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| Table S1. Effects of BMM and RCM interventions on stigma |
|  | Biomedical messages video lecture(BMM)Mean ± SD(Effect size)a) | Recommended messages video lecture(RCM)Mean ± SD(Effect size)a) | Main effect of Time | Main effect of Groupb) | Time x Group interactionb) |
| B [95% CI]p value | B [95% CI]p value | B [95% CI]p value |
| MIDUS |  |  |  |  |  |  |  |
|  Baseline | 16.60 ± 6.93 | 17.84 ± 7.53 | 0 (ref) | 1.24 [–0.83, 3.31]p = .23 | 0 (ref) |
|  Post-test | 10.49 ± 6.12(0.93) | 12.57 ± 7.27(0.71) | **–6.11 [–7.42, –4.81]****p < .001** | 0.84 [–1.01, 2.69]p = .37 |
| 1-month follow-up | 11.04 ± 7.07(0.79) | 14.17 ± 8.71(0.45) | **–5.87 [–7.44, –4.30]****p < .001** | 2.20 [–0.02, 4.42]p = .05 |
|  1-year follow-up | 14.34 ± 8.58(0.29) | 16.43 ± 8.28(0.18) | **–2.56 [–4.27, –0.85]****p < .01** | 0.67 [–1.78, 3.13]p = .59 |
| RIBS-J future |  |  |  |  |  |
|  Baseline | 12.49 ± 3.73 | 12.04 ± 3.61 | 0 (ref) | –0.44 [–1.44, 0.55]p = .38 | 0 (ref) |
|  Post-test | 14.30 ± 3.23(0.52) | 14.57 ± 3.71(0.69) | **1.81 [1.22, 2.40]****p < .001** | 0.72 [–0.11, 1.55]p = .09 |
| 1-month follow-up | 14.07 ± 2.91(0.47) | 13.74 ± 3.23(0.50) | **1.51 [0.90, 2.12]****p < .001** | 0.24 –0.62, 1,11]p = .58 |
|  1-year follow-up | 13.10 ± 3.47(0.17) | 11.88 ± 4.02(0.04) | 0.68 [–0.06, 1.43]p = .07 | –0.72 [–1.80, 0.35]p = .19 |
| RIBS-J past |  |  |  |  |  |
| Baseline | 0.62 ± 0.89 | 0.79 ± 1.06 | 0 (ref) | 0.16 [–0.12, 0.45]p = .26 | 0 (ref) |
|  1-year follow-up | 0.81 ± 1.09(0.19) | 0.57 ± 0.92(0.22) | 0.15 [–0.05, 0.34]p = .14 | **–0.38 [–0.66, –0.10]****p < .01** |
| B: Non-standardized regression coefficients; SD: Standard deviation; CI: Confidence interval; ref: Reference; RIBS-J: Japanese version of Reported and Intended Behaviour Scale; MIDUS, Mental Illness and Disorder Understanding Scale; a) Cohen’s d, d = (*M*Timet – *MTime*0) ⁄ *SD*pooled, *SD*pooled = √((*SD*Timet2 + *SD*Time02) ⁄ 2), Timet = 1 (post-test survey), 2 (1-month follow-up survey), or 3 (1-year follow-up survey); b) Reference group is BMM group |

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| Table S2. Effects of BMM and RCM interventions on the MIDUS subscale |
|  | Biomedical messages video lecture(BMM)Mean ± SD(Effect size)a) | Recommended messages video lecture(RCM)Mean ± SD(Effect size)a) | Main effect of Time | Main effect of Groupb) | Time x Group interactionb) |
| B [95% CI]p value | B [95% CI]p value | B [95% CI]p value |
| MIDUS\_TR |  |  |  |  |  |  |  |
|  Baseline | 3.67 ± 2.65 | 4.03 ± 3.10 | 0 (ref) | 0.37 [–0.47, 1.20]p = .39 | 0 (ref) |
|  Post-test | 3.18 ± 2.81(0.18) | 2.11 ± 2.68(0.66) | –0.49 [–1.04, 0.06]p = .08 | **-1.43 [–2.22, -0.65]p < .001** |
| 1-month follow-up | 3.12 ± 2.78(0.20) | 3.46 ± 3.75(0.17) | –0.66 [–1.35, 0.03]p = .06 | 0.17 [–0.80, 1.15]p = .73 |
|  1-year follow-up | 3.84 ± 3.73(0.05) | 3.66 ± 3.22(0.12) | 0.10 [–0.64, 0.84]p = .79 | -0.49 [–1.55, 0.57]p = .36 |
| MIDUS\_EM |  |  |  |  |  |
|  Baseline | 9.81 ± 4.15 | 10.26 ± 3.95 | 0 (ref) | 0.40 [–0.74, 1.54]p = .49 | 0 (ref) |
|  Post-test | 5.26 ± 3.40(1.21) | 8.42 ± 4.27(0.45) | **-4.60 [-5.35, -3.86]****p < .001** | **2.76 [1.71, 3.81]****p < .001** |
| 1-month follow-up | 5.59 ± 3.54(1.10) | 7.89 ± 4.28(0.58) | **-4.37 [-5.17, -3.56]****p < .001** | **1.89 [0.75, 3.03]p < .01** |
|  1-year follow-up | 7.53 ± 3.71(0.58) | 9.43 ± 4.84(0.19) | **-2.53 [-3.48, -1.58]****p < .001** | **1.39 [0.03, 2.75]p < .05** |
| MIDUS\_SR |  |  |  |  |  |
|  Baseline | 3.09 ± 2.26 | 3.55 ± 2.54 | 0 (ref) | 0.46 [–2.00, 1.12]p = .17 | 0 (ref) |
|  Post-test | 2.06 ± 1.87(0.50) | 2.07 ± 2.37(0.60) | **-1.03 [-1.49, -0.58]****p < .001** | -0.43 [-1.07, 0.22]p = .19 |
| 1-month follow-up | 2.33 ± 2.09(0.35) | 2.82 ± 2.63(0.28) | **-0.84 [-1.36, -0.32]****p < .01** | 0.12 [-0.61, 0.85]p = .75 |
|  1-year follow-up | 2.97 ± 2.61(0.05) | 3.34 ± 2.35(0.09) | -0.15 [-0.70, 0.40]p = .60 | -0.19 [-0.97, 0.60]p = .64 |
| B: Non-standardized regression coefficients; SD: Standard deviation; CI: Confidence interval; ref: Reference; MIDUS, Mental Illness and Disorder Understanding Scale; MIDUS\_TR: Treatability of illness of MIDUS; MIDUS\_EM: Efficacy of medication of MIDUS; MIDUS\_SR: Social Recognition of MIDUS; a) Cohen’s d, d = (*M*Timet – *MTime*0) ⁄ *SD*pooled, *SD*pooled = √((*SD*Timet2 + *SD*Time02) ⁄ 2), Timet = 1 (post-test survey), 2 (1-month follow-up survey), or 3 (1-year follow-up survey); b) Reference group is BMM group |

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| Table S3. Changes of proportion of mental health-related experience in this trial |  |
|  | Biomedical messages video lecture(BMM) | Recommended messages video lecture(RCM) | *Statistical values*a) |
| Baselinen = 90 | 1-year follow-upn = 73 | Baselinen = 89 | 1-year follow-up n = 68 |  |
|  |  |  |  |  |  |
| Having mental health problems, n (%) | 21 (23.33) | 22 (30.14) | 24 (26.97) | 15 (22.06) | *χ2= 0.81, p = 0.34* |
| Receiving care/treatment from professionals, n (%) | 11 (12.22) | 13 (17.81) | 14 (15.73) | 12 (17.65) | *χ2= 0.00, p = 1.00* |
| Attending a lecture about mental health problems, n (%) | 38 (42.22) | 38 (52.05) | 31 (34.83) | 36 (52.94) | *χ2= 0.00, p = 1.00* |
| Viewing media describing an individual with mental health problemsb), n (%) | 72 (80.00) | 65 (89.04) | 65 (73.03) | 57 (83.82) | *χ2= 0.44, p = 0.46* |
| Seeking help from family members and close friends for mental health problems, n (%) | 24 (26.67) | 18 (24.66) | 21 (23.60) | 15 (22.06) | *χ2= 0.03, p = 0.84* |
| 1. Comparisons between groups at 1-year follow-up survey were tested using chi-square test. In addition, comparison of 1-year follow-up survey with baseline survey was tested using McNemar’s test. The statistical significance threshold was adjusted to 0.05/10 = 0.005 with Bonferroni correction. The proportions of "Attending a lecture about mental health problems" in RCM was significantly increased (χ2= 9.80, p = 0.003).
2. Media include television, newspapers, internet, etc.
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| Table S4. Effects of BMM and RCM interventions on preference and intention to seek help |
|  | Biomedical messages video lecture(BMM)Mean ± SD(Effect size)a) | Recommended messages video lecture(RCM)Mean ± SD(Effect size)a) | Main effect of Timea) | Main effect of Groupb) | Time x Group interactionb) |
| B [95% CI]p value | B [95% CI]p value | B [95% CI]p value |
| Intention to seek-help |  |  |  |  |  |
|  Baseline | 3.76 ± 0.93 | 3.73 ± 0.89 | 0 (ref) | –0.03 [–0.28, 0.23]p = .85 | 0 (ref) |
|  Post-test | 3.98 ± 0.94 (0.23) | 4.09 ± 0.87 (0.41) | **0.22 [0.07, 0.37]****p < .01** | 0.14 [–0.07, 0.35]p = .20 |
| 1-month follow-up | 3.79 ± 0.90 (0.03) | 3.70 ± 0.94 (0.03) | 0.12 [–0.05, 0.29]p = .17 | –0.15 [–0.39, 0.91]p = .22 |
|  1-year follow-up | 3.88 ± 0.92(0.13) | 3.85 ± 1.03(0.12) | 0.13 [–0.09, 0.36]p = .25 | 0.04 [–0.29, 0.36]p = .83 |
| Intention to disclose |  |  |  |  |  |
|  Baseline | 3.12 ± 1.55 | 2.97 ± 1.59 | 0 (ref) | –0.16 [–0.60, 0.28]p = .49 | 0 (ref) |
|  Post-test | 3.31 ± 1.61 (0.12) | 3.47 ± 1.62 (0.31) | 0.19 [–0.02, 0.40]p = .08 | **0.32 [0.02, 0.62]p < .05** |
| 1-month follow-up | 3.39 ± 1.49 (0.18) | 3.26 ± 1.63 (0.18) | **0.33 [0.04, 0.63]****p < .05** | –0.01 [–0.43, 0.41]p = .97 |
|  1-year follow-up | 3.14 ± 1.55(0.01) | 3.16 ± 1.67(0.12) | -0.01 [–0.40, 0.37]p = .95 | 0.18 [–0.38, 0.75]p = .52 |
| B: Non-standardized regression coefficients; SD: Standard deviation; CI: confidence interval; ref: Reference; a: Cohen’s d, d = (*M*Timet – *MTime*0) ⁄ *SD*pooled, *SD*pooled = √((*SD*Timet2 + *SD*Time02) ⁄ 2), Timet = 1 (post-test survey), 2 (1-month follow-up survey), or 3 (1-year follow-up survey); b: Reference group is BMM group |