Mental Health Commission of Canada

Commission de la santé mentale du Canada

Opening Minds at University:

Results of a Contact-Based Anti-Stigma Intervention

King's College

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OPENING MINDS: Changing how we see mental illness.

As part of its 10-year mandate, The Mental Health Commission of Canada (MHCC) has embarked on an anti-stigma initiative called Opening Minds (OM) to change the attitudes and behaviours of Canadians towards people with a mental illness. OM is the largest systematic effort undertaken in Canadian history to reduce the stigma and discrimination associated with mental illness. OM is taking a targeted approach, initially reaching out to healthcare providers, youth, the workforce and media. OM'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 mental illness and have recovered or are managing their illness. OM'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

This is a nontechnical report meant to provide King's College an overview of the evaluation results of a contact-based educational intervention that was undertaken as part of the news media outreach to reduce stigma among journalism students. The two hour symposium sponsored by the Mental Health Commission of Canada, featured five presenters. Three shared their personal experiences with mental illness and the impact of stigma. Two media specialists, one journalist and a news media researcher talked about the media's pivotal role in the creation and maintenance of stigma.

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 media can influence public opinion by creating and maintaining public stereotypes of the mentally ill (Stuart, 2006a). Because story content and the language used to describe people with a mental illness can serve to reinforce or dispel stigma and discrimination, this symposium was designed to encourage journalism students to consider the impact of news stories (reports). *Opening Minds* is conducting specifically targeted symposia to reach journalism students and other professionals.

Methods

Students were surveyed before and after the symposium. Though the symposium was targeted to journalism students, anybody enrolled in the introductory journalism course was invited to attend.

We adapted items from a questionnaire used by several program sites in the World Psychiatric Association's global anti-stigma program to evaluate contact-based high school programs. (Stuart, 2006b) (Pinfold, Stuart, Thornicoft, & Arbolelda-Flórez, 2005). Our Stigma Evaluation Survey contained 20 self-report items. Of these 20 items:

- 6 items measured stereotyped attributions
- 8 items measured expressions of social distance
- 6 measured feelings of social responsibility

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 scale had good reliability in this sample with a pretest Cronbach's alpha of .71.

Information on gender, age, main area of study, and prior contact with someone with a mental illness (close friend or family member) was also collected. In addition, the post-test survey included open-ended questions asking respondents what they liked and disliked about the symposium as well as what they thought they might do differently having heard the presentation.

Results

Sample Characteristics

Fifty seven students completed the pretest survey and 37 (65%) completed the posttest survey. The characteristics of the pretest and posttest groups are presented in **Table 1**. There were 9% fewer journalism students, 12% fewer 18 year olds and 13% fewer males in the posttest sample. Nine percent more people reported having a close friend with a mental illness in the posttest. None of these differences were statistically significant, likely owing to the small sample sizes.

TABLE 1

Pretest and Posttest Characteristics	Pretest % (n=57)	Posttest % (n=37)
Type of student [a]		
• Journalism	63.2% (36)	54.1% (20)
• Other	36.8 %(21)	45.9 % (17)
Sex [b]		
• Male	32.7% (18)	19.4% (7)
• Female	67.3% (37)	80.6% (29)
• Missing	2	1
Age [c]		
• 18	54.7% (29)	42.4% (14)
• 19	32.1% (17)	33.3% (11)
• 20	7.5% (4)	15.2% (5)
• 21	3.8% (2)	3.0 % (1)
• 22+	1.9 % (1)	6.1 % (2)
• Missing	4	4
Contact [d]		
• Any close friend or family member [d]	66.7% (36)	69.4% (25)
• Close friend [e]	29.6 % (16)	38.9 % (14)
• Family member [f]	55.6% (30)	55.6% (20)
• Missing	3	1
[a] χ^2 (*df*= 1) = 0.772, *p* = .380	[d] χ^2 (*df*= 1) =0.076, *p* = .782	
[b] χ^2 (*df*= 1) = 1.985, *p* = .165	[e] χ^2 (*df*= 1) = 0.833, *p* = .361	
[c] χ^2 (*df*= 4) = 2.796, *p* = .593	[f] χ^2 (*df*= 1) = 0.000, *p* = 1.000	

Stereotypes Attributions

Stereotyped attribution items are shown in **Table 2.** For ease of presentation, items were recoded into three groups: agree (strongly agree and agree), neutral, and disagree (disagree and strongly disagree). Items that were reverse coded are marked (R).

With the exception of the dangerousness and treatability items, the majority of respondents held positive (non-stereotypical) attitudes toward people with a mental illness. For example, before the symposium students tended not to endorse the common stereotypes people with a mental illness could snap out of it (95% disagreed) or that they were too disabled to work (90% disagreed).

Just over three quarters (77%) agreed that people with a mental illness are often treated unfairly. However, only half (51%) disagreed with the stereotype that people with a mental illness are dangerous and unpredictable, and only about one third (37%) felt there were effective treatments.

Also reported in **Table 2** is the change in score from pretest to posttest. Five of the six items changed in the expected direction with the largest and only statistically significant change being with respect to students' views on dangerousness and unpredictability. In the posttest sample, 87% disagreed that people with a mental illness are dangerous and unpredictable, reflecting a 36% improvement. A greater proportion of students in the posttest sample agreed that people with a mental illness are often treated unfairly (a 15% change, resulting in 92% agreement), and disagreed with there are few effective treatments (a 12% change), and that people with a mental illness are untrustworthy (a 10% change) or too disabled to work (a 3%) change. Three percent fewer students disagree that people with a mental illness could snap out of it if they wanted to.

TABLE 2

Stereotyped Attributions Items	Pretest % (n)	Posttest % (n)	% Change
(R) People with mental illnesses tend to be dangerous and unpredictable [a]			
• Disagree	50.9% (29)	86.5% (32)	35.6%
• Neutral	38.6% (22)	13.5% (5)	-25.1%
• Agree	10.5% (6)	--	-10.5%
People with mental illnesses are often treated unfairly [b]			
• Agree	77.2% (44)	91.9% (34)	14.7%
• Neutral	15.8% (9)	5.4% (2)	-10.4%
• Disagree	7.0% (4)	2.7% (1)	-4.3%
(R) There are few effective treatments available for the mentally ill [c]			
• Disagree	36.8% (21)	48.6% (18)	11.8%
• Neutral	43.9% (25)	29.7% (11)	-14.2%
• Agree	19.3% (11)	21.6% (8)	2.3%
(R) People with mental illnesses are untrustworthy [d]			
• Disagree	78.9% (45)	88.9% (32)	10.0%
• Neutral	15.8% (9)	11.1% (4)	-4.7%
• Agree	5.3% (3)	--	-5.3%
(R) People who are mentally ill are too disabled to work [e]			
• Disagree	89.3% (50)	91.9% (34)	2.6%
• Neutral	8.9% (5)	8.1% (3)	-0.8%
• Agree	1.8% (1)	--	-1.8%
(R) Most people with a mental illness could snap out of it if they wanted to [f]			
• Disagree	94.7% (54)	91.9% (34)	-2.8%
• Neutral	3.5% (2)	2.7% (1)	-0.8%
• Agree	1.8% (1)	5.4% (2)	3.6%
[a] p = .001	[d] p = .332		
[b] p = .240	[e] p = 1.00		
[c] p = .327	[f] p =.806		
Notes: (R) Signifies the item was reverse coded in the scale calculation. Higher scale scores reflect higher levels of stigma. All p-values in this table are reported using Fisher's Exact Test so there is no corresponding test value.			

Expressions of social distance

Table 3 shows the social distance items. There were two items where students showed positive, non-stigmatizing responses prior to the symposium. Most responded they would not mind living next door to or sitting in class next to someone with a mental illness (90% and 89% respectively). These hypothetical situations involve less intimate social interactions, where the level of social proximity or

engagement can be controlled. Students were much less comfortable making close friends with someone who had a mental illness, and in situations requiring a high level of trust, such as letting someone with a mental illness babysit their children (14%).

All eight of the social distance items changed in the expected direction. With respect to professional relationships, a greater proportion of post-test students would agree to let someone with a mental illness teach school children (a 22% change), babysit their children (a 11% change), or would go to a doctor who had been treated for a mental illness (a 14% change). Posttest students were more likely to report they would make close friends with someone who had a mental illness (a 17% change) or that they would hire someone with a mental illness if they were an employer (a 16% change). Although already high at pretest (89%), 97% of posttest students indicated they would not mind if someone with a mental illness sat next to them in class (a 8% change) or lived next door to them (a 2% change).

TABLE 3

Social Distance Items	Pretest % (n)	Posttest % (n)	% Change
(R) I would not want someone with a mental illness to be a school teacher [a]			
• Disagree	50.0% (28)	72.2% (26)	22.2%
• Neutral	41.1% (23)	19.4% (7)	-22.0%
• Agree	8.9% (5)	8.3% (3)	-0.6%
I would make close friends with someone who had a mental illness [b]			
• Agree	56.1% (32)	73.0% (27)	16.9%
• Neutral	36.8% (21)	21.6% (8)	15.2%
• Disagree	7.0% (4)	5.4% (2)	1.6%
(R) If I was an employer, I would not give someone with a mental illness a job [c]			
• Disagree	64.3% (36)	80.6% (29)	16.3%
• Neutral	28.6% (16)	11.1% (4)	-17.5%
• Agree	7.1% (4)	8.3% (3)	1.2%
(R) I would not go to a physician if I knew that s/he had been treated for a mental illness [d]			
• Disagree	61.4% (35)	75.0% (27)	13.6%
• Neutral	21.1% (12)	19.4% (7)	-1.7%
• Agree	17.5% (10)	5.6% (2)	-11.9%
I would let someone with a mental illness babysit my children [e]			
• Agree	14.3% (8)	25.0% (9)	10.7%
• Neutral	53.6% (30)	52.8% (19)	-0.8%
• Disagree	32.1% (18)	22.2% (8)	-9.9%
(R) I would be upset if someone with a mental illness sat next to me in class [f]			
• Disagree	89.3% (50)	97.2% (35)	7.9%
• Neutral	10.7% (6)	2.8% (1)	-7.9%
• Agree	--	-	0.0%
I would go to the doctor if I thought I had a mental illness [g]			
• Agree	63.2% (36)	66.7% (24)	3.5%
• Neutral	17.5% (10)	22.2% (8)	4.7%
• Disagree	19.3% (11)	11.1% (4)	-8.2%
I would not mind if someone with a mental illness lived next door to me [h]			
• Agree	89.5% (51)	91.5% (33)	2.0%
• Neutral	8.8% (5)	5.6% (2)	-3.2%
• Disagree	1.8% (1)	2.8% (1)	1.0%
[a] $p = .080$	[e] $p = .361$		
[b] $p = .237$	[f] $p = .051$		
[c] $p = .134$	[g] $p = .583$		
[d] $p = .249$	[h] $p = .858$		
(R) Signifies the item was reverse coded in the scale calculation. Higher scale scores reflect higher levels of stigma All p-values in this table are reported using Fisher's Exact Test so there is no corresponding test value.			

Social Responsibility

The social responsibility items are presented in **Table 4**. Before the symposium students were generally socially conscious when close interpersonal commitment was not required, such as signing a petition to support better programs for the mentally ill (85%), making a onetime donation to support the mentally ill (70%) or supporting spending more tax dollars to improve services (61%). They were less likely to want to join an advocacy program to improve the rights of the mentally ill (35%), or volunteer their time in an agency for the mentally ill (47%) Students in the posttest sample were less willing to make a one-time donation (a 7 % change) and a small negative change was also noted in their willingness to make a regular donation (a 1.5% change). Although high at pretest (90%), the proportion willing to sign a petition increased by 8% at posttest. Seven percent more posttest students were willing to join an advocacy group. Small positive changes were seen for both volunteering in an agency for the mentally ill (4%) and support for spending more tax dollars to improve services for the mentally ill.

TABLE 4

Social Responsibility items	Pretest % (n)	Posttest % (n)	% Change
I would sign a petition to support better programs for the mentally ill [a]			
• Agree	89.5% (51)	97.2% (35)	7.7%
• Neutral	10.5% (6)	2.8% (1)	-7.7%
• Disagree	--	--	0.0%
I would join an advocacy program to improve the rights of the mentally ill [b]			
• Agree	35.1% (20)	41.7% (15)	6.6%
• Neutral	56.1% (32)	50.0% (18)	-6.1%
• Disagree	8.8% (5)	8.3% (3)	-0.5%
I would volunteer my time to work in an agency for the mentally ill [c]			
• Agree	47.4% (27)	51.4% (18)	4.0%
• Neutral	42.1% (24)	42.9% (15)	0.8%
• Disagree	10.5% (6)	5.7% (2)	-4.8%
I would support spending more tax dollars to improve services for the mentally ill [d]			
• Agree	60.7% (34)	63.9% (34)	3.2%
• Neutral	30.4% (17)	33.3% (12)	2.9%
• Disagree	8.9% (5)	2.8% (1)	-6.1%
I would make a regular donation to a charity to support mentally ill people [e]			
• Agree	40.4% (23)	38.9% (14)	-1.5%
• Neutral	43.9% (25)	52.8% (19)	8.9%
• Disagree	15.8% (9)	8.3% (3)	-7.5%
I would make a one-time donation to a charity to support mentally ill people [f]			
• Agree	70.2% (40)	62.9% (22)	-7.3%
• Neutral	22.8% (13)	25.7% (9)	2.9%
• Disagree	7.0% (4)	11.4% (4)	4.4%
[a] p = .166 [b] p = .898 [c] p = .853		[d] p = .646 [e] p = .533 [f] p =.248	
Notes: (R) Signifies the item was reverse coded in the scale calculation. Higher scale scores reflect higher levels of stigma All p-values in this table are reported using Fisher's Exact Test so there is no corresponding test value.			

Program Success

In order to provide a measure of the overall success of the symposium, we chose an a priori cut-off score of 80% correct. Though somewhat arbitrary, we have used this cutoff 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 pretest.

Figure 1 shows the cumulative percent of items reflecting non-stigmatizing responses. Prior to the symposium, 14% of students gave a non-stigmatizing response to at least 16 of the 20 questions. At posttest 46% of students fell into this category. This 32% increase represents statistically significant increase in non-stigmatizing responses, χ^2 (*df*= 1) = 10.43, *p* = .001.

FIGURE1

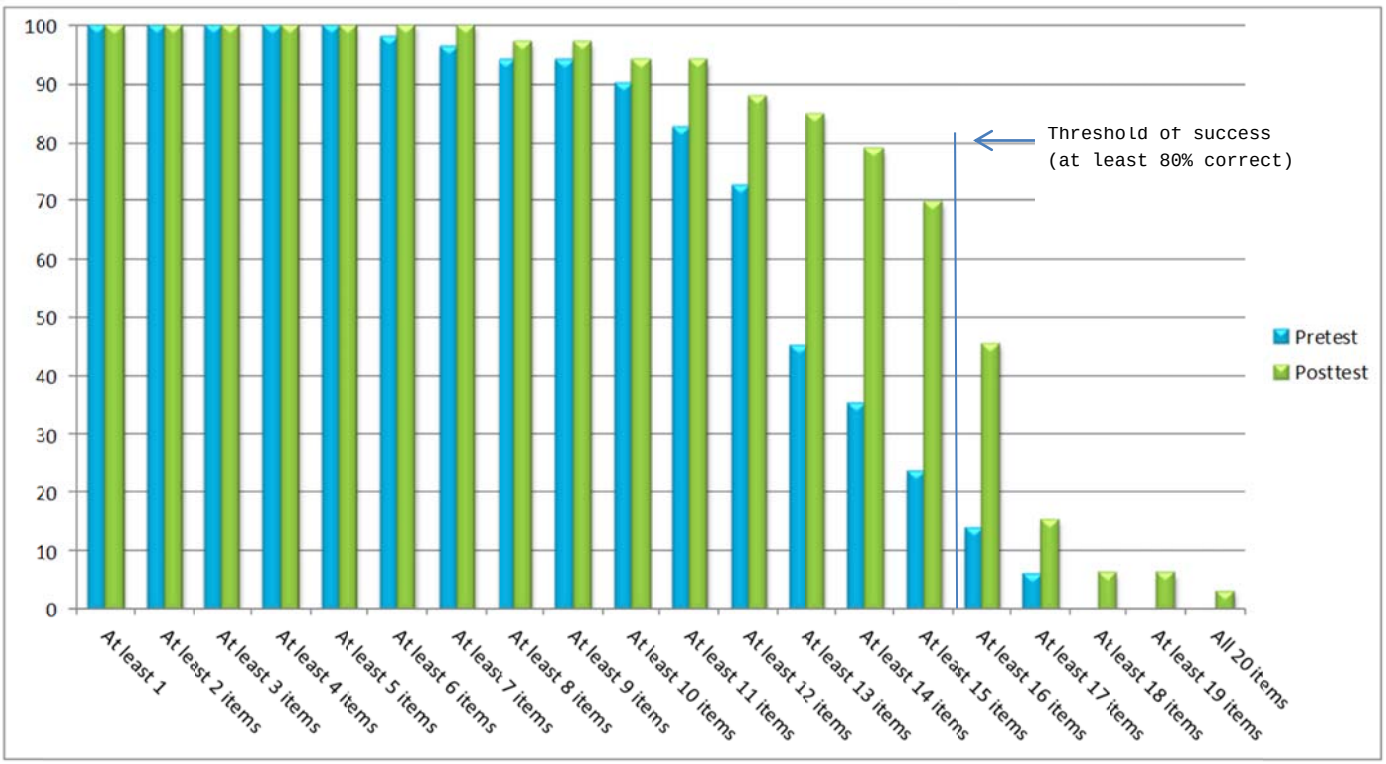
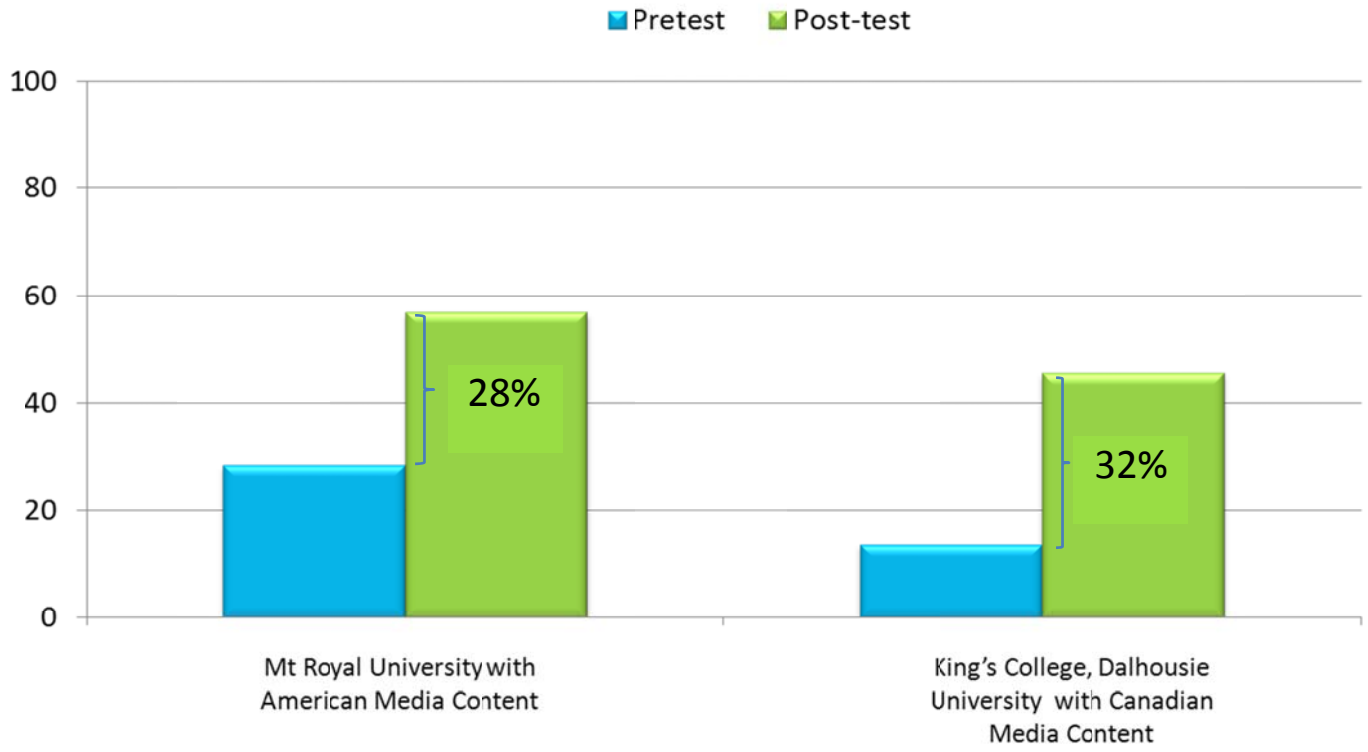


Figure 2 compares the results from the King's College symposium to a previous similar symposium conducted at Mount Royal University in Alberta. Though the presenters were different and the symposium content varied somewhat, the central active ingredient of contact-based education was present in both. A key difference was that the King's College symposium used Canadian media examples to define the scope and nature of the problem for the students, whereas the prior symposium used examples from the American media (a review of Canadian media had not been completed at the time). Students in the prior symposium reported that they believed that the Canadian media did not stigmatize to the same degree so may have been less convinced of the magnitude of the problem. Figure 2 shows that both symposia achieved significant results, but that slightly better results were achieved in the symposium that used Canadian media examples to ground the presentations and discussion.

Figure 2



What respondents liked most and least about the symposium?

The posttest survey asked students what they liked the most (85% responded) and the least (65% responded) about the symposium. Theme based coding of their comments revealed the majority liked the personal stories and experiences such as *the first hand narratives by people affected by mental illness* or *seeing the two people with a mental illness talk about their experiences*. Twenty-one percent said that they liked everything about the symposium (there was nothing that they liked the least). Twenty-one percent did not like the length, though no consensus emerged. Some thought it was too short and other thought it was too long.

What would respondents do differently?

Just over two thirds of the posttest students responded to an open-ended question asking whether they would behave differently as a result of the symposium. Of these, 75% said they would do something differently. Theme based coding of their comments revealed that 78% said they would change their views about people with a mental illness, saying things such as *I will think differently about mentally ill people and judge the media instead of them* or *be more of a critical thinker when I read articles about mental health*. Just over one third (33%) indicated they would change their behaviours towards those with a mental illness, for example *I would be willing to talk to people about their illness, before I would have avoided or been scared to*. Finally, just over one quarter (28%) said they would try to advocate for the mentally ill, or educate others about mental illness saying things such as *I will spread the word and write about stigma with mental illness* or *I will inform people of mental illness and its effects*.

Summary and Conclusion

This paper describes the results of a contact-based anti-stigma intervention provided to university students at King's College, Dalhousie University. It was sponsored by the *Opening Minds* anti-stigma initiative of the Mental Health Commission of Canada. Three people with different personal experiences with mental illness shared their stories and discussed the impact of stigma on their daily lives. Two media experts, one journalist and one researcher, discussed the role of the media in creating and maintaining stigma. Students completed surveys before and after the symposium.

Changes in self-reported attitudes, feelings of social acceptance, and social responsibility were assessed using a 20-item scale (Cronbach's alpha = .71). In addition to item changes, overall 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 pretest—reflecting a grade of A or higher.

Seventeen out of the 20 items on the scale changed in a positive direction with the largest item specific change (reflecting a 36% reduction in stigma) seen with respect to students' views of the mentally ill being dangerous and unpredictable.

When looking at the proportion of students who answered 80% of the questions correctly, a statistically significant increase from 14% to 46% was noted, reflecting a 32% change. This was slightly higher than a previous contact-based symposium offered to Mount Royal University students in Alberta that used American, rather than Canadian, media examples to demonstrate stigma. In addition, three quarters of the Kings College students (75%) said they would do something differently as a result of hearing the symposium. Most often they would change their views about people with a mental illness (78% of those responding).

We experienced several difficulties in conducting this study that may have affected our results in unknown ways. For example, we experienced 35% attrition from pre to post test. It is unknown whether this attrition may have been related to stigma. If the students who were most stigmatizing refused to fill out a posttest survey, then we may have overestimated the amount of change that occurred.

Another important difficulty was our inability to individually match many of the students on pre and posttest surveys. Although an attempt was made to gather enough information to match surveys at the individual level, many of the students did not provide all of the information requested. As a result, we could not characterize the types of students who did not provide posttest measures (to determine, for example if they were more stigmatizing), nor could we adjust our analysis for the fact that our samples were not independent, nor could we control for demographic and other group differences.

Therefore, although encouraging, these results should be interpreted with some caution. However, despite these limitations, our results are consistent with our previous work as well as other studies that were able to implement more rigorous controls. Therefore, we consider that our results confirm the potential of brief contact-based educational interventions can to promote and consolidated positive attitudes, reduce social distance and promote a sense of social responsibility among university students. In addition, our results suggest that contact-based interventions have the potential to change the way that journalism students will approach their craft, though more longitudinal research is required for this to be confirmed.

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