Appendix 1

Factors That Help and Hinder the Implementation of Digital Depression Prevention Programs: School-Based Cross-Sectional Study

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Tables

Table S1. Barriers to the implementation of a digital mental health program in schools perceived by teachers and counselors.

| Barriers                                | Teachers At least moderately challenging, n (%) | Teachers At least very challenging, n (%) | School Counselors At least moderately challenging, n (%) | School Counselors At least very challenging, n (%) |
|-----------------------------------------|------------------------------------------------|------------------------------------------|---------------------------------------------------------|--------------------------------------------------|
| **Logistical factors**                  | N=91                                           | N=89                                     | N=89                                                    | N=89                                             |
| Time                                    | 70 (77)                                        | 25 (28)                                  | 84 (94)                                                 | 45 (51)                                          |
| Staff availability                      | 49 (54)                                        | 14 (15)                                  | 56 (63)                                                 | 30 (34)                                          |
| Room availability                       | 37 (41)                                        | 13 (14)                                  | 54 (61)                                                 | 27 (30)                                          |
| Computer availability                  | 51 (56)                                        | 23 (25)                                  | 43 (48)                                                 | 22 (25)                                          |
| Technical infrastructure and support    | 29 (32)                                        | 11 (12)                                  | 29 (33)                                                 | 8 (9)                                            |
| **School support**                      | N=90                                           | N=89                                     | N=89                                                    | N=89                                             |
| Obtaining school principal support      | 27 (30)                                        | 5 (6)                                    | 39 (44)                                                 | 11 (12)                                          |
| Obtaining support from other teachers   | 42 (47)                                        | 7 (8)                                    | 53 (60)                                                 | 5 (6)                                            |
| Obtaining administrative support        | 44 (49)                                        | 10 (11)                                  | 54 (61)                                                 | 10 (11)                                          |
| Obtaining parental support              | 36 (40)                                        | 5 (6)                                    | 44 (49)                                                 | 8 (9)                                            |
| **Suitability of the program**          | N=88                                           | N=87                                     | N=88                                                    | N=87                                             |
| Concern the program will increase risk of mental illness | 13 (15)                                        | 4 (5)                                    | 6 (7)                                                   | 1 (1)                                            |
| Concern therapy should be face-to-face not online | 26 (30)                                        | 5 (6)                                    | 18 (21)                                                 | 4 (5)                                            |
| Concern mental health programs should only be delivered to those with symptoms | 9 (10)                                         | 9 (10)                                   | 7 (8)                                                   | 1 (1)                                            |
| Concern about student privacy           | 28 (32)                                        | 6 (7)                                    | 40 (46)                                                 | 6 (7)                                            |
| **Other factors**                       | N=87                                           | N=87                                     | N=87                                                    | N=87                                             |
| Student engagement                     | 51 (59)                                        | 12 (14)                                  | 52 (60)                                                 | 13 (15)                                          |
| Feeling that delivering this program is not my role | 20 (23)                                        | 7 (8)                                    | 32 (37)                                                 | 11 (13)                                          |
| Worry that the program will uncover mental health issues I am not equipped to deal with (teachers only) | 39 (45)                                        | 9 (10)                                   | NA                                                      | NA                                               |
| Responding to high-risk students uncovered by the program (counselors only) | NA                                             | NA                                       | 28 (32)                                                 | 28 (32)                                          |

aData are n (%) of respondents who indicated the factor would be ‘extremely’, ‘very’ or ‘moderately’ challenging to implementation. bData in brackets reflects ‘extremely’ or ‘very’.
Table S2. Barriers to the implementation of a digital mental health program in schools perceived by principals.

| Barriers                                | Principals n=11 |
|-----------------------------------------|------------------|
|                                         | At least moderately challenging*, n (%) | At least very challengingb, n (%) |
| Costs and resourcing                    |                  |
| Time                                    | 7 (64)           | 4 (36)          |
| Staff availability                      | 6 (55)           | 1 (9)           |
| Funding                                 | 5 (45)           | 2 (18)          |
| School support                          |                  |
| Obtaining school board support          | 1 (9)            | 0 (0)           |
| Obtaining support from teachers         | 3 (27)           | 0 (0)           |
| Obtaining support from counselling/wellbeing staff | 1 (9)            | 0 (0)           |
| Obtaining support from parents          | 3 (27)           | 0 (0)           |
| Suitability of the program              |                  |
| Concern the program will increase risk of mental illness | 0 (0) | 0 (0) |
| Concern therapy should be face-to-face not online | 4 (36) | 2 (18) |
| Concern mental health programs should only be delivered to those with symptoms | 1 (9) | 0 (0) |
| Other factors                           |                  |
| Ensuring the program is compatible with school values | 3 (27) | 2 (18) |
| Overcoming concern that school performance indicators are linked to academic and not emotional outcomes | 2 (18) | 1 (9) |

*Data are n (%) of respondents who indicated the factor would be ‘extremely’, ‘very’ or ‘moderately’ challenging to implementation. bData in brackets reflects ‘extremely’ or ‘very’.
Table S3. Facilitators to the implementation of a digital mental health program in schools perceived by teachers and counselor.

| Facilitators                                      | Teachers At least moderately challenging, n (%) | Teachers At least very challenging, n (%) | Counselors At least moderately challenging, n (%) | Counselors At least very challenging, n (%) |
|---------------------------------------------------|-----------------------------------------------|-------------------------------------------|--------------------------------------------------|---------------------------------------------|
| **Logistical Factors**                            |                                               |                                           |                                                  |                                             |
| Allowing students to use of personal devices for the program | 72 (84)                                       | 50 (58)                                   | 73 (84)                                          | 48 (55)                                     |
| **School Support**                                |                                               |                                           |                                                  |                                             |
| Having support from the school principal          | 76 (88)                                       | 67 (78)                                   | 83 (95)                                          | 75 (86)                                     |
| Having the delivery of the program recognized by the principal as part of the job | 72 (84)                                       | 56 (65)                                   | 73 (84)                                          | 57 (66)                                     |
| Having support from other teachers                | 78 (91)                                       | 63 (73)                                   | 84 (97)                                          | 72 (83)                                     |
| Having support from parents                       | 78 (91)                                       | 63 (73)                                   | 83 (97)                                          | 65 (76)                                     |
| Having administrative support                     | 74 (89)                                       | 49 (59)                                   | 83 (97)                                          | 68 (79)                                     |
| Receiving practical support from the program      | 77 (93)                                       | 63 (76)                                   | 81 (94)                                          | 66 (77)                                     |
| development team to assist with implementation if needed |                                               |                                           |                                                  |                                             |
| Having a school staff member responsible for      | 77 (93)                                       | 65 (78)                                   | 83 (97)                                          | 69 (80)                                     |
| answering questions or concerns                    |                                               |                                           |                                                  |                                             |
| Sharing responsibility for implementing the       | 77 (93)                                       | 58 (70)                                   | 84 (98)                                          | 69 (80)                                     |
| program with other staff members                  |                                               |                                           |                                                  |                                             |
| **Suitability of the Program**                    |                                               |                                           |                                                  |                                             |
| Knowledge of the program’s efficacy               | 80 (96)                                       | 63 (76)                                   | 83 (98)                                          | 77 (91)                                     |
| Knowledge that the program is beneficial for both academic and emotional outcomes | 80 (96)                                       | 66 (80)                                   | 84 (99)                                          | 78 (92)                                     |
| **Flexibility**                                   |                                               |                                           |                                                  |                                             |
| Deciding which age group to deliver the program to | 73 (89)                                       | 49 (60)                                   | 78 (93)                                          | 57 (68)                                     |
| Deciding when in the school year to deliver the program | 80 (98)                                       | 69 (84)                                   | 81 (96)                                          | 63 (75)                                     |
| Delivering the program only to those you feel need it | 39 (48)                                       | 18 (22)                                   | 56 (67)                                          | 23 (27)                                     |
| **Other Factors**                                 |                                               |                                           |                                                  |                                             |
| Having the program aligned to the school’s        | 75 (90)                                       | 59 (71)                                   | 73 (85)                                          | 57 (66)                                     |
| philosophy                                        |                                               |                                           |                                                  |                                             |
| Having the program aligned to the PDHPE curriculum | 72 (88)                                       | 55 (67)                                   | 76 (90)                                          | 50 (60)                                     |
| Having a screening component to identify students at risk with information transferred to school counselor | 76 (93)                                       | 56 (68)                                   | 76 (90)                                          | 64 (76)                                     |
| Having the program available at no cost           | 82 (100)                                      | 79 (96)                                   | 83 (99)                                          | 76 (90)                                     |
| Having the opportunity to attend face-to-face training in how to deliver the program | 76 (93)                                       | 61 (74)                                   | 77 (92)                                          | 67 (80)                                     |
| Having a training manual to support               | 78 (95)                                       | 61 (74)                                   | 81 (96)                                          | 68 (81)                                     |
| implementation                                     |                                               |                                           |                                                  |                                             |
| Receiving feedback about the impact and success of the program from students | 79 (96)                                       | 66 (81)                                   | 83 (99)                                          | 78 (93)                                     |

aData are n (%) of respondents who indicated the factor would be ‘Extremely’, ‘Very’ or ‘Moderately’ helpful or beneficial in being able to implement the program. bData in brackets reflects ‘Extremely’ or ‘Very’.
Table S4. Facilitators to the implementation of a digital mental health program in schools perceived by principals.

| Facilitators                                                                 | Principals |
|----------------------------------------------------------------------------|------------|
|                                                                             | $n=10$     |
|                                                                             | At least moderately challenging, n (%) | At least very challenging, n (%) |
| **Costs and resourcing**                                                    |            |
| Having the program available at no cost                                     | 7 (70)     | 5 (50)      |
| **School support**                                                          |            |
| Having support from the school board                                        | 7 (70)     | 3 (30)      |
| Having support from teachers                                                | 5 (50)     | 7 (70)      |
| Having a school staff member selected to supervise and take responsibility  | 5 (50)     | 7 (70)      |
| for the delivery of the program                                            |            |
| Having support from the school counselor/wellbeing staff                    | 9 (90)     | 8 (80)      |
| Having support from parents                                                 | 7 (70)     | 6 (60)      |
| **Suitability of the program**                                              |            |
| Knowledge of the program’s efficacy                                         | 10 (100)   | 8 (80)      |
| Knowledge that the program is beneficial for both academic and emotional    | 10 (100)   | 8 (80)      |
| outcomes                                                                   |            |
| **Flexibility**                                                             |            |
| Deciding when in the school year to deliver the program                     | 10 (100)   | 10 (100)    |
| **Other factors**                                                           |            |
| Having endorsement from the Department of Education                         | 6 (60)     | 5 (50)      |
| Having endorsement from principal leadership groups                         | 8 (80)     | 6 (60)      |
| Having the program align with school philosophy                             | 10 (100)   | 10 (100)    |
| Having the program aligned to the PDHPE curriculum                          | 9 (90)     | 6 (60)      |
| Having a screening component to identify students at risk with information  | 10 (100)   | 10 (100)    |
| transferred to school counselor                                             |            |
| Receiving feedback about the impact and success of the program from students| 10 (100)   | 10 (100)    |
| Having training available to staff who are responsible for supervising the | 9 (90)     | 7 (70)      |
| program                                                                     |            |

*Data are n (%) of respondents who indicated the factor would be ‘Extremely’, ‘Very’ or ‘Moderately’ helpful or beneficial in being able to implement the program. *Data in brackets reflects ‘Extremely’ or ‘Very’.