instruction centers. However, in practical terms these differences in performance appear to be more reflective of exceptional gains at some centers compared to gains slightly below the mean at others. That is, the QPRT training program appears to produce substantive knowledge gains despite expectable variability across sites in teaching ability or program fidelity. In summary, while there is some evidence of variability in the magnitude of knowledge gains, these data support the conclusion that QPRT instruction results in substantive and reliable increases in knowledge about suicide across a diverse geographic and knowledge distribution.

Table 1: Means SMRI scores by instruction center:

<u>Instruction Center (N)</u>	<u>Pre-instruction</u>	<u>Post-instruction</u>	<u>Difference</u>
Arizona (53)	52.6 ± 1.8	80.9 ± 1.4	28.4 ± 1.9
Connecticut (20)	42.8 ± 3.0	84.7 ± 2.3	41.0 ± 3.2
Whitlock (24)	56.3 ± 2.5	88.0 ± 2.0	31.7 ± 2.7
Day School (18)	60.5 ± 2.9	93.8 ± 2.5	34.0 ± 3.3
Georgia (137)	52.2 ± 1.1	78.5 ± 0.9	26.8 ± 1.2
Philadelphia (197)	49.9 ± 0.9	76.0 ± 0.7	26.1 ± 1.0
Texas (176)	54.3 ± 1.0	83.2 ± 0.8	28.9 ± 1.0
Florida (186)	51.0 ± 1.0	80.0 ± 0.7	28.9 ± 1.1
Brandywine (49)	56.7 ± 1.8	88.6 ± 1.4	31.3 ± 2.0
Deerhaven (7)	61.4 ± 4.7	84.4 ± 3.7	23.0 ± 5.0
Maryland (7)	46.7 ± 4.7	70.7 ± 3.7	24.0 ± 5.0
NJCA (41)	50.9 ± 2.1	77.3 ± 1.6	25.1 ± 2.2
Cleo Wallace, CO (95)	57.5 ± 1.4	83.9 ± 1.0	26.5 ± 1.5
Kanner (26)	58.5 ± 2.7	90.2 ± 1.9	32.6 ± 2.8
Mapleton (33)	55.4 ± 2.3	88.2 ± 1.7	32.0 ± 2.4
Florida Day School (4)	48.5 ± 6.2	70.3 ± 4.9	21.8 ± 6.6
Santa Barbara, CA (36)	56.8 ± 2.8	82.1 ± 1.6	23.1 ± 3.0
Sanford, FL (15)	50.7 ± 7.2	85.9 ± 2.6	28.7 ± 7.6
Comm. Srv. – Paoli (60)	52.0 ± 1.6	78.2 ± 1.3	26.1 ± 1.7

DC Hurt Home (7)	58.3 ± 5.1	82.4 ± 3.7	21.2 ± 5.4
Gateway (7)	60.5 ± 5.1	81.8 ± 4.0	20.8 ± 5.9
New York (17)	48.7 ± 3.6	85.7 ± 2.4	34.4 ± 3.8
ICTR (12)	61.2 ± 3.6	91.3 ± 2.8	30.2 ± 3.8
Poconos (3)	53.3 ± 7.2	86.7 ± 5.7	33.3 ± 7.6
San Diego (17)	54.4 ± 3.0	91.4 ± 2.4	37.0 ± 3.2
Woodbury, NJ (4)	39.3 ± 6.2	76.8 ± 4.9	37.5 ± 6.6
Somerset, NJ (1)	60.0 ± 12.4	93.0 ± 9.9	33.0 ± 13.2
CES (2)	60.0 ± 8.8	91.5 ± 7.0	31.5 ± 9.3
Total	53.0 ± 12.8	81.4 ± 10.7	28.2 ± 13.4 *

(* p < .05)