Mental Health Commission of Canada

Commission de la santé mentale du Canada

Opening Minds in High School:

Results of a Contact-Based Anti-Stigma Intervention

Canadian Mental Health Association – Calgary

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1 OPENING MINDS: CHANGING HOW WE SEE MENTAL ILLNESS

As part of its 10-year mandate, The Mental Health Commission of Canada (MHCC) embarked on an anti-stigma initiative called *Opening Minds* to change the attitudes and behaviours of Canadians towards people with a mental illness. *Opening Minds* is the largest systematic effort undertaken in Canadian history to reduce the stigma and discrimination associated with mental illness. *Opening Minds* is taking a targeted approach, initially reaching out to healthcare providers, youth, the workforce and media. *Opening Mind's* philosophy is to build on the strengths of existing programs from across the county and to scientifically evaluate their effectiveness. A key component of programs being evaluated is contact-based educational sessions, where target audiences hear personal stories from and interact with individuals who have experience with a mental illness and have recovered or are managing their illness. *Opening Mind's* goal is to replicate effective programs nationally, develop new interventions to address gaps in existing programs and add other target groups over time.

For more information, go to: www.mentalhealthcommission.ca/English/Pages/OpeningMinds.aspx

2 INTRODUCTION AND PURPOSE

Stigma and discrimination have gained the attention of the public health and policy communities as a hidden and costly burden cause by society's prejudicial reaction to people with a mental illness (World Health Organization, 2001). Stigma and discrimination pose major obstacles in virtually every life domain, carrying significant negative social and psychological impacts. Reducing stigma and discrimination have become important policy objectives at both international and national levels (Sartorius & Schulze, 2005). The 2009 launch of the Mental Health Commission's *Opening Minds* anti-stigma/anti-discrimination initiative marked the largest systematic effort to combat mental illness related-stigma in Canadian history.

The *Opening Minds* program has partnered with a number of programs that deliver contact-based education to primary and high school students throughout Canada. Contact-based education involves people who have experienced a mental illness educating students by telling their personal stories and allowing time for active discussion. In some cases, teacher lesson plans accompany the classroom presentations. This report is intended to provide programs with an overview of their key evaluation results.

3 PROGRAM DESCRIPTION

The Mental Health Education program at the Canadian Mental Health Association – Calgary Region (CMHA – Calgary) is a contact-based education program focusing on Calgary and area Junior and Senior High Schools. Educators provide interactive, current, evidence-based, age-appropriate mental illness and stigma education sessions. Educators are able to draw on personal experiences to bring context to the presentations. As well, through the "Speakers Bureau" attached to the program, volunteers with lived experience co-present and share their experiences with mental illness, stigma and recovery.

Volunteers complete a period of extensive training, orientation, shadowing and supervision before they present to classrooms. The volunteers bring incredible dimension and stories of hope to the knowledge presented and share age-appropriate information regarding their experiences.

4 APPROACH TO DATA COLLECTION

Students were surveyed before and after the contact-based intervention. All programs participating in this network initiative used the same pre- and post-test survey questionnaires to collect their data. These surveys were adapted from items used by the six contact-based programs that participated in the instrument development phase of this project. The resulting Stigma Evaluation Survey contained 22 self-report items. Of these:

- 11 items measured **stereotyped attributions**
    - controllability of illness – 4 items,
    - potential for recovery – 2 items, and
    - potential for violence and unpredictability – 5 items
- 11 items measured expressions of **social tolerance**, which include both social distance and social responsibility items
    - desire for social distance – 7 items, and
    - social responsibility for mental health issues – 4 items

All items were scored on a 5-point agreement scale, ranging from strongly agree to strongly disagree. To avoid potential response sets, some items were positively worded while others were negatively worded. Items were scored so that higher scores on any item would reflect higher levels of stigma. The scales had good reliability in this pooled sample with a pre-test Cronbach's alpha of 0.70 for the stereotype scale and 0.85 for the social tolerance scale. Both are at or above the conventional threshold of 0.70, indicating that they are highly reliable. Information on gender, age, grade and prior contact with someone with a mental illness (close friend or family member) was also collected.

Data were collected on two types of interventions, one with speakers with lived experience and one without speakers with lived experience. This analysis focuses only on the intervention which had speakers with lived experience. Twenty-five high school students completed both pre-test and post-test surveys. It is important to note that the base size is very small and extreme caution should be used when interpreting the results.

5 RESULTS

5.1 Sample Characteristics

The characteristics of the students are presented in **Table 1**. The majority of students were female (75%), 17 years old (88%) and in grade 12 (100%). On the pre-test, the majority (78%) of the students indicated they knew someone with a mental illness and 22% indicated that they had a mental illness.

Table 1. Sample characteristics

Characteristic	% (N=25)
Gender	
• Male	25% (6)
• Female	75% (18)
• Missing	-- (1)
Age	
• 16	4.0% (1)
• 17	88.0% (22)
• 18	8.0%(2)
• Missing	--(0)
Grade	
• 12	100% (25)
• Missing	-- (0)
Contact Pre-test - Does someone you know have a mental illness*	
• No	8.7% (2)
• Uncertain	13.0% (3)
• Close friend	34.8% (8)
• Family member	34.8% (8)
• Somebody else	21.7% (5)
• I do	21.7% (5)
• Missing	-- (2)
•	
* Multiple responses accepted	

5.2 Stereotyped Attributions

Stereotyped attributions items are shown in **Tables 2, 3** and **4**. For ease of presentation, items were recoded into three groups: agree (strongly agree and agree), neutral, and disagree (disagree and strongly disagree). **Table 2** shows the majority of respondents held positive (non-stereotypical) attitudes toward people with a mental illness on the controllability items. For example, before the intervention students tended to disagree with the common stereotypes people with a mental illness "get what they deserve" (100% disagree) or that they "could snap out of it if they wanted" (91% disagree). Eighty-six percent disagreed that people with a

mental illness "tend to bring it on themselves." Eighty-one percent disagreed with the statement "People with a mental illness often don't try hard enough to get better."

Also reported in **Table 2** is the change score from pre-test to post-test. The Controllability item with the largest positive change was "People with a mental illness often don't try hard enough to get better." At baseline, 81% disagreed with this statement whereas 95% disagreed at post-test (a 14% positive change).

Table 2. Controllability Items

Stereotyped Attributions Items	Pre-test % (n=21)	Post-test % (n=21)	% Change
4. People with a mental illness tend to bring it on themselves.			
• Strongly disagree/disagree	85.7% (18)	85.7% (18)	0.0
• Unsure	4.8% (1)	4.8% (1)	0.0
• Strongly agree/agree	9.5% (2)	9.5% (2)	0.0
5. People with mental illnesses often don't try hard enough to get better.			
• Strongly disagree/disagree	81.0% (17)	95.2% (20)	14.2
• Unsure	14.3% (3)	4.8% (1)	-9.5
• Strongly agree/agree	4.8% (1)	0.0% (0)	-4.8
6. People with a mental illness could snap out of it if they wanted to.			
• Strongly disagree/disagree	90.5% (19)	95.2% (20)	4.7
• Unsure	0.0% (0)	4.8% (1)	4.8
• Strongly agree/agree	9.5% (2)	0.0% (0)	-9.5
14. Most people with a mental illness get what they deserve.			
• Strongly disagree/disagree	100% (21)	95.2%(20)	-4.8
• Unsure	0.0% (0)	4.8% (1)	4.8
• Strongly agree/agree	0.0% (0)	0.0% (0)	0.0

Table 3 shows the stereotyped attributions for the recovery items. Again, prior to the intervention, the majority of respondents held positive (non-stereotypical) attitudes toward people with a mental illness on both items. At post-test, positive change was seen for the item "People with a mental illness need to be locked away" (a 14% positive change).

Table 3. Recovery Items

Stereotyped Attributions Items	Pre-test % (n=21)	Post-test % (n=21)	% Change
3. Most people with a mental illness are too disabled to work.			
• Strongly disagree/disagree	81.0% (17)	76.2% (396)	-4.8
• Unsure	14.3% (3)	14.3% (56)	0.0
• Strongly agree/agree	4.8% (1)	9.5 % (26)	4.7
15. People with serious mental illnesses need to be locked away.			
• Strongly disagree/disagree	71.4% (15)	85.7% (18)	14.3
• Unsure	23.8% (5)	14.3% (3)	-9.5
• Strongly agree/agree	4.8% (1)	0.0% (0)	-4.8

Table 4 shows the stereotyped attributions for violence and unpredictability. All five of the items changed in a positive direction. The largest change was for the item "People with a mental illness often become violent if not treated." On the pre-test, 29% of respondents disagreed with this statement; at post-test, 71% of respondents disagreed with the statement, reflecting a 43% improvement. This was the largest positive change realized for any one item. Three items had a 19% positive shift.

Table 4. Violence/Unpredictability Items

Stereotyped Attributions Items	Pre-test % (n=21)	Post-test % (n=21)	% Change
7. People with a mental illness are often more dangerous than the average person.			
• Strongly disagree/disagree	66.7% (14)	85.7% (18)	19.0
• Unsure	19.0% (4)	14.3% (3)	-4.7
• Strongly agree/agree	14.3% (3)	0% (0)	-14.3
8. People with a mental illness often become violent if not treated.			
• Strongly disagree/disagree	28.6% (6)	71.4% (15)	42.8
• Unsure	66.7% (14)	28.6% (6)	-38.1
• Strongly agree/agree	4.8% (1)	0% (21)	-4.8
10. Most violent crimes are committed by people with a mental illness.			
• Strongly disagree/disagree	66.7% (14)	85.7% (18)	19.0
• Unsure	19.0% (4)	14.3% (3)	-4.7
• Strongly agree/agree	14.3% (3)	0.0% (0)	-14.3
11. You can't rely on someone with a mental illness.			
• Strongly disagree/disagree	66.7% (14)	76.2% (16)	9.5
• Unsure	19.0% (4)	23.8% (5)	4.8
• Strongly agree/agree	14.3% (3)	0.0% (0)	-14.3
12. You can never know what someone with a mental illness is going to do.			
• Strongly disagree/disagree	33.3% (7)	52.4% (11)	19.1
• Unsure	38.1% (8)	38.1% (8)	0.0
• Strongly agree/agree	28.6% (6)	9.5% (2)	-19.1

5.3 Expressions of Social Tolerance

Social tolerance items are shown in **Tables 5** and **6**. **Table 5** presents the items that relate to the expression of social distance. Prior to the intervention, the majority of students showed non-stigmatizing responses for all items but one, with positive responses ranging from 73% to 96%. Only half (50%) disagreed with the item that involved the most intimate social interaction prior to the intervention: "If I know someone had a mental illness I would not date them." The only positive shift was seen for the item "If I know someone had a mental illness I would not date them." At baseline, 50% disagreed with this item; at post-test, this increased to 64% indicating a 14% positive shift.

Table 5. Social Distance Items

Stereotyped Attributions Items	Pre-test % (n=22)	Post-test % (n=22)	% Change
18. I would be upset if someone with a mental illness always sat next to me in class.			
• Strongly disagree/disagree	86.4% (19)	86.4% (19)	0.0
• Unsure	9.1% (2)	13.6% (3)	4.5
• Strongly agree/agree	4.5% (1)	0.0 % (0)	-4.5
19. I would not be close friends with someone I knew had a mental illness.			
• Strongly disagree/disagree	86.4% (19)	86.4% (19)	0.0
• Unsure	9.1% (2)	13.6% (3)	4.5
• Strongly agree/agree	4.5% (1)	0.0% (0)	-4.5
20. (R) I would visit a classmate in hospital if they had a mental illness.			
• Strongly agree/agree	77.3% (17)	72.7% (16)	-4.6
• Unsure	18.2% (4)	18.2% (4)	0.0
• Strongly disagree/disagree	4.5% (1)	9.1 % (2)	4.6
21. I would try to avoid someone with a mental illness.			
• Strongly disagree/disagree	81.8% (18)	77.3% (17)	-4.5
• Unsure	9.1% (2)	18.2% (4)	9.1
• Strongly agree/agree	9.1% (2)	4.5% (1)	-4.6
22. (R) I would not mind it if someone with a mental illness lived next door to me.			
• Strongly agree/ agree	86.4% (19)	81.8% (18)	-4.6
• Unsure	4.5% (1)	13.6% (3)	9.1
• Strongly disagree/disagree	9.1 % (2)	4.5% (1)	-4.6
24. If I knew someone had a mental illness I would not date them.			
• Strongly disagree/disagree	50.0% (11)	63.6% (14)	13.6
• Unsure	31.8% (7)	27.3% (6)	-4.5
• Strongly agree/ agree	18.2% (4)	9.1% (2)	-9.1
25. I would not want to be taught by a teacher who had been treated for a mental illness.			
• Strongly disagree/disagree	90.9% (20)	90.9% (20)	0.0
• Unsure	4.5% (1)	9.1% (2)	4.6
• Strongly agree/ agree	4.5% (1)	0.0% (0)	-4.5
Note: (R) Signifies the item was reverse coded in the scale calculation. Higher scale scores reflect higher levels of stigma.			

Social responsibility items are presented in **Table 6**. Before the intervention students were generally socially responsible with positive ratings ranging from 73% to 95%. One item, "I would tutor a classmate who got behind in their studies," showed a positive shift (14%).

Table 6. Social Responsibility Items

Social tolerance items	Pre-test % (n=22)	Post-test % (n=22)	% Change
28. (R) I would tell a teacher if a student was being bullied because of their mental illness.			
• Strongly agree/agree	86.4% (19)	86.4% (19)	0.0
• Unsure	9.1% (2)	9.1% (2)	0.0
• Strongly disagree/disagree	4.5% (1)	4.5% (1)	0.0
32. (R) I would stick up for someone who had a mental illness if they were being teased.			
• Strongly agree/agree	95.5% (21)	86.4% (19)	-9.1
• Unsure	4.5% (1)	9.1% (2)	4.6
• Strongly disagree/disagree	0.0% (0)	4.5% (1)	4.5
33. (R) I would tutor a classmate who got behind in their studies because of their mental illness.			
• Strongly agree/agree	72.7% (16)	86.4% (19)	13.7
• Unsure	27.3% (6)	9.1% (2)	-18.2
• Strongly disagree/disagree	0.0% (0)	4.5% (1)	4.5
34. (R) I would volunteer my time to work in a program for people with a mental illness.			
• Strongly agree/agree	86.4% (19)	72.7% (16)	-13.7
• Unsure	4.5% (1)	18.2% (4)	13.7
• Strongly disagree/disagree	9.1% (2)	9.1% (2)	0.0
Note: (R) Signifies the item was reverse coded in the scale calculation. Higher scale scores reflect higher levels of stigma.			

6 PROGRAM SUCCESS

In order to provide a measure of the overall success of the intervention, we chose (*a priori*) a cut-off score of 80% correct. Though somewhat arbitrary, we have used this cut-off in previous work to count the number of students who achieve an "A" grade or higher following an educational session. More specifically, success was measured by comparing the proportion of students who obtained 80% or more correct (non-stigmatizing) answers on the post-test compared to the pre-test.

Figure 1 shows the cumulative percent of the stereotyped attributions items reflecting non-stigmatizing responses. Prior to the intervention, 38% of students gave a non-stigmatizing response to at least 9 of the 11 questions (signifying an A grade). At post-test this was 71% (reflecting a 33% improvement).

Figure 1. Cumulative Percent of Stereotype Scale Items Reflecting Non-stigmatizing Responses

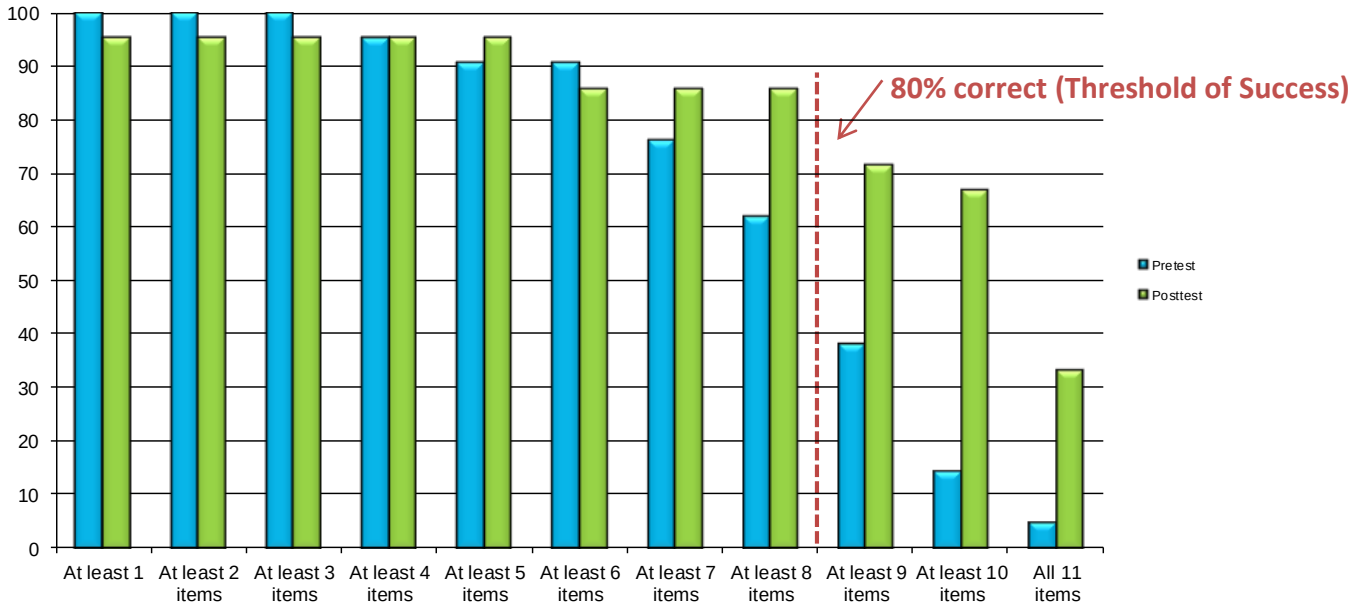
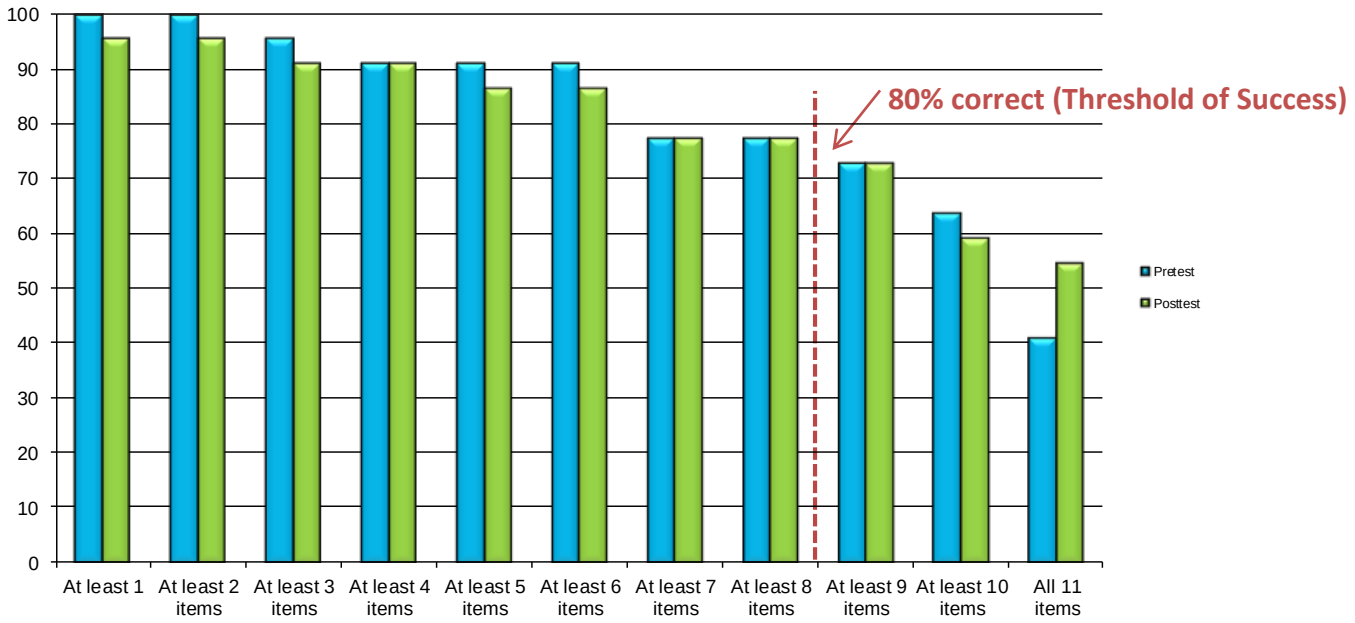


Figure 2 shows the cumulative percent of the social tolerance items reflecting non-stigmatizing responses. Prior to the intervention, 73% of students gave a non-stigmatizing response to at least 9 of the 11 questions (signifying an A grade). At post-test this was unchanged.

Figure 2. Cumulative Percent of Social Tolerance Items Reflecting Non-stigmatizing Responses



7 CONCLUSION

This paper describes the results of a contact-based intervention provided to high school students. The results show that education sessions have a positive impact on the reduction of stigma and views regarding people with mental illness, but not as significantly as expected. Groups also rated higher than expected on pre-tests, which may explain the smaller movement. The education team has been involved in the study schools and have previously presented to various grades. It is suspected that we may be seeing a positive long-term impact of the previous education sessions (in relation to the elevated pre-scores). The Schizophrenia Society also has speakers who present to school-aged youth, which may also impact the increased pre-test ratings of the participants.

In the areas where there was a decrease from pre- to post-test, a number of factors may have come into play. Due to the small sample size, in an instance when one student changed their response to “unsure” on the post-test, it creates a marked decrease in the overall score. In a larger sample size, one slightly lowered score would not have such a significant impact.

In response to rating if people with a mental illness are too ill to work, the decrease in rating may have been impacted by the story presented. Though the educators clearly state that mental illness does not prevent a successful return to work, the real-life stories of volunteers are very impactful. Many of the stories involve time away from work, so a small number of students may have interpreted that as more permanent. Again, due to the small sample size, one or two slightly lowered scores have a greater impact on the overall category.

It is the desire of the Mental Health Education program to administer the pre- and post-tests to a larger sample of students as it is believed that a larger sample size might better demonstrate impact.

Appendix A

Percent Non-Stigmatizing Endorsement of Stereotyped Items

	Pre-test % (n=21)	Post-test % (n=21)
None	0.0% (0)	4.8% (1)
At least 1	100.0% (21)	95.2% (20)
At least 2 items	100.0% (21)	95.2% (20)
At least 3 items	100.0% (21)	95.2% (20)
At least 4 items	95.2% (20)	95.2% (20)
At least 5 items	90.5% (19)	95.2% (20)
At least 6 items	90.5% (19)	85.7% (18)
At least 7 items	76.2% (16)	85.7% (18)
At least 8 items	61.9%(3)	85.7% (18)
At least 9 items	38.1% (2)	71.4% (15)
At least 10 times	14.3% (3)	66.7% (14)
All 11 times	4.8% (1)	33.3% (7)

Percent Non-Stigmatizing of Endorsement of Social Tolerance Items

	Pre-test % (n=22)	Post-test % (n=22)
None	4.5% (1)	0.0% (0)
At least 1	95.5% (21)	100.0% (22)
At least 2 items	100.0% (22)	95.5% (21)
At least 3 items	95.5% (21)	90.9% (20)
At least 4 items	90.9% (20)	90.9% (20)
At least 5 items	90.9% (20)	86.4% (19)
At least 6 items	90.9% (20)	86.4% (19)
At least 7 items	77.3% (17)	77.3% (17)
At least 8 items	77.3% (17)	77.3% (17)
At least 9 items	72.7% (16)	72.7% (16)
At least 10 times	63.6% (14)	59.1% (13)
All 11 times	40.9% (9)	54.5% (12)