

## The Mental Health Inventory (MHI-38)

**INSTRUCTIONS:** Please read each question and tick the box by the ONE statement that best describes how things have been FOR YOU during the past month. There are no right or wrong answers.

1. How happy, satisfied, or pleased have you been with your personal life during the past month? **(Tick one)**
  - 1  Extremely happy, could not have been more satisfied or pleased
  - 2  Very happy most of the time
  - 3  Generally, satisfied, pleased
  - 4  Sometimes fairly satisfied, sometimes fairly unhappy
  - 5  Generally dissatisfied, unhappy
  - 6  Very dissatisfied, unhappy most of the time
  
2. How much of the time have you felt lonely during the past month? **(Tick one)**

1 <input type="checkbox"/> All of the time	4 <input type="checkbox"/> Some of the time
2 <input type="checkbox"/> Most of the time	5 <input type="checkbox"/> A little of the time
3 <input type="checkbox"/> A good bit of the time	6 <input type="checkbox"/> None of the time
  
3. How often did you become nervous or jumpy when faced with excitement or unexpected situations during the past month? **(Tick one)**

1 <input type="checkbox"/> Always	4 <input type="checkbox"/> Sometimes
2 <input type="checkbox"/> Very often	5 <input type="checkbox"/> Almost never
3 <input type="checkbox"/> Fairly often	6 <input type="checkbox"/> Never
  
4. During the past month, how much of the time have you felt that the future looks hopeful and promising? **(Tick one)**

1 <input type="checkbox"/> All of the time	4 <input type="checkbox"/> Some of the time
2 <input type="checkbox"/> Most of the time	5 <input type="checkbox"/> A little of the time
3 <input type="checkbox"/> A good bit of the time	6 <input type="checkbox"/> None of the time
  
5. How much of the time, during the past month, has your daily life been full of things that were interesting to you? **(Tick one)**

1 <input type="checkbox"/> All of the time	4 <input type="checkbox"/> Some of the time
2 <input type="checkbox"/> Most of the time	5 <input type="checkbox"/> A little of the time
3 <input type="checkbox"/> A good bit of the time	6 <input type="checkbox"/> None of the time
  
6. How much of the time, during the past month, did you feel relaxed and free from tension? **(Tick one)**

1 <input type="checkbox"/> All of the time	4 <input type="checkbox"/> Some of the time
2 <input type="checkbox"/> Most of the time	5 <input type="checkbox"/> A little of the time
3 <input type="checkbox"/> A good bit of the time	6 <input type="checkbox"/> None of the time

7. During the past month, how much of the time have you generally enjoyed the things you do? **(Tick one)**
- |                            |                        |                            |                      |
|----------------------------|------------------------|----------------------------|----------------------|
| 1 <input type="checkbox"/> | All of the time        | 4 <input type="checkbox"/> | Some of the time     |
| 2 <input type="checkbox"/> | Most of the time       | 5 <input type="checkbox"/> | A little of the time |
| 3 <input type="checkbox"/> | A good bit of the time | 6 <input type="checkbox"/> | None of the time     |
8. During the past month, have you had any reason to wonder if you were losing your mind, or losing control over the way you act, talk, think, feel, or of your memory? **(Tick one)**
- 1  No, not at all
- 2  Maybe a little
- 3  Yes, but not enough to be concerned or worried about
- 4  Yes, and I have been a little concerned
- 5  Yes, and I am quite concerned
- 6  Yes, I am very much concerned about it
9. Did you feel depressed during the past month? **(Tick one)**
- 1  Yes, to the point that I did not care about anything for days at a time
- 2  Yes, very depressed almost every day
- 3  Yes, quite depressed several times
- 4  Yes, a little depressed now and then
- 5  No, never felt depressed at all
10. During the past month, how much of the time have you felt loved and wanted? **(Tick one)**
- |                            |                        |                            |                      |
|----------------------------|------------------------|----------------------------|----------------------|
| 1 <input type="checkbox"/> | All of the time        | 4 <input type="checkbox"/> | Some of the time     |
| 2 <input type="checkbox"/> | Most of the time       | 5 <input type="checkbox"/> | A little of the time |
| 3 <input type="checkbox"/> | A good bit of the time | 6 <input type="checkbox"/> | None of the time     |
11. How much of the time, during the past month, have you been a very nervous person? **(Tick one)**
- |                            |                        |                            |                      |
|----------------------------|------------------------|----------------------------|----------------------|
| 1 <input type="checkbox"/> | All of the time        | 4 <input type="checkbox"/> | Some of the time     |
| 2 <input type="checkbox"/> | Most of the time       | 5 <input type="checkbox"/> | A little of the time |
| 3 <input type="checkbox"/> | A good bit of the time | 6 <input type="checkbox"/> | None of the time     |
12. When you have got up in the morning, this past month, about how often did you expect to have an interesting day? **(Tick one)**
- |                            |              |                            |              |
|----------------------------|--------------|----------------------------|--------------|
| 1 <input type="checkbox"/> | Always       | 4 <input type="checkbox"/> | Sometimes    |
| 2 <input type="checkbox"/> | Very often   | 5 <input type="checkbox"/> | Almost never |
| 3 <input type="checkbox"/> | Fairly often | 6 <input type="checkbox"/> | Never        |
13. During the past month, how much of the time have you felt tense or "high-strung"? **(Tick one)**
- |                            |                        |                            |                      |
|----------------------------|------------------------|----------------------------|----------------------|
| 1 <input type="checkbox"/> | All of the time        | 4 <input type="checkbox"/> | Some of the time     |
| 2 <input type="checkbox"/> | Most of the time       | 5 <input type="checkbox"/> | A little of the time |
| 3 <input type="checkbox"/> | A good bit of the time | 6 <input type="checkbox"/> | None of the time     |
14. During the past month, have you been in firm control of your behaviour, thoughts, emotions or feelings? **(Tick one)**
- |                            |                        |                            |                                 |
|----------------------------|------------------------|----------------------------|---------------------------------|
| 1 <input type="checkbox"/> | Yes, very definitely   | 4 <input type="checkbox"/> | No, not too well                |
| 2 <input type="checkbox"/> | Yes, for the most part | 5 <input type="checkbox"/> | No, and I am somewhat disturbed |
| 3 <input type="checkbox"/> | Yes, I guess so        | 6 <input type="checkbox"/> | No, and I am very disturbed     |

15. During the past month, how often did your hands shake when you tried to do something? **(Tick one)**
- |                            |              |                            |              |
|----------------------------|--------------|----------------------------|--------------|
| 1 <input type="checkbox"/> | Always       | 4 <input type="checkbox"/> | Sometimes    |
| 2 <input type="checkbox"/> | Very often   | 5 <input type="checkbox"/> | Almost never |
| 3 <input type="checkbox"/> | Fairly often | 6 <input type="checkbox"/> | Never        |
16. During the past month, how often did you feel that you had nothing to look forward to? **(Tick one)**
- |                            |              |                            |              |
|----------------------------|--------------|----------------------------|--------------|
| 1 <input type="checkbox"/> | Always       | 4 <input type="checkbox"/> | Sometimes    |
| 2 <input type="checkbox"/> | Very often   | 5 <input type="checkbox"/> | Almost never |
| 3 <input type="checkbox"/> | Fairly often | 6 <input type="checkbox"/> | Never        |
17. How much of the time, during the past month, have you felt calm and peaceful? **(Tick one)**
- |                            |                        |                            |                      |
|----------------------------|------------------------|----------------------------|----------------------|
| 1 <input type="checkbox"/> | All of the time        | 4 <input type="checkbox"/> | Some of the time     |
| 2 <input type="checkbox"/> | Most of the time       | 5 <input type="checkbox"/> | A little of the time |
| 3 <input type="checkbox"/> | A good bit of the time | 6 <input type="checkbox"/> | None of the time     |
18. How much of the time, during the past month, have you felt emotionally stable? **(Tick one)**
- |                            |                        |                            |                      |
|----------------------------|------------------------|----------------------------|----------------------|
| 1 <input type="checkbox"/> | All of the time        | 4 <input type="checkbox"/> | Some of the time     |
| 2 <input type="checkbox"/> | Most of the time       | 5 <input type="checkbox"/> | A little of the time |
| 3 <input type="checkbox"/> | A good bit of the time | 6 <input type="checkbox"/> | None of the time     |
19. How much of the time, during the past month, have you felt downhearted and blue? **(Tick one)**
- |                            |                        |                            |                      |
|----------------------------|------------------------|----------------------------|----------------------|
| 1 <input type="checkbox"/> | All of the time        | 4 <input type="checkbox"/> | Some of the time     |
| 2 <input type="checkbox"/> | Most of the time       | 5 <input type="checkbox"/> | A little of the time |
| 3 <input type="checkbox"/> | A good bit of the time | 6 <input type="checkbox"/> | None of the time     |
20. How often have you felt like crying, during the past month? **(Tick one)**
- |                            |              |                            |              |
|----------------------------|--------------|----------------------------|--------------|
| 1 <input type="checkbox"/> | Always       | 4 <input type="checkbox"/> | Sometimes    |
| 2 <input type="checkbox"/> | Very often   | 5 <input type="checkbox"/> | Almost never |
| 3 <input type="checkbox"/> | Fairly often | 6 <input type="checkbox"/> | Never        |
21. During the past month, how often have you felt that others would be better off if you were dead? **(Tick one)**
- |                            |              |                            |              |
|----------------------------|--------------|----------------------------|--------------|
| 1 <input type="checkbox"/> | Always       | 4 <input type="checkbox"/> | Sometimes    |
| 2 <input type="checkbox"/> | Very often   | 5 <input type="checkbox"/> | Almost never |
| 3 <input type="checkbox"/> | Fairly often | 6 <input type="checkbox"/> | Never        |
22. How much of the time, during the past month, were you able to relax without difficulty? **(Tick one)**
- |                            |                        |                            |                      |
|----------------------------|------------------------|----------------------------|----------------------|
| 1 <input type="checkbox"/> | All of the time        | 4 <input type="checkbox"/> | Some of the time     |
| 2 <input type="checkbox"/> | Most of the time       | 5 <input type="checkbox"/> | A little of the time |
| 3 <input type="checkbox"/> | A good bit of the time | 6 <input type="checkbox"/> | None of the time     |
23. How much of the time, during the past month, did you feel that your love relationships, loving and being loved, were full and complete? **(Tick one)**
- |                            |                        |                            |                      |
|----------------------------|------------------------|----------------------------|----------------------|
| 1 <input type="checkbox"/> | All of the time        | 4 <input type="checkbox"/> | Some of the time     |
| 2 <input type="checkbox"/> | Most of the time       | 5 <input type="checkbox"/> | A little of the time |
| 3 <input type="checkbox"/> | A good bit of the time | 6 <input type="checkbox"/> | None of the time     |

24. How often, during the past month, did you feel that nothing turned out for you the way you wanted it to? **(Tick one)**
- |                            |              |                            |              |
|----------------------------|--------------|----------------------------|--------------|
| 1 <input type="checkbox"/> | Always       | 4 <input type="checkbox"/> | Sometimes    |
| 2 <input type="checkbox"/> | Very often   | 5 <input type="checkbox"/> | Almost never |
| 3 <input type="checkbox"/> | Fairly often | 6 <input type="checkbox"/> | Never        |
25. How much have you been bothered by nervousness, or your “nerves”, during the past month? **(Tick one)**
- |                            |  |                            |                                  |
|----------------------------|--|----------------------------|----------------------------------|
| 1 <input type="checkbox"/> | Extremely so, to the point where I could not take care of things | 4 <input type="checkbox"/> | Bothered some, enough to notice  |
| 2 <input type="checkbox"/> | Very much bothered   | 5 <input type="checkbox"/> | Bothered just a little by nerves |
| 3 <input type="checkbox"/> | Bothered quite a bit by nerves                                   | 6 <input type="checkbox"/> | Not bothered at all by this      |
26. During the past month, how much of the time has living been a wonderful adventure for you? **(Tick one)**
- |                            |                        |                            |                      |
|----------------------------|------------------------|----------------------------|----------------------|
| 1 <input type="checkbox"/> | All of the time        | 4 <input type="checkbox"/> | Some of the time     |
| 2 <input type="checkbox"/> | Most of the time       | 5 <input type="checkbox"/> | A little of the time |
| 3 <input type="checkbox"/> | A good bit of the time | 6 <input type="checkbox"/> | None of the time     |
27. How often, during the past month, have you felt so down in the dumps that nothing could cheer you up? **(Tick one)**
- |                            |              |                            |              |
|----------------------------|--------------|----------------------------|--------------|
| 1 <input type="checkbox"/> | Always       | 4 <input type="checkbox"/> | Sometimes    |
| 2 <input type="checkbox"/> | Very often   | 5 <input type="checkbox"/> | Almost never |
| 3 <input type="checkbox"/> | Fairly often | 6 <input type="checkbox"/> | Never        |
28. During the past month, did you think about taking your own life? **(Tick one)**
- |                            |                        |
|----------------------------|------------------------|
| 1 <input type="checkbox"/> | Yes, very often        |
| 2 <input type="checkbox"/> | Yes, fairly often      |
| 3 <input type="checkbox"/> | Yes, a couple of times |
| 4 <input type="checkbox"/> | Yes, at one time       |
| 5 <input type="checkbox"/> | No, never              |
29. During the past month, how much of the time have you felt restless, fidgety, or impatient? **(Tick one)**
- |                            |                        |                            |                      |
|----------------------------|------------------------|----------------------------|----------------------|
| 1 <input type="checkbox"/> | All of the time        | 4 <input type="checkbox"/> | Some of the time     |
| 2 <input type="checkbox"/> | Most of the time       | 5 <input type="checkbox"/> | A little of the time |
| 3 <input type="checkbox"/> | A good bit of the time | 6 <input type="checkbox"/> | None of the time     |
30. During the past month, how much of the time have you been moody or brooded about things? **(Tick one)**
- |                            |                        |                            |                      |
|----------------------------|------------------------|----------------------------|----------------------|
| 1 <input type="checkbox"/> | All of the time        | 4 <input type="checkbox"/> | Some of the time     |
| 2 <input type="checkbox"/> | Most of the time       | 5 <input type="checkbox"/> | A little of the time |
| 3 <input type="checkbox"/> | A good bit of the time | 6 <input type="checkbox"/> | None of the time     |
31. How much of the time, during the past month, have you felt cheerful, lighthearted? **(Tick one)**
- |                            |                        |                            |                      |
|----------------------------|------------------------|----------------------------|----------------------|
| 1 <input type="checkbox"/> | All of the time        | 4 <input type="checkbox"/> | Some of the time     |
| 2 <input type="checkbox"/> | Most of the time       | 5 <input type="checkbox"/> | A little of the time |
| 3 <input type="checkbox"/> | A good bit of the time | 6 <input type="checkbox"/> | None of the time     |

32. During the past month, how often did you get rattled, upset or flustered? **(Tick one)**
- |                            |              |                            |              |
|----------------------------|--------------|----------------------------|--------------|
| 1 <input type="checkbox"/> | Always       | 4 <input type="checkbox"/> | Sometimes    |
| 2 <input type="checkbox"/> | Very often   | 5 <input type="checkbox"/> | Almost never |
| 3 <input type="checkbox"/> | Fairly often | 6 <input type="checkbox"/> | Never        |
33. During the past month, have you been anxious or worried? **(Tick one)**
- 1  Yes, extremely to the point of being sick or almost sick
- 2  Yes, very much so
- 3  Yes, quite a bit
- 4  Yes, some, enough to bother me
- 5  Yes, a little bit
- 6  No, not at all
34. During the past month, how much of the time were you a happy person? **(Tick one)**
- |                            |                        |                            |                      |
|----------------------------|------------------------|----------------------------|----------------------|
| 1 <input type="checkbox"/> | All of the time        | 4 <input type="checkbox"/> | Some of the time     |
| 2 <input type="checkbox"/> | Most of the time       | 5 <input type="checkbox"/> | A little of the time |
| 3 <input type="checkbox"/> | A good bit of the time | 6 <input type="checkbox"/> | None of the time     |
35. How often during the past month did you find yourself trying to calm down? **(Tick one)**
- |                            |              |                            |              |
|----------------------------|--------------|----------------------------|--------------|
| 1 <input type="checkbox"/> | Always       | 4 <input type="checkbox"/> | Sometimes    |
| 2 <input type="checkbox"/> | Very often   | 5 <input type="checkbox"/> | Almost never |
| 3 <input type="checkbox"/> | Fairly often | 6 <input type="checkbox"/> | Never        |
36. During the past month, how much of the time have you been in low or very low spirits? **(Tick one)**
- |                            |                        |                            |                      |
|----------------------------|------------------------|----------------------------|----------------------|
| 1 <input type="checkbox"/> | All of the time        | 4 <input type="checkbox"/> | Some of the time     |
| 2 <input type="checkbox"/> | Most of the time       | 5 <input type="checkbox"/> | A little of the time |
| 3 <input type="checkbox"/> | A good bit of the time | 6 <input type="checkbox"/> | None of the time     |
37. How often, during the past month, have you been waking up feeling fresh and rested? **(Tick one)**
- |                            |                   |                            |                              |
|----------------------------|-------------------|----------------------------|------------------------------|
| 1 <input type="checkbox"/> | Always, every day | 4 <input type="checkbox"/> | Some days, but usually not   |
| 2 <input type="checkbox"/> | Almost every day  | 5 <input type="checkbox"/> | Hardly ever                  |
| 3 <input type="checkbox"/> | Most days         | 6 <input type="checkbox"/> | Never wake up feeling rested |
38. During the past month, have you been under or felt you were under any strain, stress or pressure? **(Tick one)**
- 1  Yes, almost more than I could stand or bear
- 2  Yes, quite a bit of pressure
- 3  Yes, some more than usual
- 4  Yes, some, but about normal
- 5  Yes, a little bit
- 6  No, not at all

## MHI-38 scoring and subscales

All of the 38 MHI items, except two, are scored on a six-point scale (range 1-6). Items 9 and 28 are the exception, each scored on a five-point scale (range 1-5). The pre-coded values of each item are shown on the copy of the instrument on the preceding pages.

The MHI may be aggregated into:

- Six subscales – Anxiety, Depression, Loss of Behavioural / Emotional Control, General Positive Affect, Emotional Ties and Life Satisfaction;
- Two global scales - Psychological Distress and Psychological Well-being; and
- A global Mental Health Index score.

Scoring is made relatively complicated by the fact that items making up the various subscales and global scales may be recoded (or reversed scored) differently depending on the underlying construct being measured.

Details of subscale and global scale scoring are provided below and are based on the following source:

Davies AR, Sherbourne CD, Peterson JR and Ware JE (1998) *Scoring manual: Adult health status and patient satisfaction measures used in RAND's Health Insurance Experiment*. Santa Monica: RAND Corporation.

## Scoring the subscales

The subscales are scored in two steps: (1) item scoring; and (2) the subscales themselves. Of the 38 items, 35 are used to score the six mental health subscales (items 2, 22 and 38 are omitted from the subscales). Each item appears in only one subscale. Table 1 shows the mapping of items to the various subscales.

**Table 1: Item composition of the six MHI subscales included in MHI-38**

Subscale	Component items	Subscale directionality	Subscale raw score range
Anxiety	Items 3, 11, 13, 15, 25, 29, 32, 33 and 35	Higher scores = greater Anxiety	9-54
Depression	Items 9, 19, 30 and 36	Higher scores = greater Depression	4-23
Loss of Behavioural / Emotional Control	Items 8, 14, 16, 18, 20, 21, 24, 27 and 28	Higher scores = greater Loss of Behavioural / Emotional Control	9-53
General Positive Affect	Items 4, 5, 6, 7, 12, 17, 26, 31, 34 and 37	Higher scores = greater Positive Affect	10-60
Emotional Ties	Items 10 and 23	Higher scores = stronger Emotional Ties	2-12
Life Satisfaction	Item 1	Higher scores = greater Life Satisfaction	1-6

*Note: Three items (2, 22, 38) are not used to score the subscales*

When deriving subscale scores, individual item scoring depends on two things:

1. whether higher scores on the coded values of the item responses indicate more frequent or intense occurrence of *favourable* or *unfavourable* mental health symptoms; and
2. whether the item belongs to a *positively* or *negatively* scored mental health subscale.

All subscales are scored so higher scores indicate more of the construct named by the subscale label. Thus, higher scores on three subscales indicate positive states of mental health (General Positive Affect, Emotional Ties, Life Satisfaction); higher scores on the other three subscales indicate negative states of mental health (Anxiety, Depression, Loss of Behavioural/Emotional Control). The aim of item scoring is to ensure that higher scores on each item reflect more of the construct named by the scale to which it belongs.

To illustrate this aspect of the MHI, consider a consumer who responds to Item 4 with the value '6':

4. During the past month, how much of the time have you felt that the future looks hopeful and promising? (**Tick one**)
- |   |   |
|---|---|
| 1 <input type="checkbox"/> All of the time        | 4 <input type="checkbox"/> Some of the time     |
| 2 <input type="checkbox"/> Most of the time       | 5 <input type="checkbox"/> A little of the time |
| 3 <input type="checkbox"/> A good bit of the time | 6 <input type="checkbox"/> None of the time     |

The consumer's response indicates that this favourable experience occurred very infrequently during the past month. Item 4 forms a component of the subscale General Positive Affect, a *positively scored subscale* (ie. higher scores indicate better mental health). Therefore, for the purpose of deriving the General Positive Affect subscale score, the original response must be reversed so higher scores will indicate more frequent occurrence of a favourable aspect of mental health.

Details of item coding rules for calculating raw subscale scores are shown in Table 2 below. After scoring items as indicated, items belonging to each subscale are summed to give subscale scores.

**Table 2: Coding rules for MHI items used to score subscales**

Item Number	Code Value	Recoded value
1, 3, 4, 5, 6, 7, 10, 11, 12, 13, 15, 16, 17, 19, 20, 21, 23, 24, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37	1	6
	2	5
	3	4
	4	3
	5	2
	6	1
8, 14, 18	1	1
	2	2
	3	3
	4	4
	5	5
	6	6
9, 28	1	5
	2	4
	3	3
	4	2
	5	1

## Scoring the global scales - Psychological Distress and Psychological Well-being

The Psychological Distress and Psychological Well-being global scales represent complementary summary scales with Psychological Distress indicating negative states of mental health and Psychological Well-being indicating positive states. Together, they use all 38 items to derive the scores (24 items for Distress, 14 items for Well-being) with no item overlap. Table 3 shows the mapping of items to the two global scales.

**Table 3: Item composition of the MHI global scales**

Global mental health scale	Component items	Subscale directionality	Scale raw score range
Psychological Distress	Items 2, 3, 8, 9, 11, 13, 14, 15, 16, 18, 19, 20, 21, 24, 25, 27, 28, 29, 30, 32, 33, 35, 36 and 38.	Higher scores = greater Psychological Distress	24-142
Psychological Well-being	Items 1, 4, 5, 6, 7, 10, 12, 17, 22, 23, 26, 31, 34 and 37	Higher scores = greater Psychological Well-being	14-84

Like the scoring of the subscales, calculation of the Psychological Distress and Psychological Well-being global scales occurs in two steps: (1) item scoring; and (2) the global subscales themselves. Item scoring depends on two things:

1. whether higher scores on the coded values of the item responses indicate more intense or frequent occurrence of *favourable* or *unfavourable* symptoms of one's mental health; and
2. whether the item belongs to a *positively* or *negatively* scored global scale.

*Both global scales are scored so higher scores indicate more of the construct named by the scale's label.* Thus, higher scores on Psychological Distress indicate negative states of mental health, while higher scores on Psychological Well-being indicate positive states. Rules for scoring the items used to construct the two global scales are shown in Table 4. After scoring items as indicated, items belonging to each global scale are summed to give scale scores.

**Table 4: Coding rules for MHI items used to score the global scales**

Item Number	Code Value	Recoded value
<i>Rules used to score Psychological Distress</i>		
2, 3, 11, 13, 15, 16, 19, 20, 21, 24, 25, 27, 29, 30, 32, 33, 35, 36, 38	1	6
	2	5
	3	4
	4	3
	5	2
	6	1
8, 14, 18	1	1
	2	2
	3	3
	4	4
	5	5
	6	6
9, 28	1	5
	2	4
	3	3
	4	2
	5	1

Item Number	Code Value	Recoded value
<i>Rules used to score Psychological Well-being</i>		
1, 4, 5, 6, 7, 10, 12, 17, 22, 23, 26, 31, 34 and 37	1 2 3 4 5 6	6 5 4 3 2 1

### Scoring the Mental Health Index

The Mental Health Index is a single score based on all 38 items designed as high level summary index of the person's mental health status. High scores on the Mental Health Index indicate greater psychological well being and relatively less psychological distress. The raw score range is 38-226.

The Mental Health Index is calculated in two steps: (1) item scoring; and (2) the Index itself. The objective of item scoring for the Index is to ensure that higher scores on each item reflect more frequent occurrence of favourable mental health symptoms or less frequent occurrence of negative mental health symptoms. Item recoding rules are shown in

Table 5. After scoring the 38 items as indicated, item scores are simply summed to calculate the Index score.

**Table 5: Coding rules for MHI items used to score the Mental Health Index**

Item Number	Code Value	Recoded value
1, 4, 5, 6, 7, 8, 10, 12, 14, 17, 18, 22, 23, 26, 31, 34, 37	1 2 3 4 5 6	6 5 4 3 2 1
2, 3, 11, 13, 15, 16, 19, 20, 21, 24, 25, 27, 29, 30, 32, 33, 35, 36, 38	1 2 3 4 5 6	1 2 3 4 5 6
9, 28	1 2 3 4 5	1 2 3 4 5

### Summary of item subscale and global scale membership and recoding

Table 6 summarises the mapping of each MHI item to the 6 subscales, two global scales and the overall Mental Health Index as well as indicating whether the item is reverse scored for the purposes of constructing the specific summary measure. Note that if an item is reverse scored for calculating its 'parent' subscale score, it is similarly handled for the calculation of the Psychological Distress and Psychological Well-being global scores. However, the majority of items are handled differently in the construction of the Mental Health Index.

**Table 61: Summary of MHI items: Membership and scoring rules for subscales, Global scales and the Mental Health Index**

ITEM	SCORE RANGE	SUBSCALES		PSYCHOLOGICAL DISTRESS		PSYCHOLOGICAL WELL-BEING		MENTAL HEALTH INDEX	
		Subscale membership	Reverse scored	Included?	Reverse scored	Included?	Reverse scored	Reverse scored	Flag
1	1-6	Life Satisfaction	Yes			✓	Yes	Yes	
2	1-6			✓	Yes			No	*
3	1-6	Anxiety	Yes	✓	Yes			No	*
4	1-6	General Positive Affect	Yes			✓	Yes	Yes	
5	1-6	General Positive Affect	Yes			✓	Yes	Yes	
6	1-6	General Positive Affect	Yes			✓	Yes	Yes	
7	1-6	General Positive Affect	Yes			✓	Yes	Yes	
8	1-6	Loss of Behav/Emot Control	No	✓	No			Yes	*
9	1-5	Depression	Yes	✓	Yes			No	*
10	1-6	Emotional Ties	Yes			✓	Yes	Yes	
11	1-6	Anxiety	Yes	✓	Yes			No	*
12	1-6	General Positive Affect	Yes			✓	Yes	Yes	
13	1-6	Anxiety	Yes	✓	Yes			No	*
14	1-6	Loss of Behav/Emot Control	No	✓	No			Yes	*
15	1-6	Anxiety	Yes	✓	Yes			No	*
16	1-6	Loss of Behav/Emot Control	Yes	✓	Yes			No	*
17	1-6	General Positive Affect	Yes			✓	Yes	Yes	
18	1-6	Loss of Behav/Emot Control	No	✓	No			Yes	*
19	1-6	Depression	Yes	✓	Yes			No	*
20	1-6	Loss of Behav/Emot Control	Yes	✓	Yes			No	*
21	1-6	Loss of Behav/Emot Control	Yes	✓	Yes			No	*
22	1-6					✓	Yes	Yes	
23	1-6	Emotional Ties	Yes			✓	Yes	Yes	
24	1-6	Loss of Behav/Emot Control	Yes	✓	Yes			No	*
25	1-6	Anxiety	Yes	Y	Yes			No	*
26	1-6	General Positive Affect	Yes			✓	Yes	Yes	
27	1-6	Loss of Behav/Emot Control	Yes	✓	Yes			No	*
28	1-5	Loss of Behav/Emot Control	Yes	✓	Yes			No	*
29	1-6	Anxiety	Yes	✓	Yes			No	*
30	1-6	Depression	Yes	✓	Yes			No	*
31	1-6	General Positive Affect	Yes			✓	Yes	Yes	
32	1-6	Anxiety	Yes	✓	Yes			No	*
33	1-6	Anxiety	Yes	✓	Yes			No	*
34	1-6	General Positive Affect	Yes			✓	Yes	Yes	
35	1-6	Anxiety	Yes	✓	Yes			No	*
36	1-6	Depression	Yes	✓	Yes			No	*
37	1-6	General Positive Affect	Yes			✓	Yes	Yes	
38	1-6			✓	Yes			No	*

\* Flag indicates the direction of scoring for calculating the Mental health Index differs from that used to construct the subscale and global scale scores.

SOURCE: *Mental Health National Outcomes and Casemix Collection: Overview of clinician-rated and consumer self-report measures, Version 1.50*. Department of Health and Ageing, Canberra, 2003.