Background:

This is a follow-up report for the results of a study conducted on data from a one-year follow-up mental health literacy survey completed in school districts 44 and 45 in North Vancouver, BC. Follow-up tests were in the exact same format as the earlier completed pre- and post-intervention tests. The intervention was the classroom application of the Mental Health Guide resource as applied by usual classroom teachers to Grade 9 students in schools located in the above districts.

Outcomes:

Paired-samples t-tests were conducted to study the difference between students’ pre-test and follow-up test means for knowledge of (n= 64) and stigma around (n=75) mental health. Prior to being exposed to the classroom intervention, participants correctly answered an average of 15.93 (55% correct, SD=3.82) out of 29 mental health knowledge questions. One year after receiving the training, the students demonstrated a significantly increased average score of 17.78 (61.31% correct, SD=4.56) out of
29 knowledge questions $t(66) = -3.339, p=.001, d=.44$ (see Figure 1). This result is statistically significant and robust (medium effect size).

Additionally, the students demonstrated a significantly increased average score for their attitudes towards mental health/mental illness one year later, compared to their baseline test scores.

In pre-training surveys, the average score was 62.29 (SD=11.60) out of 84, compared to 69.07 (SD=11.68) in follow-up surveys $t(74) = -5.782, p<.001, d=.58$ (see figure 2). This change is statistically significant and robust (medium effect size).

ANOVA were conducted to address gender differences in baseline/follow-up average scores for students’ knowledge and attitudes toward mental health and mental illness. Significant gender differences were found for students’ attitudes toward mental health and mental illness, but no gender differences were found for knowledge scores.

Average knowledge scores between pre-test and follow-up were 17.55 (60.52% correct, SD=4.79) for males, and 18 (62.07% correct, SD=4.38) for females out of 29 knowledge questions $F(1, 64) = .159, p=.691$ (see figure 3). While females had a
numerically greater average knowledge score than males, this difference was not statistically significant.

Contrarily, males and females did differ significantly for their average attitudes scores. Males had an average of 64.31 (76.56% correct, SD=12.48) while females had an average of 73.23 (87.18% correct, SD=9.23) out of a possible 84 points $F(1, 72) = 8.018, p=.006$ (see figure 4). Females had an average of 10.62% higher attitude scores than their male counterparts.

**Discussion:**

The results from these tests demonstrate the long-term benefits (one year duration) of exposure to the Guide intervention. Participants showed statistically significant and substantial improvements in their knowledge of and attitudes toward mental health and mental illness as a result of the intervention. This follows from and continues the significant and substantial improvements shown in both of these domains demonstrated at post-test and reported in a previous evaluation. This report shows that the improvements in knowledge of mental health and mental illness and stigma reduction were sustained over the course of a year, indicating that knowledge acquisition and stigma reduction are maintained after exposure to this intervention in this cohort of participants. Results from this study also indicated differences between males and females in their attitudes toward mental health and mental illness, showing that females had...
higher attitude scores (lower stigma toward mental illness) but similar knowledge scores to males in this study.

The outcomes of this study support the long-term benefits of having the Guide classroom intervention. To our knowledge this is the first and only report demonstrating significant and substantial improvements in MHL measures sustained for such a long period of time. This finding supports a scale up of the Guide intervention to all other school districts in the province of British Columbia. Further research is needed to better understand differences in attitudes scores between genders. For this, larger sample sizes are needed.

References


