

## Scoring and Interpretation of the Connor-Davidson Resilience Scale (CD-RISC®)

### Scoring the CD-RISC-25®

Each item ranges in score from 0 to 4. The total score is obtained by adding up all the 25 items, which gives a score that can range from 0 to 100. Lower scores indicate less resilience and higher scores indicate greater resilience. We do not recommend using any factors or subscales, except for the established shorter RISC-10 and RISC-2 scales (see below).

### How Do I Interpret the CD-RISC-25® Score?

General population scores for the CD-RISC-25 have been obtained from the US general population, in whom the mean score was 79.0 (all subjects in sample). The population was then divided into quartiles. For the lowest quartile (i.e. from 1-25% of the general population), the score ranged from 0-73. For the second quartile (i.e. from 26-50%) the score ranged from 74-82. For the third quartile (51-75% of the population) the score ranged from 83-90. For the highest quartile (76-100% of the population) the score ranged from 91-100. Therefore, a score of 55 in that population (but not necessarily others) would place an individual in the lowest 25% of the population as measured by the CD-RISC and, depending on the reason why the scale was administered, could suggest the need to explore ways to strengthen coping or adaptability. Although the CD-RISC is not intended to be a diagnostic instrument, we have found that low scores can also accompany clinical depression, anxiety and posttraumatic stress disorder. Although the general population score reflects a representative sample, in certain groups the mean score may be different, reflecting selection factors. Many of the studies of college students have yielded scores which are 3-5 points lower than the US adult population mean. Some studies conducted outside the US have yielded lower or higher scores (see manual).

The CD-RISC-25 consists of statements describing different aspects of resilience. The scale incorporates items which measure **hardiness** (i.e. commitment/challenge/control) (items 5, 10, 11, 12, 22, 23, 24), **coping** (2, 7, 13, 15, 18), **adaptability/flexibility** (items 1, 4, 8), **meaningfulness/purpose** (items 3, 9, 20, 21), **optimism** (items 6, 16) **regulation of emotion and cognition** (items 14, 19), and **self-efficacy** (items 17, 25). In some cases, the items overlap more than one of these constructs.

The CD-RISC-25 score can change during treatment/counseling/stress management, to reflect growth of resilience in a wide range of conditions, e.g. PTSD, medical problems, stress. These changes may be apparent within a few weeks. Thus, the CD-RISC-25 can reflect change over time, or improvement from treatment/self-help. It can also be used to compare the effect of different interventions. For example, 4 studies of civilian medical employees in a US health system and providers in the military showed a statistically significant increase in CD-RISC score after stress management or meditation, with the mean score increasing from 68 to 79, 70 to 73, 73 to 81 and 76 to 84.

### Scoring the CD-RISC-10<sup>®</sup>

The CD-RISC-10<sup>®</sup> consists of 10 statements describing different aspects of resilience. The scale serves mainly as a measure of hardiness, with items corresponding to **flexibility** (1 and 5), sense of **self-efficacy** (2, 4 and 9), ability to **regulate emotion** (10), **optimism** (3, 6 and 8) and **cognitive focus/maintaining attention under stress** (7). Each item is scored on a five-point scale ranging from 0 to 4, with 0 representing that the resilience statement is not at all true and a score of 4 indicating that the statement is true nearly all the time. The total score is obtained by adding up all 10 items. The total can therefore range from 0 to 40. Higher scores suggest greater resilience and lower scores suggest less resilience, or more difficulty in bouncing back from adversity.

### How Do I Interpret the CD-RISC-10<sup>©</sup> Score?

Population scores for the CD-RISC-10<sup>©</sup> have been obtained from two US communities, which yielded mean scores of 32.1 and 31.8. In the Memphis study, the authors presented score distribution by quartile. They found that the lowest quartile (i.e. from 1 to 25% of the population) scored between 0-29. The second quartile (i.e. from 26-50%) scored between 30 and 32. The third quartile (51-75% of the population) scored between 33 and 36. The top quartile (i.e. 76-100%) scored between 37 and 40.

The scale is neither intended to provide diagnostic information, nor to indicate that treatment or counseling is required. However, in conjunction with other assessments, it could provide one piece of useful information in deciding whether an intervention is appropriate. A score in the lowest or second quartile may suggest problems in coping with stress or bouncing back from adversity.

The CD-RISC<sup>©</sup> can change during treatment, counseling or stress management, to reflect growth of resilience in a wide range of conditions, e.g. PTSD, medical problems, stress. These changes may be apparent in a few weeks.

### Scoring and Interpretation of the CD-RISC-2 <sup>©</sup>

The total score is derived by adding up the two items, which can range in total from 0 to 8. Higher scores reflect greater resilience. This scale provides a brief indication of a person's **ability to bounce back** and **adapt in response to setbacks**. Mean or median general population scores have been obtained from three US studies, and one each from China, Italy, Norway and Portugal, which range between 5 and 7. Scores on the CD-RISC-2 can change from intervention or treatment.