



SUCCESSFUL APPLICATION OF MENTAL HEALTH &
HIGH SCHOOL CURRICULUM GUIDE IN THE
TORONTO DISTRICT SCHOOL BOARD (TDSB)

INCREASING STUDENT MENTAL HEALTH KNOWLEDGE
AND DECREASING STIGMA

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| Background

What is Mental Health Literacy?

Mental health literacy has been defined as capacities and skills to obtain and maintain good mental health; understand and recognize mental disorders and related treatments; decrease stigma around mental illness, and enhance help-seeking behaviors from appropriate services (Kutcher & Wei, 2014). It is the foundation for mental health promotion, prevention and intervention in the school setting. Students who are mental health literate are more likely to be aware of their mental health states and more willing to seek help, which may improve their academic achievements in the long run.

The Mental Health and High School Curriculum Guide (the Guide)

The Guide is a mental health literacy program designed for Grade nine/ten students. It was developed in 2008 by Dr. Stan Kutcher, Sun Life Financial Chair in Adolescent Mental Health in collaboration with the Canadian Mental Health Association, and it was field tested across Canada and revised based on educators' feedback in 2010. The Guide is made up of a teacher's self-study component and six classroom delivery modules, available in monograph and web-based formats (see <http://teenmentalhealth.org/for-educators/mental-health-high-school-curriculum/>). The six modules are designed to be taught in sequence so that students achieve mental health literacy through: evidence-based strategies to fight stigma; an understanding of the basic functions of the brain; details about different types of mental illnesses typically onsetting during the adolescent years and their best evidence based treatments; a real-life introduction to young people's experiences of mental illness; building competencies on how to access mental health care, to enhance mental health self-care, and to improve the quality of care received; and evidence based strategies that can be used to help obtain and maintain good mental health.

Designed to be embedded in existing appropriate grade nine/ten curriculum of high school classes (for example: Healthy Living), the objective of the six-module Guide is to enhance knowledge pertaining to mental health and mental disorders, reduce stigma related to mental disorders, help students obtain and maintain positive mental health, and improve students' help-seeking efficacy.

Training on the Guide and Previous Evaluation Results

A one-day training session on how to apply the Guide is provided to teachers who will implement the Guide within their classrooms. The training is featured by power point presentations, animated video clips, online resources sharing, group discussions and step-by-step instructions and discussions on how to teach each module. Following this exposure, individual teachers apply the on-line lesson plans,

activities and other included materials using their own teaching styles in their own classrooms. The training is hosted by a teaching group of two mental health professionals who are also the developers of the Guide.

Previous evaluations have demonstrated that this approach not only familiarizes teachers with the Guide, but has highly significant and substantive impact on improving teachers own mental health knowledge and decreasing stigma (Kutcher, Wei, McLuckie, & Bullock, 2013). Advance research, such as a randomized controlled trial and a cross sectional study on the impact of the Guide on students, also demonstrates highly promising results in increasing students' knowledge, decrease stigma and improving help-seeking efficacy (Milin, Kutcher, Lewis, Walker, & Ferrill, 2013; McLuckie, Kutcher, Wei, & Weaver, 2014).

Purpose of this Report

This report presents the outcome of classroom teacher's application of the Guide delivered to students in usual classrooms within the Toronto District School Board (TDSB) in 2013. Teachers from three schools within TDSB who had received a one-day training on the use of the Guide in a session conducted under the auspices of the Ontario Shores Mental Health Center in late 2012 and who agreed to participate in this evaluation were recruited.

Teachers applied the Guide at various times between January 2013 and December 2013. Ethical approval for the evaluation was received through the TDSB.

| Participants

Teachers at three different schools, over a period of one to two weeks, applied their own Guide directed mental health teaching within their usual classroom activities, within classes designated as appropriate for mental health literacy application and consistent with their interpretation of existing provincial curriculum guidelines.

Pre and posttest anonymous evaluations of student's knowledge and attitudes were determined using previously validated assessment tools. These were distributed in class before and immediately after the Guide directed teaching was completed. Two months after the completion of the posttest, a follow-up test was applied.

One hundred and seventy five students in their usual classrooms were exposed to their own teacher's application of the Guide. No special instructions pertaining to mental health literacy were provided to the students apart from their understanding that they would be receiving teaching related to mental health in their classrooms. Of the 175 students exposed to the teaching, and for whom data at all evaluation points is available, 49 identified as males; 89 as females; and 37 did not identify. The vast majority of students were in grades nine or ten. One hundred and fourteen students were matched for the analysis of knowledge data and 112 students were matched for the analysis of attitudes data at three evaluation points respectively (pre, post, and 2 month follow-up).

Outcomes

Students participating in the training completed previously validated anonymous mental health knowledge and attitude assessment surveys before and after the implementation of the Guide in order to help determine the effectiveness of their exposure to the Guide directed mental health literacy teaching. Surveys included knowledge questions pertaining to general mental health literacy and questions designed to measure attitudes (stigma). The knowledge questions were framed as “True”, “False”, and “Do Not Know” options. Students were instructed to use the “Do Not Know” option rather than guessing. The attitude questions were measured with a 7 point Likert Scale, ranging from “strongly disagree” to “strongly agree”. A total positive attitude score out of 56 is calculated from this measure. To assure anonymity participants were asked not to provide any identifying information. In order to link participants’ responses between the pre-training and post-training surveys, anonymous linking questions were asked, such as their month of birth, first pet’s name, and shoe size.

Knowledge Evaluation Outcomes

Outcomes of the knowledge assessment survey reveal that prior to their in class exposure to the Guide directed teaching, the group correctly answered an average of 15.45 (SD = 3.97) of 28 (55%) general mental health questions correctly, which improved to 19.5 (SD= 3.39) of 28 (70%) following exposure to their teachers application of the Guide in their usual classroom work. This is a highly significant improvement ($t(114) = 12.83, p < 0.001$) (see Figure 1). This improvement also demonstrates a very high effect size, $d = 1.11$, showing a substantial positive impact of this mental health literacy intervention.

Figure 1: Mean Group Scores for General Mental Health Knowledge Pre and Immediately Post Training

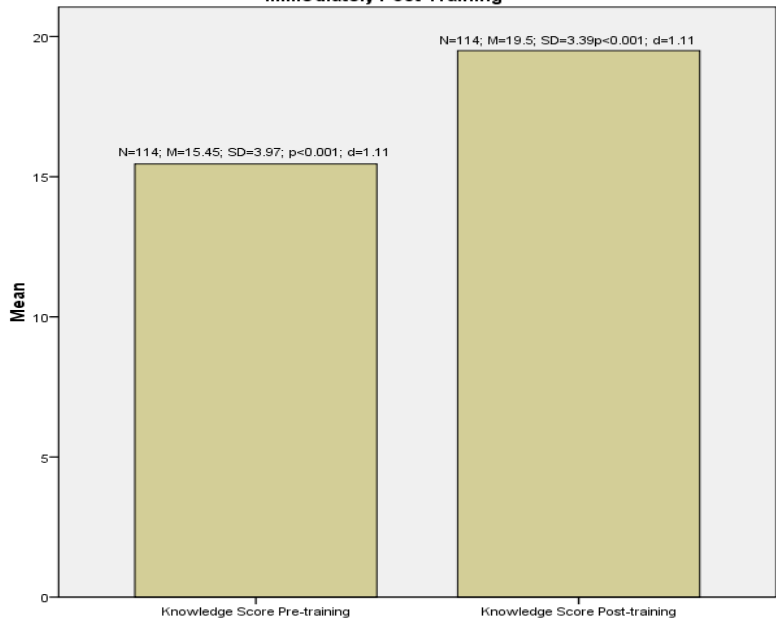
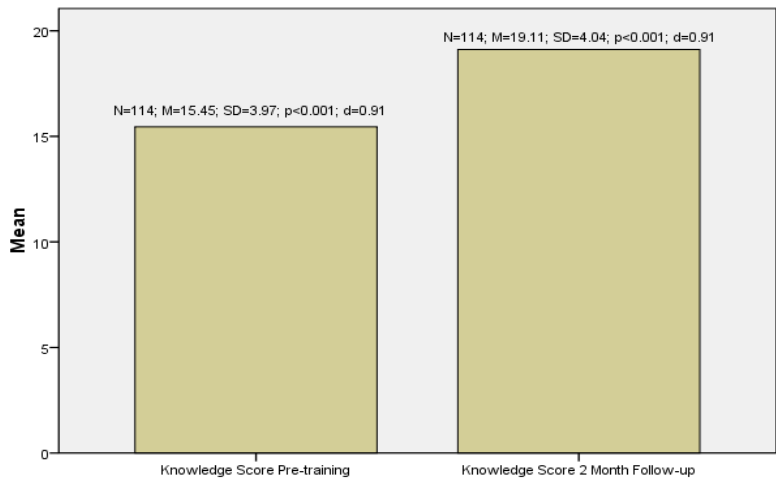
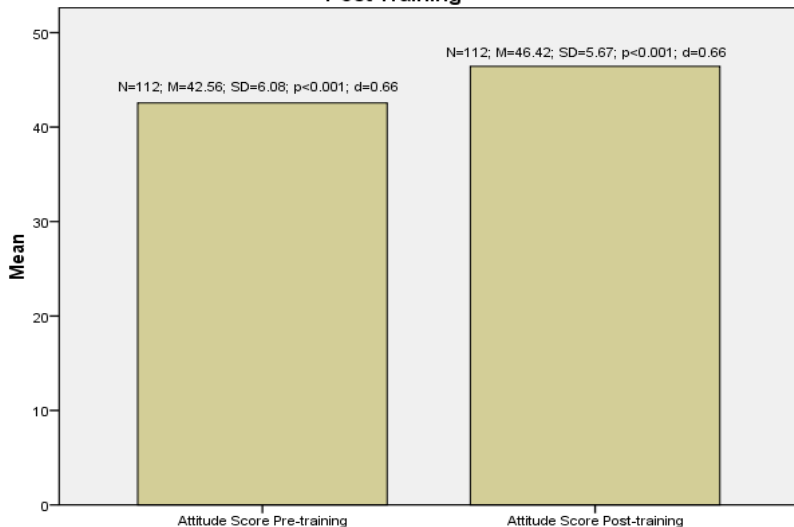


Figure 2: Mean Group Scores for General Mental Health Knowledge Pre Training and 2 Months Post Training



The two-month follow-up results showed that students maintained the knowledge improvement demonstrated at the initial baseline ($t(114) = 11.18, p < 0.001$) (see Figure 2). This highly significant improvement over baseline continued to demonstrate a very high effect size at 2 month follow-up ($d = 0.91$). Compared to immediate posttest knowledge evaluation there was no significant knowledge decay over time at 2 month follow-up ($t(114) = 1.39, p < 0.200$) (non significant).

Figure 3: Mean Group Scores for Attitudes Regarding Mental Illness Pre and Post Training



Attitude Evaluation Outcomes

Student’s attitudes towards mental illness were revealed to be largely positive at baseline with an average group score of 42.56 (SD=6.08) out of 56.0. Following classroom exposure to their teacher’s application of the Guide, student attitudes scores nevertheless increased to 46.42 (SD=5.67), a highly significant improvement ($t(112) = 8.54, p < 0.001, d=0.66$) (see Figure 3).

Two-month follow-up results showed that students maintained their improvement in attitudes compared to baseline, (M=45.86, SD=6.66). This was a highly statistically significant improvement ($t(112) = 6.2, p < 0.001, d=0.52$) (see Figure 4). Compared to immediate posttest attitudes evaluation there was no significant decrease in attitudes over time at 2 -month follow-up ($t(114) = 1.77, p < 0.9$, non significant), indicating positive attitudes sustained overtime.

Discussion, Conclusions and Suggestions

Evaluation of the teacher’s application of the Guide mental health literacy curriculum in three TDSB schools on student’s knowledge about mental health and mental disorders and attitudes pertaining to mental disorders (stigma) demonstrated highly significant, substantial and robust impacts that were sustained over time. These results were obtained without any attempt to address fidelity in how the Guide curriculum was applied by teachers and no additional branded mental health events or activities were used to introduce or bolster the impact of this application. Rather, these highly significant positive and sustained improvements in knowledge and reduction in stigma were obtained simply by integration of a mental health literacy curriculum directed by the Guide into usual classroom instructions by usual classroom teachers. These results are consistent with similar findings on the implementation of the Guide published or currently being prepared for peer-reviewed journals showing robust outcomes in these domains in different educational jurisdictions within the province of Ontario (Kutcher, Wei, McLuckie, & Bullock, 2013; Milin, Kutcher, Lewis, Walker, & Ferrill, 2013; McLuckie, Kutcher, Wei, & Weaver, 2014).

These findings further support the value of using the Guide curriculum, embedded into usual classroom instruction by usual classroom teachers to enhance mental health literacy of young people. Unlike the application of externally applied, specifically designed anti-stigma or mental health knowledge enhancement interventions, we used a pedagogically familiar model (providing teachers with training on how to apply the Guide) that is not dependent upon fidelity of application but instead uses teachers' professional skills and enhances existing school capacity with potential less investments to improve student mental health literacy, and therefore can be applied in many different school settings. Furthermore, the magnitude of the findings of TDSB study is as good as or better than those reported from stand-alone, externally implemented anti-stigma or mental health knowledge programs, based on our team's review of more than three hundred studies. Thus, this approach successfully and parsimoniously addresses the improvement of both teacher and student mental health literacy within the same framework.

While a cost analysis was not conducted as part of this evaluation, the cost for teacher training, the availability of the Guide resource in print, the availability of all lesson plans, core instructional and supplementary materials online (www.teenmentalhealth.org/curriculum) are minimal.

These highly positive and sustained results strongly suggest that the TDSB may consider applying the Guide and its attendant training program to grade nine/ten classes in schools similar to those that participated in this evaluation. Further large-scale assessment of the impact of the Guide on improving mental health literacy for students in educationally unique environments could also be initiated to further consolidate the findings of this report.

| References

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