

## **Derived Variables–Social Support Availability (SSA)**

### **(Tracking and Comprehensive Assessments)**

Functional social support is multidimensional and includes the perception that one is in receipt of emotional support, instrumental assistance, information, guidance and feedback, personal appraisal support, and companionship. In the CLSA, it is measured using the 19-item, self-administered Medical Outcomes Study (MOS) Social Support Survey (1).

The MOS survey provides indicators of four subscales of functional social support:

- 1) Tangible social support - the provision of material aid or behavioral assistance.  
(CLSA Variables: SSA\_CONFBED\_TRM, SSA\_TYTDR\_TRM, SSA\_MEALS\_TRM, SSA\_CHORES\_TRM)
  
- 2) Affection - involving expressions of love and affection.  
(CLSA Variables: SSA\_SHLOV\_TRM, SSA\_HUGS\_TRM, SSA\_LOVU\_TRM)
  
- 3) Positive social interaction - the availability of other persons to positively interact with.  
(CLSA Variables: SSA\_GOODT\_TRM, SSA\_RELAX\_TRM, SSA\_ENJOY\_TRM)
  
- 4) Emotional or informational support - the expression of positive affect, empathetic understanding, and the encouragement of expressions of feelings, or the offering of advice, information, guidance or feedback.  
(CLSA Variables: SSA\_NDTLK\_TRM, SSA\_CRISIS\_TRM, SSA\_INFO\_TRM, SSA\_CONFID\_TRM, SSA\_ADVCE\_TRM, SSA\_SHFEAR\_TRM, SSA\_SUGG\_TRM, SSA\_PROBLM\_TRM)

According to the authors of the scale, scores for each subscale of social support can be obtained by averaging the responses over all items in the subscale, and an overall social support score can be obtained by averaging the responses over all 19 items in the questionnaire. Sherbourne and Stewart (1) further transform the scores so that they range from 0 - 100, using the following formula:

$$\text{Transformed score} = \frac{100 * (\text{observed score} - \text{minimum possible score})}{(\text{maximum possible score} - \text{minimum possible score})} \quad (2).$$

There are five derived variables (DVs) in the Social Support Availability (SSA) module; one transformed score for each of the four subscales of social support, as well as a transformed overall social support

score. For the purposes of the CLSA, if there are any missing items belonging to a subscale, that subscale score will be set to missing, as will the overall score.

These DVs are created for participants in both the Tracking and Comprehensive assessments. For simplicity, we describe them here for the Tracking assessment, however, the process of creating the DVs for the Comprehensive assessment is identical. Distinguishing the two are the variable name endings; all variable names in the Tracking assessment end in 'TRM' and in the Comprehensive assessment in 'COM'. For example, the DV named SSA\_DPTNG\_TRM in the Tracking assessment is named SSA\_DPTNG\_COM in the Comprehensive assessment.

(1) Sherbourne CD, Stewart AL. The MOS social support survey. Soc Sci Med 1991; 32(6):705-714.

(2) Social Support Survey Instrument Scoring Instructions.(n.d). Retrieved on 25/10/2017 from [https://www.rand.org/health/surveys\\_tools/mos/social-support/scoring.html](https://www.rand.org/health/surveys_tools/mos/social-support/scoring.html)

#### **MOS Subscales:**

##### **1) Tangible Social Support**

**Derived Variable Name:** SSA\_DPTNG\_TRM

**Description:** This variable measures the level of tangible social support that is available to the respondent. It includes questions about whether or not the respondent has someone to help them if they are confined to bed, someone to take him/her to the doctor, someone to prepare meals, or someone to do daily chores. If any of these items are missing, this DV will be set to missing.

#### **Notes:**

Higher scores indicate higher levels of tangible social support.

One of the items (SSA\_TYTDR\_TRM) used in the calculation of this score is worded differently in the CLSA than in the MOS Social Support Survey.

**Based on:** SSA\_CONFBED\_TRM, SSA\_TYTDR\_TRM, SSA\_MEALS\_TRM, SSA\_CHORES\_TRM

**Derived Variable Specifications:**

Value	Condition(s)	Description	Notes
999.99	SSA_CONFBED_TRM = (8,9,-8) or SSA_TYTDR_TRM = (8,9,-8) or SSA_MEALS_TRM = (8,9,-8) or SSA_CHORES_TRM = (8,9,-8)	At least one required question was not answered	
$\frac{100*(SUM\_TNG-4)}{16}$ , where SUM_TNG = SSA_CONFBED_TRM + SSA_TYTDR_TRM + SSA_MEALS_TRM + SSA_CHORES_TRM	( 1 ≤ SSA_CONFBED_TRM ≤ 5) and ( 1 ≤ SSA_TYTDR_TRM ≤ 5) and ( 1 ≤ SSA_MEALS_TRM ≤ 5) and ( 1 ≤ SSA_CHORES_TRM ≤ 5)	Transformed score obtained for the tangible support subscale	(min: 0; max: 100)

**2) Affection**

**Derived Variable Name:** SSA\_DPAFF\_TRM

**Description:** This variable measures the level of affection the respondent received. It includes questions about whether or not the respondent has someone that shows him/her love, someone to hug, or someone to love him/her and make them feel wanted. If any of these items are missing, this DV will be set to missing.

**Notes:**

Higher scores indicate higher levels of affection.

One of the items (SSA\_LOVU\_TRM) used in the calculation of this score is worded differently in the CLSA than in the MOS Social Support Survey.

**Based on:** SSA\_SHLOV\_TRM, SSA\_HUGS\_TRM, SSA\_LOVU\_TRM

**Derived Variable Specifications:**

Value	Condition(s)	Description	Notes
999.99	SSA_SHLOV_TRM = (8,9,-8) or SSA_HUGS_TRM = (8,9,-8) or	At least one required question was not answered	

	SSA_LOVU_TRM = (8,9,-8)		
$\frac{100*(SUM\_AFF-3)}{12}$ , where SUM_AFF = SSA_SHLOV_TRM + SSA_HUGS_TRM + SSA_LOVU_TRM	( 1 ≤ SSA_SHLOV_TRM ≤ 5) and ( 1 ≤ SSA_HUGS_TRM ≤ 5) and ( 1 ≤ SSA_LOVU_TRM ≤ 5)	Transformed score obtained for the affection support subscale	(min: 0; max: 100)

### 3) Positive Social Interaction

**Derived Variable Name:** SSA\_DPSOC\_TRM

**Description:** This variable measures the respondent's level of positive social interaction. It includes questions about whether the respondent has someone to have a good time with, get together with for relaxation, or someone to do something enjoyable with. If any of these items are missing, this DV will be set to missing.

**Note:** Higher scores indicate higher levels of positive social interaction.

**Based on:** SSA\_GOODT\_TRM, SSA\_RELAX\_TRM, SSA\_ENJOY\_TRM

**Derived Variable Specifications:**

Value	Condition(s)	Description	Notes
999.99	SSA_GOODT_TRM = (8,9,-8) or SSA_RELAX_TRM = (8,9,-8) or SSA_ENJOY_TRM = (8,9,-8)	At least one required question was not answered	
$\frac{100*(SUM\_SOC-3)}{12}$ , where SUM_SOC = SSA_GOODT_TRM + SSA_RELAX_TRM + SSA_ENJOY_TRM	( 1 ≤ SSA_TGOODT_TRM ≤ 5) and ( 1 ≤ SSA_RELAX_TRM ≤ 5) and ( 1 ≤ SSA_ENJOY_TRM ≤ 5)	Transformed score obtained for the positive interaction subscale	(min: 0; max: 100)

### 4) Emotional and Informational support

**Derived Variable Name:** SSA\_DPEMO\_TRM

**Description:** This variable measures the level of emotional and informational support received by the respondent. It includes questions about whether the respondent has someone to listen and to advise them in a crisis, someone to give information, confide in and talk to, or someone who understands his/her problems. If any of these items are missing, this DV will be set to missing.

**Notes:**

Higher scores indicate higher levels of emotional and informational support.

Two of the items (SSA\_CRISIS\_TRM and SSA\_INFO\_TRM) used in the calculation of this score are worded differently in the CLSA than in the MOS Social Support Survey.

**Based on:** SSA\_NDTLK\_TRM, SSA\_CRISIS\_TRM, SSA\_INFO\_TRM, SSA\_CONFID\_TRM, SSA\_ADVCE\_TRM, SSA\_SHFEAR\_TRM, SSA\_SUGG\_TRM, SSA\_PROBLM\_TRM

**Derived Variable Specifications:**

Value	Condition(s)	Description	Notes
999.99	SSA_NDTLK_TRM = (8,9,-8) or SSA_CRISIS_TRM = (8,9,-8) or SSA_INFO_TRM = (8,9,-8) or SSA_CONFID_TRM = (8,9,-8) or SSA_ADVCE_TRM = (8,9,-8) or SSA_SHFEAR_TRM = (8,9,-8) or SSA_SUGG_TRM = (8,9,-8) or SSA_PROBLM_TRM = (8,9,-8)	At least one required question was not answered	
$\frac{100*(SUM\_EMO-8)}{32}$ , where SUM_EMO = SSA_NDTLK_TRM + SSA_CRISIS_TRM + SSA_INFO_TRM + SSA_CONFID_TRM + SSA_ADVCE_TRM + SSA_SHFEAR_TRM + SSA_SUGG_TRM + SSA_PROBLM_TRM	( 1 ≤ SSA_NDTLK_TRM ≤ 5) and ( 1 ≤ SSA_CRISIS_TRM ≤ 5) and ( 1 ≤ SSA_INFO_TRM ≤ 5) and ( 1 ≤ SSA_CONFID_TRM ≤ 5) and ( 1 ≤ SSA_ADVCE_TRM ≤ 5) and ( 1 ≤ SSA_SHFEAR_TRM ≤ 5) and ( 1 ≤ SSA_SUGG_TRM ≤ 5) and ( 1 ≤ SSA_PROBLM_TRM ≤ 5)	Transformed score obtained for the emotional and informational support subscale	(min: 0; max: 100)

**5) MOS Overall Support Index**

**Derived Variable Name:** SSA\_DPALL\_TRM

**Description:** This variable measures the overall level of functional social support that is available to the respondent. It includes all aspects asked about in the MOS Social Support Survey. If any of these items are missing, this DV will be set to missing.

**Note:** Higher scores indicate higher levels of functional social support.

**Based on:** SSA\_CONFBED\_TRM, SSA\_TYTDR\_TRM, SSA\_MEALS\_TRM, SSA\_CHORES\_TRM, SSA\_SHLOV\_TRM, SSA\_HUGS\_TRM, SSA\_LOVU\_TRM, SSA\_GOODT\_TRM, SSA\_RELAX\_TRM, SSA\_ENJOY\_TRM, SSA\_NDTLK\_TRM, SSA\_CRISIS\_TRM, SSA\_INFO\_TRM, SSA\_CONFID\_TRM, SSA\_ADVCE\_TRM, SSA\_SHFEAR\_TRM, SSA\_SUGG\_TRM, SSA\_PROBLM\_TRM, SSA\_MINDOFF\_TRM

**Notes:**

The MOS Overall Support Index includes all 19 items in the MOS survey. However, SSA\_MINDOFF\_TRM is not included in any of the four subscales, as indicated in Sherbourne and Stewart (1).

Four of the items (SSA\_TYTDR\_TRM, SSA\_LOVU\_TRM, SSA\_CRISIS\_TRM and SSA\_INFO\_TRM) used in the calculation of this score are worded differently in the CLSA than in the MOS Social Support Survey.

**Derived Variable Specifications:**

Value	Condition(s)	Description	Notes
999.99	SSA_CONFBED_TRM = (8,9,-8) or SSA_TYTDR_TRM = (8,9,-8) or SSA_MEALS_TRM = (8,9,-8) or SSA_CHORES_TRM = (8,9,-8) or SSA_SHLOV_TRM = (8,9,-8) or SSA_HUGS_TRM = (8,9,-8) or SSA_LOVU_TRM = (8,9,-8) or SSA_GOODT_TRM = (8,9,-8) or SSA_RELAX_TRM = (8,9,-8) or SSA_ENJOY_TRM = (8,9,-8) or SSA_NDTLK_TRM = (8,9,-8) or SSA_CRISIS_TRM = (8,9,-8) or SSA_INFO_TRM = (8,9,-8) or SSA_CONFID_TRM = (8,9,-8) or SSA_ADVCE_TRM = (8,9,-8) or SSA_SHFEAR_TRM = (8,9,-8) or SSA_SUGG_TRM = (8,9,-8) or SSA_PROBLM_TRM = (8,9,-8) or SSA_MINDOFF_TRM = (8,9,-8)	At least one required question was not answered	



Canadian Longitudinal Study on Aging  
Étude longitudinale canadienne sur le vieillissement

$\frac{100 * (\text{SUM\_ALL} - 19)}{76}, \text{ where}$ <p>SUM_ALL = SSA_CONFBED_TRM +          SSA_TYTDR_TRM +          SSA_MEALS_TRM +          SSA_CHORES_TRM +          SSA_SHLOV_TRM +          SSA_HUGS_TRM +          SSA_LOVU_TRM +          SSA_GOODT_TRM +          SSA_RELAX_TRM +          SSA_ENJOY_TRM +          SSA_NDTLK_TRM +          SSA_CRISIS_TRM +          SSA_INFO_TRM +          SSA_CONFID_TRM +          SSA_ADVCE_TRM +          SSA_SHFEAR_TRM +          SSA_SUGG_TRM +          SSA_PROBLM_TRM +          SSA_MINDOFF_TRM</p>	<p>( 1 ≤ SSA_CONFBED_TRM ≤ 5) and          ( 1 ≤ SSA_TYTDR_TRM ≤ 5) and          ( 1 ≤ SSA_MEALS_TRM ≤ 5) and          ( 1 ≤ SSA_CHORES_TRM ≤ 5) and          (1 ≤ SSA_SHLOV_TRM ≤ 5) and          (1 ≤ SSA_HUGS_TRM ≤ 5) and          (1 ≤ SSA_LOVU_TRM ≤ 5) and          (1 ≤ SSA_TGOODT_TRM ≤ 5) and          (1 ≤ SSA_RELAX_TRM ≤ 5) and          (1 ≤ SSA_ENJOY_TRM ≤ 5) and          (1 ≤ SSA_NDTLK_TRM ≤ 5) and          (1 ≤ SSA_CRISIS_TRM ≤ 5) and          (1 ≤ SSA_INFO_TRM ≤ 5) and          (1 ≤ SSA_CONFID_TRM ≤ 5) and          (1 ≤ SSA_ADVCE_TRM ≤ 5) and          (1 ≤ SSA_SHFEAR_TRM ≤ 5) and          (1 ≤ SSA_SUGG_TRM ≤ 5) and          (1 ≤ SSA_PROBLM_TRM ≤ 5) and          (1 ≤ SSA_MINDOFF_TRM ≤ 5)</p>	<p>Overall transformed social support score</p>	<p>(min: 0; max: 100)</p>
--	--	---	-------------------------------