

Scoring

Scores for the total scale and each subscale

To standardise the total score on the 20-item LVAD self-care behaviour scale:

1. Sum the responses of the 20 items then subtract the lowest possible scale score of 20.
2. Determine the possible range of scores based on the number of scale items. For the 20-item total scale, scores can range from a high of 100 to a low of 20. Subtract the lowest possible scale score from the highest possible scale score (100 – 20 = 80).
3. Divide the number obtained by in step one by the number obtained in step two and multiple by 100.

$$Z_i = \frac{\text{Sum of scores (xi)} - \text{minium possible score}}{\text{Maximum possible score} - \text{minumum possible score}} * 100$$

- z_i : The i^{th} standardised value
- x_i : The i^{th} value in the dataset

Score for the total scale (20 items)

$$Z_i = \frac{\text{Sum of scores (xi)} - 20}{100 - 20} * 100$$

Score for a subscale of Factor 1: Monitoring (8 items)

$$Z_i = \frac{\text{Sum of scores} - 8}{40 - 8} * 100$$

Score for a subscale of Factor 2: Heart failure self-care (5 items)

$$Z_i = \frac{\text{Sum of scores (xi)} - 5}{25 - 5} * 100$$

Score for a subscale of Factor 3: LVAD self-care (7 items)

$$Z_i = \frac{\text{Sum of scores (xi)} - 7}{35 - 7} * 100$$