



# Effectiveness of School-Based Interventions on Mental Health Stigmatization

# 12

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## Abstract

This chapter first provides an overview and analysis of current school-based interventions on mental health stigmatization. This includes contact-based education, literacy-based education, and other approaches such as protest, art-based interventions, and the summit approach. The effectiveness of contact-based education in improving knowledge, attitudes, and behavioural intentions towards people with mental illnesses is supported by strong evidence. The student-driven summit approach is also a promising intervention in schools. Next the *Opening Minds* anti-stigma initiative of the Mental Health Commission of Canada, one of the first national anti-stigma programs to target school youth using contact-based education, is described to illustrate key ingredients and the program logic model for contact-based education in the Canadian school context. Engaging contact and delivery of recovery message are identified as key ingredients for program success. The logic model including four input components (team building, partnerships with schools, preparation,

coordination), six process components (who-program deliverers, what-contents, how-pedagogy, materials, where-place, when-time), and four levels of program outcome (reaction, knowledge, behaviours, social changes) are discussed.

Stigma is a complex social phenomenon involving a cognitive component (labelling and stereotyping), an emotional component (prejudice), a behavioural component (discrimination), and a structural component (the accumulated organizational policies and practices, the result in inequities for people with a mental illness). Stigma often makes it difficult for people with mental illnesses to access services and to fully participate in society (Zaske, 2017).

Though 70% of people with mental illnesses develop symptoms before age 18, research has indicated that youth demonstrate low mental health literacy, moderate to high levels of stigma towards mental illnesses, and desire more education about mental health (Chandra & Minkovitz, 2006; Pinto-Foltz, Hines-Martin, & Logsdon, 2010). Adolescence is a critical time for attitude change. Early implementation of anti-stigma education to increase awareness and knowledge of mental illnesses can encourage young people's timely help-seeking; promote respect, diversity, and inclusion in the school environment; and impact their adult behaviours in relation to

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stigma. In 2009, the Mental Health Commission of Canada (MHCC) launched a 10-year anti-stigma initiative, *Opening Minds*, to change the attitudes and behaviours of Canadians towards people with mental illnesses. Youth aged 12–18 was one of the four groups targeted for anti-stigma activities.

Many anti-stigma interventions attempt to address the cognitive and emotional components of stigma by correcting public misperceptions, improving public knowledge, or changing attitudes towards mental illnesses. Few interventions focus on the behavioural components (Stuart, Arboleda-Florez, & Sartorius, 2012).

Given the importance of stigma reduction as a public health goal, this chapter will first provide an overview and analysis of current anti-stigma approaches. This is followed by describing the Mental Health Commission of Canada's *Opening Minds* anti-stigma initiatives, which focused on school-based programs for youth.

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## Overview School-Based Anti-stigma Approaches

### Contact-Based Education

Contact-based education involves people with lived experiences of a mental illness in sharing their personal stories and conveying positivity around recovery to an audience of school children (Chen, Koller, Krupa, & Stuart, 2016). The lived experiences discredit false beliefs and misinformation allowing for transformative learning through social interaction. Contact can be direct or indirect. During direct contact, a person who has experienced a mental illness presents personal experiences (Sakellari, Leino-Kilpi, & Kalokerinou-Anagnostopoulou, 2011; Wei, Hayden, Kutcher, Zygmunt, & McGrath, 2013). The presenter can use discussion and other interactive activities to engage the students in cooperative contact. Such presentations are supported by the schools (Rickwood, Cavanagh, Curtis, & Sakrouge, 2004). Similar content can be delivered to students by indirect contact, for

example, the school children might watch videos of the dramatization and real experiences of people with a mental illness, followed by discussion and education in a classroom environment (Stuart, 2006). This more structured delivery of mental health information may be provided by a teacher using first-person videos or by a person who has experienced a mental illness. A wide variety of programs involving contact-based education have been documented (Painter et al., 2016; Pinto-Foltz, Logsdon, & Myers, 2011; Sakellari et al., 2011; Wei et al., 2013).

Outcomes that have been evaluated following student participation in contact-based education have included improved knowledge of mental illnesses, reductions in stereotypic thinking, reduced stigmatizing attitudes, reductions in a desire for social distance, and increased mental health help-seeking (Mellor, 2014; Sakellari, Sourander, Kalokerinou-Anagnostopoulou, & Leino-Kilpi, 2016; Stuart, 2006; Wei et al., 2013). The efficacy of contact-based education in improving knowledge, attitudes, and behavioural intentions (social distance) towards people with mental illnesses is supported by *strong* evidence, including clinical trials (Chan, Mak, & Law, 2009; Corrigan, Larson, Sells, Niessen, & Watson, 2007; Koller & Stuart, 2016; Painter et al., 2016; Pinfold et al., 2003; Schulze, Richter-Werling, Matschinger, & Angermeyer, 2003; Spagnolo, 2009; Stuart, 2006).

There are only two exceptions found in the recent literature. First, a meta-analysis conducted by Corrigan et al. (2007) concluded that, in regard to attitudes about mental illnesses, contact had a better effect on attitudes in adults whereas education had a better effect on attitudes in adolescents. It was postulated that beliefs about mental illnesses might not be as firmly developed in adolescents as they are in adults, making adolescents more likely to be responsive to education. Second, Painter et al. (2016) evaluated the effectiveness of (1) a classroom-based mental health anti-stigma intervention involving a PowerPoint presentation and a discussion about mental illnesses compared to (2) contact with two individuals who had experienced a mental illness and exposure to mental health anti-stigma

materials in print or (3) a combination of (1) and (2). It was noted that while the curriculum-based mental health anti-stigma intervention was found to have significant positive effects on participant attitudes to mental illnesses, the contact-only mental health anti-stigma intervention was less effective. In addition, the curriculum plus contact-based mental health anti-stigma intervention did not differ significantly from the contact-only intervention with regard to participant attitudes (Painter et al., 2016). Despite these findings, the majority of existing evidence supports contact-based education as a current best strategy for mental health stigma reduction in a school-based environment (Koller & Stuart, 2016; Rickwood et al., 2004; Sakellari et al., 2011; Stuart, 2006; Wei et al., 2013).

### Literacy-Based Education

Literacy-based mental health education is employed in a school setting to increase student's knowledge regarding mental health and mental illnesses, their treatments, and available resources (Sakellari et al., 2016). The expectation is that increased knowledge would reduce stigmatizing attitudes, while supporting early identification of mental illnesses and stimulating help-seeking behaviours (Milin et al., 2016; Perry et al., 2014; Sakellari et al., 2011; Wei et al., 2013). Literacy-based interventions are often didactic, typically involving presentations, lectures, discussions, videos, and quizzes delivered by school teachers, counsellors, or mental health professionals (but not individuals who have lived experience of a mental illness). When mental health anti-stigma interventions are adapted to fit the environment of the school, some are incorporated into the existing health curriculum while others are delivered in individual classrooms (Esters, College, Cooker, & Ittenbach, 1998; Swartz et al., 2010; Rickwood et al., 2004; Ventieri, Clarke, & Hay, 2011). As one example, Kutcher et al. developed a curriculum resource, the *Mental Health and High School Curriculum Guide*, taught by usual classroom teachers on students'

knowledge and attitudes related to mental health and mental illness. This approach has been demonstrated to have a positive impact on knowledge and attitudes in various high school populations (Kutcher, Wei, & Morgan, 2015; Mcluckie, Kutcher, Wei, & Weaver, 2014). There appears to be little standardization of interventions and each program is unique in its duration and implementation.

Although outcome evaluations have not been standardized, some literacy programs have shown improved knowledge about mental health and others have shown decreases in negative attitudes to people with mental illnesses (Corrigan et al., 2013; Milin et al., 2016; Perry et al., 2014; Sakellari et al., 2016; Ventieri et al., 2011; Wei et al., 2013). Studies that have examined extended mental health outcomes such as social restriction, social care, and social integration (Sakellari et al., 2016), have demonstrated that information about mental illnesses can help to create an inclusive social atmosphere. Regardless of the outcome measures used in mental health literacy, nearly all programs have shown an immediate increase in knowledge. However, to date, there is no strong evidence of a direct link between changes in knowledge or attitudes and changes in behaviours, leading authors such as Stuart et al. to call for interventions that directly target behavioural change (Stuart et al., 2012).

Few studies have examined the longer-term impacts of literacy-based interventions. In most cases, data are collected before and immediately after the program is executed without longitudinal follow-up (Mellor, 2014; Sakellari et al., 2011; Wei et al., 2013). Only Kutcher et al. followed up after implementation of the *Mental Health Resource Guide* (described above) and found that the improved knowledge and attitude scores were maintained at 2 months (Kutcher et al., 2015; Mcluckie et al., 2014). However, the longer-term effects of literacy-based programs are largely unknown (Milin et al., 2016; Perry et al., 2014; Sakellari et al., 2016). Therefore, it is not clear whether refresher interventions (or boosters) are necessary and, if so, how frequently these should be delivered.

## Other Approaches to Mental Health Anti-stigma Programs

The “protest” method attempts to suppress negative attitudes and negative depictions of mental illnesses by highlighting the injustices of stigma and reprimanding those who stereotype or discriminate (Corrigan et al., 2001; Corrigan & Shapiro, 2010; Corrigan, Morris, Michaels, Rafacz, & Rusch, 2012). It is a “shaming and blaming” model that has the potential to provoke negative reactions and backlash. Corrigan et al. found that protest targeting public stigma was rarely examined in research, and the results of meta-analysis did not show that protest yielded significant changes in stigma (Corrigan et al., 2012). Though not described in the literature, legal protest may be an effective means of reducing broader structural stigmas, but this is not a method that is useful when targeting school-based programming.

Arts, drama, and games also have been employed to engage students and reduce stigma (Essler, Arthur, & Stickley, 2006; Schulze et al., 2003). Studies employing role playing, games, quizzes, and artwork have demonstrated increases in positive attitudes (Sakellari et al., 2011; Wei et al., 2013), but programs that focus solely on these types of methods are rare. Most of the programs that use drama, games, posters, painting, and other such methods additionally employ lectures or presentations that teach about mental illnesses or contact-based approaches (Sakellari et al., 2011; Wei et al., 2013). Pitre, Stewart, Adams, Bedard, and Landry (2007) used puppets to deliver mental health messages to children, successfully reducing the children’s perceptions of “threat” and “shame” attached to people with a mental illness, and reducing their desire to keep people with a mental illness “at a safe distance”.

Youth anti-stigma summits have recently emerged as a promising practice for challenging the stereotypes and misconceptions that fuel stigma in Canadian high schools and empowering students to undertake their own anti-stigma activities. Originally developed by the Durham Talking About Mental Illness (TAMI) Coalition in Ontario, a summit brings together selected students along with school teachers and administra-

tors to learn about mental health issues and stigma. Participants join in mental health education sessions, contact-based education led by speakers with lived experience of mental illnesses, experiential exercises, discussion, and action planning. After the summit, students work together to implement anti-stigma activities in their schools. Both students and school staff are provided with action guides and activity starters to help them plan activities and keep up the momentum of the anti-stigma message (Mental Health Commission of Canada, 2014a, 2014b). Key components of a summit include education, action, and contact. In this approach, students are recognized as experts in helping to design summits and empowered to act as a driving force to guide activities in their schools. Early research is showing that the summit approach can successfully diminish stereotyped attitudes and feelings of social distance (Koller, Chen, Heeney, Potts, & Stuart, 2013). Summits are gaining in popularity and have been used by [Jack.org](http://jack.org) and British Columbia’s *Talk at the Top* ([jack.org](http://jack.org), n.d.).

In summary, with the possible exception of protest, all of the above-mentioned approaches typically show small positive effects on knowledge and attitude change; however, only the contact and summit approaches appear to have an influence on social structures (such as school activities) and behavioural changes. These results suggest that more comprehensive, multilayered approaches are needed.

In the next section, we describe the *Opening Minds* anti-stigma youth initiative in more detail as one of the first national anti-stigma programs to target youth using contact-based education as the key intervention approach. We use it to illustrate key ingredients and the most promising practices in contact-based education.

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### **Opening Minds Anti-stigma Initiatives of Mental Health Commission of Canada**

The *Opening Minds* anti-stigma initiative of the Mental Health Commission of Canada was launched in 2009 with a 10-year mandate to act

as a catalyst for improving the mental health system and changing the attitudes and behaviours of Canadians with respect to mental health issues (Stuart et al., 2014a, 2014b). Building on the emerging evidence that emphasized the importance of a more intensive and targeted approach to stigma reduction, *Opening Minds* identified four priority groups for anti-stigma programming (youth, health-care providers, news media, and the workforce) and so was one of the first national programs to take such a targeted approach.

Youth were targeted because of their high prevalence of mental health issues. According to a multi-country study conducted by the World Health Organization, Canadian youth experienced higher levels of emotional distress compared to youth in other countries and reported feelings of depression once a week or more (The World Health Organization, 1996). Youth were also more likely to report being stigmatized as a result of mental health issues (Stuart, Patten, Koller, Modgil, & Liinamaa, 2014c).

*Opening Minds* has partnered with more than 20 youth contact-based anti-stigma programs across Canada to promote systematic evaluation using standardized approaches and instruments. This work has contributed to the understanding of promising and best practices in the field of anti-stigma programming. In order to undertake broad-based evaluation across partner organizations, a standardized measurement tool was needed. A literature review showed that none existed to meet the specific needs of this evaluation. Therefore, an instrument that measured stereotypic attributions (controllability of the illness, the potential for recovery, and the potential for violence and unpredictability) and social acceptance (desire for social distance and feelings of social responsibility for mental health issues) was developed. Social distance is a measure of behavioural intent and considered to be a fair (but not perfect) proxy for actual behaviours. The final scale consists of 15 stereotyped attribution items and 17 social acceptance items. Items were scored so that higher scores on any item would reflect higher levels of stigma. The validity and reliability of the instrument has been established (Chen et al., 2017).

Despite the fact that all programs used a contact-based intervention, standardized evaluation showed considerable variability in outcomes—64% of the variation in outcomes was due to the program. Also, males and females reacted differently to anti-stigma programming, particularly those with self-reported mental illnesses (Koller & Stuart, 2016). In addition to the gender mix of the students, contact-based education may have different outcomes depending on the age of the speakers and the quality of the contact (Corrigan et al., 2012).

To more thoroughly understand sources of variation across programs, we undertook a qualitative study to identify critical ingredients in contact-based interventions and build a program logic model to indicate how the various parts of the program interact to produce an effect. The research team worked with 18 contact-based educational programs implemented across Canada that targeted high school students, all formally affiliated with the *Opening Minds* anti-stigma initiative. Twenty in-depth interviews with stakeholders (program coordinators, speakers with lived experiences, family members) were conducted along with field observations of seven programs and an extensive review of program materials. Data analysis involved collecting critical ingredients into domains for conceptual clarity and logic model building. Finally, content validation of the program logic model through a stakeholders' review was conducted (Chen et al., 2016).

A main component of contact-based intervention was the ability of speakers to engage with their audience. "Engaging contact" occurred when the speaker and the audience found some common ground to reduce the stigma attached to mental illnesses. In addition, the speakers had to be in recovery, psychologically ready to share their personal stories, equipped with the skills and knowledge necessary to deliver the mental health anti-stigma program, and able to act as a role model to embody mental health recovery. The message delivered must be one of mental health recovery, misperceptions about mental illness must be corrected, and students in the audience must be connected to mental health

resources. The best programs ensured that students were prepared for the interaction with the speaker. Also, it was helpful if the speaker followed up with students after the presentation. In short, the interaction had to facilitate an emotional connection with the speaker, engage students, and empower students with mental health problems to seek help. It also helped students accept responsibility for advocating against mental illness related stigma. This research has led to the development of a fidelity measurement standard and has thus contributed to the development of best practice standards in mental health anti-stigma programming for youth (Chen et al., 2016).

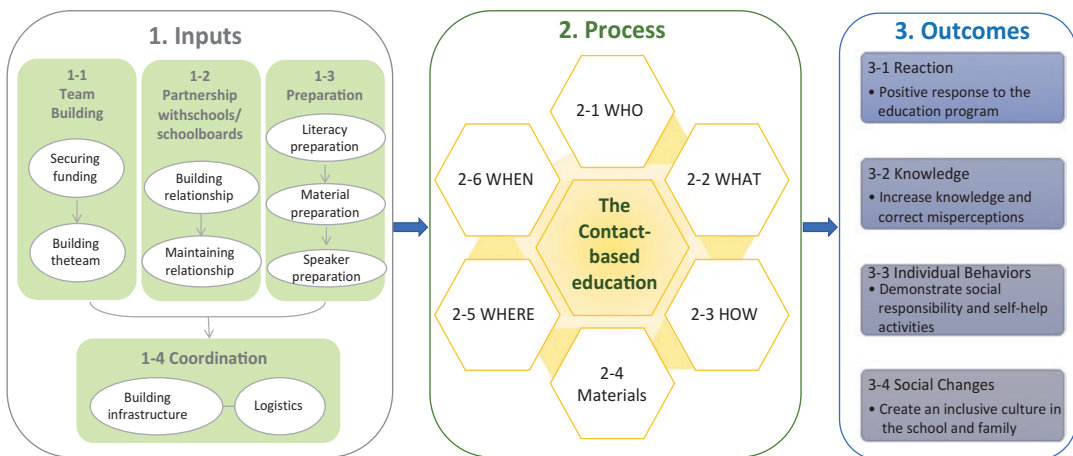
To further illustrate “how the program theoretically works to achieve benefits for participants” (Savaya & Waysman, 2005, p. 87), a program logic model framework was constructed. The basic logic model included three core components: (1) inputs (the resources to be invested in a program), (2) outputs (the processes, activities, events, and actions that are implemented in the program), and (3) outcomes (the benefits or changes in program participants, measured in terms of short-term, medium term, and long-term impacts) (Savaya & Waysman, 2005). Figure 12.1 shows our logic model for contact-based mental health anti-stigma education. It includes four input components (team building, partnerships

with schools, preparation, coordination), six process components (who-program deliverers, what-contents, how-pedagogy, materials, where-place, when-time), and four levels of program outcome (reaction, knowledge, behaviours, social changes). These are described in more detail below.

### Domain 1: Inputs

Inputs refer to the resources invested in a program, which could include human resources, financial resources, and other efforts required to support a program. At this level, securing funding to build a team is the first step in providing contact-based mental health education. A well-developed program proposal or a demonstration of previous program outcomes is the key to a successful funding application. Potential funding sources may include public and private sectors. In addition to a grant application, fundraising can be used to obtain financial support. A strong team might include support staff, a mental health provider, speakers with lived experience of mental illness, family members, youth, and community members.

Second, program staff had to gain entrance into schools. Once a school was chosen as a target for mental health anti-stigma education, access to the school was obtained in one of two



**Fig. 12.1** Youth mental health anti-stigma intervention—a program logic model There are "arrows" conneting boxes in the outcomes. ie. 3-1 -> 3-2 -> 3-3 -> 3-4

ways. Some programs used a top-down approach by contacting school principals or members of the school board, while others used a bottom-up approach by talking to individual teachers or presenting the program at parent teacher association meetings. Advertising through word of mouth or by delivering program information to a school were also methods that were used. Once contact is made, a more detailed assessment of the school's needs can be undertaken to better tailor the program to the context of the particular school. It was important to maintain relationships with partner schools or school boards. A regular line of communication using telephone or email was set up to foster information sharing among school members and program members. After mental health programs were implemented, it was important that someone familiar with the program was available for troubleshooting and follow-up. Some programs maintained a computerized database to manage this information.

The third step involved preparation of the educational materials. The strongest programs used a team of advisors and experts to develop the program's educational content, including the development of teaching tools such as PowerPoint presentations, worksheets, scripts, stories, and workbooks. For programs using live speakers, considerable preparation went into teaching and supporting the speakers. Speakers needed to feel comfortable in front of a class and able to meet student's learning needs (rather than their own need to tell a story).

The strongest programs eased new speakers into their roles through a graduated process. Initially, they observed the program delivery of trained speakers in order to understand the nature of the intervention and the reaction of the audience and assess their own psychological preparedness. In addition, speakers had to build a repertoire of knowledge about mental health and mental illnesses and their treatments so that they could respond to student questions. Some programs kept a list of questions and answers that could be used as a speaker training tool. Careful personal story development was also a key feature of a strong program. Typically, speakers were mentored in developing a personal story

line. Main ideas would be defined and the story carefully crafted to illuminate the important points leading to a positive, recovery-oriented tale. Practice sessions were an important element in speaker training. This included practice answering potential questions. Ongoing practice sessions helped speakers manage any anxiety that they might feel, help organize thoughts, and build a repertoire of accurate answers that could be used in the question and answer periods that typically followed contact-based educational sessions.

Finally, programs had to build infrastructures to support delivery. This included a major coordination function to ensure that sessions were appropriately scheduled with schools and speakers were transported to the sessions. An effective means of managing the scheduling function for larger programs was an online booking system, but smaller programs typically used more conventional approaches. There also needed to be a backup plan in place in case a speaker was unable to attend. For example, many programs had a backup video that could be used so that there was no risk of having to cancel presentations.

## **Domain 2: Process**

The process domain addresses the who, what, how, where, and when of anti-stigma programming. With respect to the who, most programs centred on individuals with lived experience of a mental illness, but some also included a mental health professional, family member, teacher, or program staff as partners in the presentation. For speakers with lived experience of a mental illness, it was important that they were living well with their illness (i.e. recovered), not in acute distress, and had support to make their presentations. They had to be psychologically ready to share their personal stories and well equipped with the mental health knowledge. They also had to be able to communicate this knowledge in clear ways to students without deepening stereotypic thinking. Finally, they had to act as a role model embodying recovery characteristics and their dress and

demeanour had to be consistent with this. In other words, speakers must actively disconfirm stereotypic views that students may have of people with a mental illness, such as being unkempt, dangerous, incoherent, or intellectually limited. This requires a well-designed training program that psychologically and technically supports speakers who will deliver mental health knowledge and share their experiences of mental illness with an audience.

A second process consideration is what the message will contain. The most effective contact-based mental health education enhances mental health knowledge and improves acceptance of mental illness by delivering a personal mental health recovery message that includes a statement of strength, hope, and empowerment. A speaker's recovery message must connect with students and elicit their empathy. Often, speakers would start by describing how it felt to be diagnosed with a mental illness and explain some of the useful strategies they used to deal with the difficulties encountered when they were in high school. The speaker could continue the story by describing how maturity led to a successful management of the illness in early adult life. An important part of such a presentation is the breaking of misperceptions of mental illnesses. The speaker must address the myths related to mental illnesses and discuss how students can find help for mental problems. The goals of the presentation are to enhance disclosure, encourage help-seeking, increase social acceptance, and promote greater social responsibility regarding mental illnesses.

A third consideration is how the program will educate the students—what pedagogy will be used. To encourage youth engagement, a mental health anti-stigma education program must be youth-friendly. That is, it must use youth culture (e.g. social media, popular music) and language that appeals to youth. In addition, the creation of a safe environment is necessary to encourage students to engage in more open dialogue. A good way to accomplish the above is to employ students as partners in the process and promote their empowerment. Involvement of students in the program design can reveal what the needs of the students are, allowing the program to target

these needs more specifically. This is also an effective way to encourage students to access information and become youth advocates. It gives students the opportunity to play a leadership role and empowers them to make changes. A mental health anti-stigma intervention that partners with students to implement anti-stigma activities in local schools after the contact-based education could amplify the intervention effects to reach a community level.

Next, the program staff must determine what materials the program will contain. Providing students with mental health resources in various formats such as handouts, toolkits, or information booklets will augment and sustain the program's effects and make sure students have outlets if the stories trigger any emotional effects. Materials that introduce the topic can be printed or Web based and should be distributed before the presentation to give students a general sense of what the presentation will entail. Materials that provide follow-up resources to students and their families can be distributed after the presentation. Teachers require guidelines to deliver mental health literacy before the presentation and to debrief students after the presentation. The best programs worked closely with teachers to ensure that students were well prepared to receive the speaker's story. Similarly, they often provided time after the program (such as the next day) to debrief. Key school staff (such as a guidance counsellor) were often on hand in case students needed to talk further about a personal mental health issue, and teachers were schooled in how to make the connection between students who may be in distress with the appropriate support personnel.

Where the presentations take place can make an important difference to the level of comfort, safety, disclosure, and student engagement. For example, presentations that took place in individual classrooms provided the best environment for a transformative learning experience. When presentations were made to large groups (such as in an assembly or a theatre), students were less likely to ask questions and interact with the speakers on a personal level. While larger presentations have broader reach (which is often the rationale for adopting this



approach), the presence of hundreds of students in a large room undermines the personal interaction that is the hallmark of contact-based education. Smaller classroom presentations can also allow presenters to address specific curricular requirements. Online-based methods such as websites and social media can also be used to answer students' questions. Booster elements (posters, concerts, fund raisers, video contests) can foster program sustainability and support ongoing activities driven by student champions.

The final process issue is to determine when the program will be completed. Programs varied from a single session of 40–90 min to a whole day of activities to activities that spanned several days. With longer, multi-day activities, it was possible to have a teacher engage with the material and help prepare the students to hear personal stories and understand their context. It also allowed for follow-up discussion, debriefing, and engagement of additional support staff. Engaging with a school for a longer presentation was often challenging as many teachers had limited time to devote to this topic. However, brief interventions were largely unsuccessful in bringing about the desired outcomes.

### Domain 3: Outcomes

We used Kirkpatrick's framework for educational evaluation (Kirkpatrick & Kirkpatrick, 2006), which progresses through a series of levels, to guide our understanding of best practices for program outcomes. Student reaction is at the lowest level. This evaluates how students feel about the learning experience; whether they liked it and were satisfied with it. Potential emotional reactions might include happiness, empathy, feeling more connected, approachable, open minded, moved, or sadness. The second level evaluates changes in student knowledge and attitudes that could be attributed to the intervention. This includes correcting misperceptions and stereotypes. The third level examines changes in behaviours and evaluates the extent to which learning has been applied. This might include a demonstration of social

responsibility towards students with mental or emotional problems, greater demonstrations of respect, decreases in social distance, and provision of greater social support. Finally, the fourth level evaluates the extent to which the program messages may have been transferred to the sociocultural environment, in this case to create a less stigmatizing environment. Creation of a safe environment that enables students to talk about mental health issues, support each other, promote social inclusion, and advocate for anti-stigma activities is the long-term goal of effective anti-stigma interventions. Most programs had some data describing student reactions but few had anything more. In the context of the *Opening Minds* evaluation, all programs collected information on knowledge and attitude change. In addition, they included a measure of behavioural intent as a proxy for behaviour change. In an attempt to promote structural change, in November 2014, *Opening Minds* launched a HEADSTRONG national summit to mobilize youth across the country to confront mental health stigma. The summit brought together more than 4400 youth from across the country who were committed to create positive change. Through the HEADSTRONG summit, 19 regional coordinators were established, 3 provincial events and 25 regional summits were hosted, and countless more students and school-based activities were inspired (Mental Health Commission of Canada, 2014a, 2014b).

Having a logic model to guide program activities, such as the one described above, provides a thorough understanding of the changes anti-stigma programs can make in a student body. It provides a comprehensive and testable picture outlining "what works" and explains active components in contact-based mental health anti-stigma interventions, especially for the youth population in schools. Understanding the changes that can be achieved by contact-based mental health anti-stigma education and identifying the most effective components in a contact-based mental health anti-stigma education program are essential to inform the design of best-practice mental health anti-stigma education interventions in a school context.

## Summary/Conclusion

Although both literacy education and contact with people who have had a mental illness were shown to have positive effects on knowledge and attitude change, contact demonstrates stronger evidence in reducing discriminatory behavioural intentions such as social distance. Contact combined with education and student-driven actions seems to work best among adolescents.

The *Opening Minds* research discussed in this chapter built the programming model illustrating how contact-based anti-stigma intervention should be crafted to meet the differing needs of the school context and identified the key ingredients that must be implemented to maximize program success. Further validation of the key ingredients and development of fidelity criteria would be the next steps to promote best practice in youth anti-stigma interventions.

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