

# BEACON Version for students in Year 6 to Year 12 - Scoring

BEACON (Brief Evaluation of Adolescents and Children Online) is a mental health screening tool for students to do in school. It aims to identify students who may be going through a difficult time and need additional support. The version for students in Year 6 to Year 12 has 35 items in total and consists of four subscales: anxiety (10 items), depression (9 items), attention/hyperactivity problems (8 items), and eating difficulties (8 items).

### Administration

The authors recommend computer-based administration via online survey tools, such as SurveyMonkey or SurveyGizmo. BEACON takes approximately 5 minutes to complete. Respondents indicate the extent to which items describe how they have felt over the past few weeks, on the following 5-point scale:

- 1 not at all/not at all hard
- 2 only a little/only a little hard
- 3 sometimes/sometimes hard
- 4 quite a lot/quite hard
- 5 a great deal/ very hard

# Scoring

Subscales are scored by summing scores from items 1-10 for the anxiety subscale, items 11-19 for the depression subscale, items 20-27 for the attention/hyperactivity problems subscale, and items 28-35 for the eating difficulties subscale. Raw scores range from 10 to 50 on the anxiety subscale, from 9 to 45 on the depression subscale, from 8 to 40 on the attention/hyperactivity problems subscale, and from 8 to 40 on the eating difficulties subscale.

Higher scores on the subscales are suggestive of higher mental health risk; conversely, lower scores are associated with lower mental health risk.

### Interpretation

Results can be interpreted using Table 1 to convert raw scores into T-scores, which provide guidelines to relevant cut-off points to identify students who might benefit from further evaluation or referral. For example, based on mental health prevalence data of the Australian population (Lawrence et al., 2015), cut-offs at T-scores of 66 (reflecting the highest 7%) for anxiety and attention/hyperactivity problems, 73 for depression and 74 for eating difficulties (reflecting the highest 3%) may be used to identify students for additional follow-up support. However, if a school has very limited local resources, then they might select an even higher cut-off, or if they plan to implement broad, early intervention programs, then a lower cut-off may be warranted.

For details about the psychometric evaluation of BEACON, please refer to Rapee et al. (2024). The Brief Evaluation of Adolescents and Children Online (BEACON): Psychometric development of a mental health screening measure for school students. *Journal of Clinical Psychology*, http://doi.org/10.1002/jclp.23673.



# Table 1. Raw Scores, T-Scores and Percentiles for BEACON subscales (Year 6 to Year 12)

| Anxiety subscale |             |       | Depression subscale |             |       | Attention/hyperactivity subscale |             |       | Eating difficulties<br>subscale |             |       |
|------------------|-------------|-------|---------------------|-------------|-------|----------------------------------|-------------|-------|---------------------------------|-------------|-------|
| Raw<br>Score     | T-<br>Score | %     | Raw<br>Score        | T-<br>Score | %     | Raw<br>Score                     | T-<br>Score | %     | Raw<br>Score                    | T-<br>Score | %     |
| 10               | 37          | 6.60  | 9                   | 40          | 18.00 | 8                                | 37          | 10.00 | 8                               | 42          | 28.80 |
| 11               | 38          | 10.70 | 10                  | 41          | 25.90 | 9                                | 39          | 14.90 | 9                               | 43          | 37.80 |
| 12               | 39          | 15.40 | 11                  | 42          | 32.20 | 10                               | 40          | 20.20 | 10                              | 44          | 44.90 |
| 13               | 40          | 20.10 | 12                  | 43          | 38.50 | 11                               | 41          | 25.90 | 11                              | 45          | 50.80 |
| 14               | 41          | 24.90 | 13                  | 44          | 43.40 | 12                               | 42          | 30.90 | 12                              | 47          | 56.00 |
| 15               | 42          | 29.70 | 14                  | 45          | 47.60 | 13                               | 44          | 36.00 | 13                              | 48          | 60.00 |
| 16               | 43          | 34.30 | 15                  | 47          | 51.70 | 14                               | 45          | 40.90 | 14                              | 49          | 63.60 |
| 17               | 44          | 38.50 | 16                  | 48          | 55.20 | 15                               | 46          | 44.90 | 15                              | 50          | 66.40 |
| 18               | 46          | 43.00 | 17                  | 49          | 58.00 | 16                               | 47          | 49.60 | 16                              | 52          | 69.8  |
| 19               | 47          | 47.10 | 18                  | 50          | 61.10 | 17                               | 49          | 53.40 | 17                              | 53          | 72.3  |
| 20               | 48          | 51.00 | 19                  | 51          | 63.50 | 18                               | 50          | 57.30 | 18                              | 54          | 74.6  |
| 21               | 49          | 54.80 | 20                  | 52          | 66.40 | 19                               | 51          | 61.20 | 19                              | 55          | 76.70 |
| 22               | 50          | 58.20 | 21                  | 53          | 69.00 | 20                               | 52          | 64.90 | 20                              | 57          | 78.8  |
| 23               | 51          | 61.50 | 22                  | 54          | 71.40 | 21                               | 54          | 68.20 | 21                              | 58          | 80.8  |
| 24               | 52          | 64.40 | 23                  | 55          | 73.70 | 22                               | 55          | 71.60 | 22                              | 59          | 82.7  |
| 25               | 53          | 67.20 | 24                  | 56          | 76.00 | 23                               | 56          | 74.50 | 23                              | 60          | 84.0  |
| 26               | 54          | 70.00 | 25                  | 57          | 78.00 | 24                               | 57          | 77.60 | 24                              | 62          | 85.8  |
| 27               | 55          | 72.60 | 26                  | 59          | 79.90 | 25                               | 59          | 80.50 | 25                              | 63          | 87.20 |
| 28               | 56          | 75.30 | 27                  | 60          | 82.10 | 26                               | 60          | 83.00 | 26                              | 64          | 88.60 |
| 29               | 58          | 77.80 | 28                  | 61          | 83.90 | 27                               | 61          | 85.60 | 27                              | 65          | 89.8  |
| 30               | 59          | 80.40 | 29                  | 62          | 85.70 | 28                               | 62          | 87.70 | 28                              | 67          | 90.90 |
| 31               | 60          | 82.70 | 30                  | 63          | 87.40 | 29                               | 64          | 89.50 | 29                              | 68          | 92.10 |
| 32               | 61          | 84.60 | 31                  | 64          | 89.00 | 30                               | 65          | 91.10 | 30                              | 69          | 93.10 |
| 33               | 62          | 86.60 | 32                  | 65          | 90.30 | 31                               | 66          | 92.70 | 31                              | 70          | 94.10 |
| 34               | 63          | 88.60 | 33                  | 66          | 91.60 | 32                               | 68          | 94.30 | 32                              | 72          | 95.30 |
| 35               | 64          | 90.20 | 34                  | 67          | 92.70 | 33                               | 69          | 95.70 | 33                              | 73          | 96.3  |
| 36               | 65          | 91.60 | 35                  | 68          | 93.90 | 34                               | 70          | 96.50 | 34                              | 74          | 97.10 |
| 37               | 66          | 93.00 | 36                  | 69          | 94.80 | 35                               | 71          | 97.30 | 35                              | 75          | 97.70 |
| 38               | 67          | 94.20 | 37                  | 71          | 95.50 | 36                               | 73          | 98.10 | 36                              | 77          | 98.30 |
| 39               | 69          | 95.10 | 38                  | 72          | 96.30 | 37                               | 74          | 98.80 | 37                              | 78          | 98.70 |

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| 40 | 70 | 96.00 | 39 | 73 | 97.00  | 38 | 75 | 99.20  | 38 | 79 | 99.00  |
|----|----|-------|----|----|--------|----|----|--------|----|----|--------|
| 41 | 71 | 96.80 | 40 | 74 | 97.70  | 39 | 76 | 99.40  | 39 | 80 | 99.30  |
| 42 | 72 | 97.40 | 41 | 75 | 98.20  | 40 | 78 | 100.00 | 40 | 82 | 100.00 |
| 43 | 73 | 98.10 | 42 | 76 | 98.70  |    |    |        |    |    |        |
| 44 | 74 | 98.50 | 43 | 77 | 99.10  |    |    |        |    |    |        |
| 45 | 75 | 98.90 | 44 | 78 | 99.40  |    |    |        |    |    |        |
| 46 | 76 | 99.20 | 45 | 79 | 100.00 |    |    |        |    |    |        |
| 47 | 77 | 99.50 |    |    |        |    |    |        |    |    |        |
| 48 | 78 | 99.60 |    |    |        |    |    |        |    |    |        |
| 49 | 79 | 99.70 |    |    |        |    |    |        |    |    |        |

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