Evaluation of the Mental Health & High School Curriculum Guide Program in the North Vancouver School District

Dr. Stan Kutcher, Dr. Yifeng Wei, Rebecca Alaffe

February 2018

Background:

The Mental Health & High School Curriculum Guide (The Guide) was developed in 2007 by Dr. Stan Kutcher, Sun Life Chair in Adolescent Mental Health in collaboration with the Canadian Mental Health Association. This curriculum resource is intended to be integrated into grade 8, 9 or 10 classrooms by the regular classroom teacher who has ideally been trained in its application. In contrast to stand-alone mental health or stigma programs, this novel approach strives to improve mental health literacy (understanding how to optimize and maintain good mental health; understand mental disorders and their treatments; decrease stigma; enhance help seeking efficacy) in students and teachers alike, utilizing familiar, education system compatible, sustainable and inexpensive pedagogic processes by supporting the integration of the resource into existing junior high/high school curriculum.

The teacher’s training component (The Guide Training Program) of the Guide resource prepares teachers for the implementation of the Guide resource in their classrooms. The Guide then gets integrated into an existing course in order to round out education for students in grades eight, nine or ten. This approach has been extensively evaluated and researched in numerous Canadian provinces, demonstrating significant and substantive positive improvements in mental health literacy for both teachers and students (Kutcher & Wei, 2014; McLuckie, Kutcher, Wei & Weaver, 2014; Kutcher, Wei, McLuckie & Bullock, 2013; Kutcher & Wei, 2013; Kutcher,
Bagnell, & Wei, 2015; Wei, Kutcher, Hine, & Mackay, 2014). The current report assesses the impact of the Guide on key measures of mental health literacy in grade nine students in the North Vancouver School District as it was applied in 2017.

**Participants:**

Three hundred and thirty-five participants (170 identified as female, 160 identified as male) were involved in the current study. These students attended grade nine during the time of the study, and were from the North Vancouver School District in British Columbia. Of the 335 participants, 130 filled out pre-and post-training mental health knowledge surveys. Data from these 130 completed surveys were used in conducting the paired samples t-test for knowledge acquisition. One hundred and fifty nine participants completed pre- and post-training attitudes towards mental health surveys. Data from these 159 surveys were used in conducting the paired samples t-test for mental health attitudes.

**Procedure:**

The participants completed the anonymous mental health knowledge and attitude surveys before and after the two-day mental health conference in which the curriculum guide was implemented. Mental health knowledge was measured with 29 questions that each required the students to choose from one of three options: ‘true’, false’ or ‘do not know’. Each correct answer received 1 point for a total score out of 29. They were encouraged to choose ‘do not know’ to reduce the likelihood of guessing.

Additionally, there were twelve questions that assessed the individual’s attitudes towards mental illness (stigma towards mental illness). The attitude questions required participants to choose an option on a seven-point Likert scale ranging from ‘strongly disagree’ to ‘strongly
agree’. A total positive attitude score out of 84 was calculated for attitudes towards mental health/mental illness. Higher scores reflected positive attitudes (less stigma).

Completed surveys were entered into a secure database by a researcher blind to participant identities and naïve to the workshop materials and delivery.

To assure anonymity, participants were asked not to provide any personal identifying information. In order to link responses between the pre-training and post-training evaluations, anonymous linking questions were asked including the participant’s birth month, postal code, and first pet’s name.

Data were analyzed using the Statistical Package for the Social Sciences (SPSS). The changes in mental health knowledge and attitudes towards mental disorders were compared between the pre- and post-training surveys. These changes were compared using paired sample t-tests. All p-values were compared to a statistical significance alpha of .05.

Outcomes:

Two paired-samples t-tests were conducted to study the difference between grade nine students’ pre- and post-test knowledge of and attitudes on mental health. Prior to attending the workshop, participants correctly answered an average of 15.95 (55% correct, SD=4.90) out of 29 mental health knowledge questions. After training, the scores significantly increased to an average of 19.48 (67% correct, SD=5.42)
out of 29 knowledge questions $t (129) = -9.58, p<.001, d= .68$ (see Figure 1). This result is statistically significant and robust (medium effect size).

Additionally, there was a significant increase in participants’ attitudes towards mental health from pre-test to post-test.

In pre-training surveys, the average score was 64.09 (SD=11.45) out of 84, compared to 71.48 (SD=10.66) in post-training surveys $t (158) = -10.11, p<.001, d= .67$ (see figure 2). This change is statistically significant and robust (medium effect size).

Pearson correlations were conducted in order to assess the relationship between knowledge scores and attitude scores pre-test and post-test. There was a moderate positive correlation between students’ pre-test knowledge and attitude scores $r=.40, n=203, p<.001$. A moderate positive correlation was also found for participants’ post-test knowledge and attitude scores $r=.55, n=174, p<.001$. This finding indicates that increases in mental health knowledge are correlated to increases in positive attitudes towards mental health and mental illness.

**Discussion:**

The results of this evaluation, demonstrate that the students involved in this study benefitted significantly from receiving exposure to the Guide. Both the knowledge and attitudes of participants showed statistically significant and substantial improvements as a result of the intervention.
This demonstrates that an inexpensive and educationally appropriate classroom mental health literacy resource, such as The Guide, can have a significant positive impact on enhancing knowledge and decreasing stigma towards mental illness among students. This result is consistent with evaluations conducted in numerous other Canadian Provinces (McLuckie, Kutcher, Wei & Weaver, 2014; Kutcher, Wei, McLuckie & Bullock, 2013; Kutcher & Wei, 2013; Kutcher, Bagnell, & Wei, 2015; Wei, Kutcher, Hine, & Mackay, 2014, see http://teenmentalhealth.org/toolbox/ for School of Mental Health reports from Nova Scotia, Ontario, and the Calgary area), and further demonstrates the suitability of this approach as an effective national strategy for addressing mental health literacy in schools. The positive relationship between improvements in knowledge and decreases in stigma demonstrate the necessity of using a mental health literacy approach in schools rather than an anti-stigma stand-alone intervention. As knowledge improves, stigma declines. Such dual impact is not found in stand-alone stigma programs, as they do not address knowledge. Also, the improvements in stigma found herein are more robust than those found in stand alone stigma programs.

This again demonstrated effective approach stands in contrast to interventions that focus on bringing programs from outside schools to train teachers in mental health or decrease stigma. To our knowledge, such programs have not demonstrated comparable results in either knowledge acquisition or stigma reduction to those found with the approach described herein. Furthermore, parachuting programs into schools is costly, does not mirror familiar pedagogical processes, does not serve to embed or sustain mental health literacy into education systems and does not support integration of mental health with other health related domains.

The results of this study suggest that a scale up of this intervention be applied in the other school districts in the province of British Columbia.


