

Introduction

- Globally, 70% of those with disorders do not have access to treatment (Henderson, Evans-Lacko & Thornicroft, 2013).
- Stigma contributes to this treatment gap, functioning as a barrier for accessing healthcare by dissuading help-seeking behaviour (Thornicroft et al., 2009; Henderson, Evans-Lacko & Thornicroft, 2013).
- For those with schizophrenia, 60% report stigma having a pivotal role in treatment delay (Cabassa et al., 2018).
- Stigma is defined by Corrigan (2000) as encompassing stigmatic signals (e.g., talking to oneself), stereotypes (e.g., “crazy people are dangerous”), and discriminative behaviours (e.g., “I don’t want to live near crazy people”).
- For example, people with schizophrenia are more likely to be perceived as violent and unpredictable (Henderson, Evans-Lacko & Thornicroft, 2013).
- Both psychoeducational (increasing knowledge of conditions) and contact-based (direct or indirect contact with someone with a condition) have been shown to be effective in reducing stigma (Waqas et al., 2020).
- Service users rely more heavily on the internet for health information than healthcare authorities (Vance, Howe & Dellavalle, 2009).
- Social media and the internet have become a common medium to deliver mental health and stigma interventions, such as the In One Voice campaign (Livingston et al., 2014).

Purpose

- The purpose of this exploratory study was to compare the effectiveness of contact-based and psychoeducational interventions utilizing media from YouTube, which has a short duration and often made by non-healthcare professionals. It was hypothesized that:
 1. Participants in psychoeducational and contact-based intervention groups would display decreased desire for social distancing, negative attitudes, and intended discrimination towards schizophrenia at post-intervention.
 2. At the longitudinal measure, both groups would display a decrease of intended discrimination, and increase of negative attitudes and social distance compared to post-intervention scores.

Methods

- Participants were self-selected from the HSS research pool at Douglas College.
- The study employed a pretest-posttest design and independent groups design.
- Participants were exposed to one of two videos.
- Participants were measured at three distinct points in time, at baseline, post-intervention and a 1-week follow-up.

Table 1
Demographics

Variables	Contact-Based (n=25)		Psychoeducation (n=24)		
	Mean	SD	Mean	SD	
Age	26.12	5.99	26.71	10.94	
Gender	n	%	n	%	
	Male	5	20.0	9	37.5
	Female	18	72.0	14	58.3
	Non-binary	1	4.0	1	4.2
Cultural Background	European	10	40.0	12	50.0
	East Asian	6	24.0	3	12.5
	South Asian	1	4.0	2	8.3
	Latin American	1	4.0	2	8.3
	African	1	4.0		
Familiarity with a person with schizophrenia	First Nations or Indigenous	1	4.0		
	Southeast Asian	1	4.0	4	16.7
	Middle Eastern	3	12.0	1	4.2
Other	1	4.0			
Familiarity with a person with schizophrenia	9	36.0	3	12.5	

- Desire for social distancing was assessed by the Bogardus Social Distance Scale – Adapted, a 12-item scale, assessing the willingness for intimate and non-intimate contact (Norman, Windell, & Manchanda, 2012).
- Negative attitudes were assessed by the Mental Illness Belief Measure, a 23-item scale, rating attitudes about schizophrenia (Norman, Windell, & Manchanda, 2012).
- Intended discrimination was assessed by the Reported and Intended Behaviour Scale, an 8-item scale, assessing willingness for cohabitation with stigmatized groups (Evans-Lacko et al., 2011).

Results

- Out of 65 participants, 9 were removed due to incomplete scores at T1-T2 and 7 due to duplicates, totalling 49.
- At T2, from 45 participants, 5 were removed due to incomplete scores and 6 due to lack of T1-T2 data, totalling 34.

Figure 1
Independent Samples Group Mean Scores per Measurement

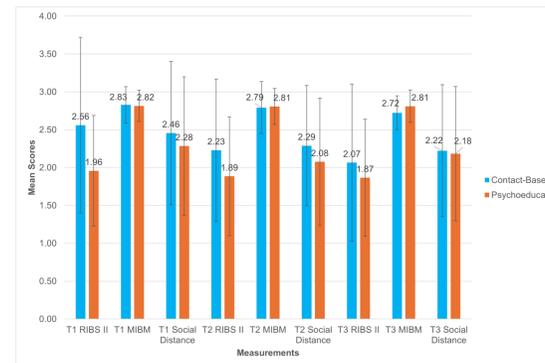


Table 2
Independent Samples t-test

	Contact-based		Psychoeducation		df	t	p	Cohen's d
	M	SD	M	SD				
T1 RIBS	2.56	1.16	1.96	0.73	40.62	2.18	.035*	0.618
T1 MIBM	2.82	0.24	2.81	0.21	46.5	0.21	.830	0.061
T1 Social Distance	2.45	0.95	2.28	0.91	47	0.65	.521	0.185
T2 RIBS	2.23	0.94	1.88	0.78	46.10	1.39	.170	0.397
T2 MIBM	2.79	0.34	2.81	0.24	42.67	-0.17	.862	-0.050
T2 Social Distance	2.29	0.79	2.08	0.84	46.56	0.91	.366	0.261
T3 RIBS	2.66	1.04	1.87	0.77	31.92	0.64	.526	0.214
T3 MIBM	2.72	0.22	2.81	0.21	30.80	-1.15	.258	-0.396
T3 Social Distance	2.22	0.87	2.18	0.89	29.92	0.13	.895	0.046

Table 3
Paired Samples Test

Pairs	M	SD	95% Confidence Interval		df	t	p	Cohen's d
			Lower	Upper				
T1 RIBS - T2 RIBS	0.20	0.73	-0.005	0.414	48	1.96	.056	0.280
T2 RIBS - T3 RIBS	0.15	0.50	-0.026	0.320	33	1.73	.094	0.286
T1 MIBM - T2 MIBM	0.02	0.29	-0.061	0.105	48	0.53	.598	0.07
T2 MIBM - T3 MIBM	-0.04	0.26	-0.132	0.053	33	-0.87	.389	-0.110
T1 Social Distance - T2 Social Distance	0.19	0.44	0.061	0.313	48	2.99	.004*	0.427
T2 Social Distance - T3 Social Distance	0.06	0.34	-0.055	0.182	33	1.10	.281	0.188

- The results from this study did not support the hypothesis of intended discrimination decreasing. In addition, negative attitudes did not change for the psychoeducation group.
- The results supported the predicted reduction of desire for social distance for both groups post-intervention, and of negative attitudes in the contact-based group.
- The hypothesis predicting change of measures at T3 compared to T2 was not supported, except for social distancing for the psychoeducation group.

Discussion

- Paired sample t-tests indicate a significant effect of interventions in reducing desire for social distance post-intervention alike previous findings (Livingston et al., 2014; Fretian et al., 2021).
- Obtained RIBS results had the opposite effect direction than expected.
- Obtained results are conflicting for social distance and intended discrimination.
- Mean changes from T2 to T3 did not support findings from the literature.
- MIBM scores for the psychoeducation group were incongruent with previous findings in the literature with no mean reduction (Fretian et al., 2021).
- Results suggested the contact-based intervention was superior to the psychoeducational intervention in reducing desire for social distance and negative attitudes.
- Limited sample size of study and 30.62% attrition rate fails to achieve necessary power to draw meaningful conclusions from results.
- The chosen timespan at T3 could have influenced unexpected scores. Future studies should consider multiple longitudinal measures.
- Brain filler questionnaires did not sufficiently lengthen time between measurements. Future studies should aim for longer intervals.
- Future studies could evaluate different intervention durations such as short-form content (up to 60 seconds) and explore more differences in intimate and non-intimate social contact.

References

- Cabassa, L., Piscitelli, S., Haselden, M., Lee, R., Essock, S., Dixon, L. (2018). Understanding pathways to care of individuals entering a specialized early intervention service for first episode psychosis. *Psychiatric Services, 69*(6), 648-656.
- Evans-Lacko, S., Rose, D., Little, K., Flach, C., Rhydderch, D., Henderson, C., & Thornicroft, G. (2011). Development and psychometric properties of the Reported and Intended Behaviour Scale (RIBS): a stigma-related behaviour measure. *Epidemiology and Psychiatric Sciences, 20*, 263-271. doi:10.1017/S2045796011000308
- Fretian, A., Graf, P., Kirchoff, S., Glinphratum, G., Bollweg, T., Sauzet, O., Bauer, U. (2021). The long-term effectiveness of interventions addressing mental health literacy and stigma of mental illness in children and adolescents: systematic review and meta-analysis. *International Journal of Public Health, 66*.
- Henderson, C., Evans-Lacko, S., Thornicroft, G. (2013). Mental illness stigma, help seeking, and public health programs. *American Journal of Public Health, 103*(5), 777-780.
- Livingston, J., Cianfrone, M., Korf-Uzan, K., Coniglio, C. (2014). Another time point, a different story: one year effects of a social media intervention on the attitudes of young people towards mental health issues. *Social Psychiatry and Psychiatry Epidemiology, 49*, 985-990.
- Morgan, A., Reavley, N., Ross, A., Too, L., Jorm, A. (2018). Interventions to reduce stigma towards people with severe mental illness: systematic review and meta-analysis. *Journal of Psychiatric Research, 103*, 120-133.
- Norman, R., Windell, D., & Manchanda, R. (2012). Bogardus Social Distance Scale--Adapted [Database record]. Retrieved from PsycTESTS. doi: https://dx.doi.org/10.1037/135129-000
- Norman, R., Windell, D., & Manchanda, R. (2012). Mental Illness Beliefs Measure [Database record]. Retrieved from PsycTESTS. doi: https://dx.doi.org/10.1037/135127-000
- Thornicroft, G., Brohan, E., Rose, D., Sartorius, N., Lesse, M. (2009). Global pattern of experienced and anticipated discrimination against people with schizophrenia: a cross-sectional survey. *Lancet, 373*, 408-415.
- Thornicroft, G., Mehta, N., Clement, S., Evans-Lacko, S., Doherty, M., Rose, D., Koschorke, M., Shihaye, R., O'Reilly, C., Henderson, C. (2016). Evidence for effective interventions to reduce mental-health-related stigma and discrimination. *Lancet, 387*, 1123-1132.
- Vance, K., Howe, W., Dellavalle, R. (2009). Social internet sites as a source of public health information. *Dermatologic Clinics, 27*(2), 133-136.