# How to score the Stroke Social Network Scale

### To calculate a score

#### Overall score:

The overall score is the mean score of all the items (ie the items should be added together, and then divided by 19). To work out the score for each item, see the attached table (‘Scoring the Stroke Social Network Scale’).

A better overall score is indicative of a stronger social network. Scores range from 0 to 100.

#### Scores for the five factors:

The scale is made up of five factors:

Children (C1, C2, C3, C4)

Relatives (R1, R2, R3)

Friends (F1, F2, F3, F4)

Groups (WN2, WN3)

Satisfaction (S1, S2, S3, S4, S5, L1)

Factors may be analysed independently. To calculate a score for a specific factor, add up the scores for each item then divide by the number of items in that factor. For example, to work out a Children factor score:

[C1 + C2 + C3 + C4]/ 4

## Scoring of non-applicable items:

Some items will be non-applicable. For example, if someone has no children, items C2 and C3 are non-applicable. These should be scored as 0 (not at all). For the relevant satisfaction item (S1), the overall satisfaction score (S5) should be imputed. Thus, for example, if they have no children, and their overall satisfaction score is 60 (a little satisfied), they should be given 60 for the item S1 (‘How satisfied were you with the frequency of contact with your children?’).

A similar process will occur if someone has no relatives or no friends.

### Other points to note:

The scoring system is for whole numbers. Thus if someone has said they have ‘two to three’ close friends, this should be rounded up to three.

When estimating how many close friends or relatives a person has, it is useful to give the definition of ‘close’, noted in the scorer’s form (ie someone you feel at ease with, and can talk about what is on your mind).

For those with aphasia, it is acceptable to use total communication strategies (eg. gesture, drawing, and other communication modalities) to assist a person to complete the assessment.

### Who can the Stroke Social Network Scale be used with?

The scale has been validated on the stroke population, including those with and without aphasia. Those with mild, moderate and severe expressive aphasia can complete the scale. However, it is not suitable for those with severe receptive aphasia (who score less than 7/15 on the receptive domains of the Frenchay Aphasia Screening Test).

### Further information about the scale

The psychometric properties of this scale are described in the following paper:

**Northcott S.** & Hilari K. (2013) Stroke Social Network Scale: development and psychometric evaluation of a new patient-reported measure *Clinical Rehabilitation* 27 (9); 823-33

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Descriptive statistics are given below, based on the sample of stroke survivors described in the above paper.

Descriptive statistic**s**: Stroke Social Network Scale

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| --- |
| **Social Networks (Stroke Social Network Scale)** |
| **Overall scale** | **Pre-morbid** | **3 months post stroke** | **6 months post stroke** |
| Social Network  |  |  |  |
|  Mean (SD) | 60.69 (15.22) | 58.04 (16.74) | 56.78 (15.44) |
|  Range | 11.32 – 91.70 | 6.84 – 92.81 | 10.26 – 85.15 |
|  *n*  | *n* = 87 | *n* = 75 | *n* = 71 |
| **Subdomains** |
| Satisfaction |  |  |  |
|  Mean (SD) | 85.17 (15.61) | 84.60 (19.49) | 82.56 (19.23) |
|  Median (IQR) | 88.33 (78.33 – 96.67) | 88.33 (80.83– 96.67) | 86.67 (80.0– 93.33) |
|  Range | 35.83 – 100  | 3.33 – 100 | 6.67 – 100  |
| Children |  |  |  |
|  Mean (SD) | 57.60 (35.52) | 57.67 (35.74) | 58.78 (34.21) |
|  Range | 0 – 100  | 0 – 100  | 0 – 100 |
| Relatives |  |  |  |
|  Mean | 37.76 (28.55) | 39.07 (28.40) | 36.78 (29.17) |
|  Range  | 0 – 88.89 | 0 – 100  | 0 – 93.33 |
| Friends |  |  |  |
|  Mean (SD) | 56.98 (24.95) | 48.77 (25.55) | 43.96 (28.08) |
|  Range | 0 – 95 | 0 – 100 | 0 – 95 |
| Groups |  |  |  |
|  Mean (SD) | 35.06 (37.10) | 27.78 (31.99) | 30.98 (34.19) |
|  Range | 0 – 100  | 0 – 100 | 0 – 100 |

Having a stroke caused participants’ social networks to become weaker: Wilks’ Lambda = .82, F(2, 68) = 7.35, p =.001, η = .18. Post hoc comparisons showed that baseline social network scores were significantly higher than at six months (p = .001). Other differences were not significant.

In terms of the subdomains, only one subdomain showed significant change between baseline and six months: the Friends subdomain, Wilks’ Lambda = .80, F (2, 68) = 8.49, p = .001, η = .20. Post hoc tests showed that there was a significant difference between baseline and six months (p <.001). Although post stroke people became less satisfied with their social network, and had less group involvement, neither of these trends reached statistical significance. The Children factor and the Relatives factor appeared to be particularly stable elements of the network

Scoring the Stroke Social Network Scale

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|  | **Item** | **Response options** |
| **C1** | Do you have any sons or daughters? | 0 = no children; 50 = sons; 100 = sons and/or daughters |
| **C2** | In the past month, how often did yousee your children? | 0 = not at all; 20 = about once a month; 40 = 2 or 3 times a month; 60 = at least once a week; 80 = 2 or 3 times a week; 100 = every day |
| **C3** | In the past month, how often were youin contact with your children by telephone, letter or email? | 0 = not at all; 20 = about once a month; 40 = 2 or 3 times a month; 60 = at least once a week; 80 = 2 or 3 times a week; 100 = every day |
| **S1** | How satisfied were you with thefrequency of contact with your children? | 0 = very dissatisfied; 20 = fairly dissatisfied; 40 = a littledissatisfied; 60 = a little satisfied; 80 = fairly satisfied; 100 = very satisfied |
| **R1** | How many close relatives do youhave?\* | 0 = no relatives; 17 = 1 relative; 33 = 2 relatives; 50 = 3 relatives; 67 = 4 relatives; 83 = 5 relatives; 100 = 6 or more relatives  |
| **R2** | In the past month, how often did yousee your relatives? | 0 = not at all; 20 = about once a month; 40 = 2 or 3 times a month; 60 = at least once a week; 80 = 2 or 3 times a week; 100 = every day |
| **R3** | In the past month, how often were youin contact with your relatives by telephone, letter, or email? | 0 = not at all; 20 = about once a month; 40 = 2 or 3 times a month; 60 = at least once a week; 80 = 2 or 3 times a week; 100 = every day |
| **S2** | How satisfied were you with the frequency of contact with yourrelatives? | 0 = very dissatisfied; 20 = fairly dissatisfied; 40 = a littledissatisfied; 60 = a little satisfied; 80 = fairly satisfied; 100 = very satisfied |
| **F1** | How many close friends do you have?\* | 0 = no friends; 14 = 1 friend; 36 = 2 friends; 43 = 3 friends; 57 = 4 friends; 71 = 5 friends; 86 = 6 friends; 100 = 7 or more friends  |
| **F2** | In the past month, how often did yousee your close friends? | 0 = not at all; 20 = about once a month; 40 = 2 or 3 times a month; 60 = at least once a week; 80 = 2 or 3 times a week; 100 = every day |
| **F3** | In the past month, how often were youin contact with your close friends by telephone, letter or email? | 0 = not at all; 20 = about once a month; 40 = 2 or 3 times a month; 60 = at least once a week; 80 = 2 or 3 times a week; 100 = every day |
| **S3** | How satisfied were you with thefrequency of contact with your close friends? | 0 = very dissatisfied; 20 = fairly dissatisfied; 40 = a littledissatisfied; 60 = a little satisfied; 80 = fairly satisfied; 100 = very satisfied |
| **S4** | How satisfied were you with thefrequency of contact with neighbours? | 0 = very dissatisfied; 20 = fairly dissatisfied; 40 = a littledissatisfied; 60 = a little satisfied; 80 = fairly satisfied; 100 = very satisfied |
| **WN2** | How many groups do you belong to? |  0 = no groups; 33 = 1 group; 67 = 2 groups; 100 = 3 or more groups |
| **WN3** | How active were you in these groups? | 0 = don’t belong to any groups; 33 = belong but not active; 67 = fairly active; 100 = very active |
| **C4** | How far away does your nearest child orclose relative live? | 0 = 50+ miles (or no child/relative); 25 = 16-50 miles; 50 = 6-15 miles; 75 = 1-5 miles; 100 = same house |
| **F4** | How many of your close friends live nearby? (within 5 miles) | 0 = none of them/ no friends; 33 = some of them; 67 = most of them; 100 = all of them |
| **S5** | How satisfied are you overall with yoursocial network? | 0 = very dissatisfied; 20 = fairly dissatisfied; 40 = a littledissatisfied; 60 = a little satisfied; 80 = fairly satisfied; 100 = very satisfied |
| **L1** | How often do you feel lonely? | 0 = lonely all the time; 25 = lonely most of the time; 50 = lonelysome of the time; 75 = lonely a little of the time; 100 = never lonely |

\*Definition of ‘close friend/relative’: people you feel at ease with and/or can talk about what is on your mind.