

Kingston Caregiver Stress Scale

ADMINISTRATION AND INTERPRETATION MANUAL

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The Kingston Scales and Manuals can be freely downloaded from:

www.providencecare.ca → [Clinical Services](#) → [Geriatric Psychiatry](#) → [Kingston Scales](#)
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Purpose:

The Kingston Caregiver Stress Scale (KCSS) is primarily a scale that allows a family caregiver to express their level of perceived stress. It can also be used to monitor changes, in stress levels over time, as the caregiver's situation changes. The scale is designed for community living lay caregivers, not institutional care staff. The caregiver is the individual who provides care on a day-to-day basis in the home; usually a spouse or other relative.

Administration:

The scale may be handed to the caregiver for completion, or one can read the items to the caregiver and ask for a response. Since more than one person may be involved in an individual's care, each person can be interviewed separately and followed over time with the KCSS.

Say to the caregiver **“Some people report feelings of stress surrounding certain aspects of care giving. To what extent, if any, do these apply to you in your role of care giving to your spouse (or relative)? Using a 5 point rating scale, where 1 indicates no stress and 5 indicates extreme stress, indicate the extent of the stress or frustration you feel surrounding the following issues.”**

Interpretation:

Some caregiver stress scales try to determine how much stress an individual *should* be experiencing. There is evidence that these levels do not correlate well with reality, and therefore the KCSS takes a more direct approach by asking how much stress the caregiver actually feels. Instead of asking the one simple question “how much stress do you feel”, we have derived, from a review of the literature, a set of ten questions that represent potential sources of stress to the lay caregiver. We have observed that caregivers seem to be able to compartmentalize their stress and attribute it independently to the ten questions, rather than give one score for all.

These ten responses can be further divided into 3 categories, namely: “care giving”, “family issues”, and “financial problems”. Hence, the 3 sub-divisions of the scale.

As we are assessing a subjective condition, i.e. perceived stress, a score for one person probably does not mean the same thing as a similar score for another. Therefore, the following tables, containing data applicable to the KCSS, should be interpreted with some caution, and is only provided as a rough guide as to what might be expected with the average dementia caregiver.

The relationship between Caregiver Stress and Dementia-Related Behaviour:

An important relationship that has emerged in working with the KCSS is that of caregiver stress and the behavioural changes associated with dementia. These changes as measured by the Kingston Standardized Behavioural Assessment (KSBA(comm) - see references below) are outlined in Table 3.

Some abbreviations used below:

- KCSS = Kingston Caregiver Stress Scale
- KSCAr = Kingston Standardized Cognitive Assessment - Revised
- BKSCAr = *Brief* Kingston Standardized Cognitive Assessment - Revised
- KSBA(comm) = Kingston Standardized Behavioural Assessment - Community Form
- KSBA(ltc) = Kingston Standardized Behavioural Assessment - Long Term Care Form
- MMSE = Mini Mental State Examination
- Age = Current age of subject
- Education = Years of education
- NPT - Neuropsychiatric Behaviours
- NPL - Neuropsychological Behaviours

Table 1 - KCSS Individual Question and Section Score Means and Standard Deviations

KCSS Questions											
<i>n=80</i>	1	2	3	4	5	6	7	8	9	10	Total
Mean	2.28	2.35	2.25	1.57	1.67	2	2.10	1.94	1.48	1.88	19.46
sd	1.36	1.2	1.28	1.07	1.11	1.19	1.26	1.28	0.88	1.27	8.21

KCSS Section		
	Mean	sd
Care Factor 1-7	14.19	6.08
Family Factor 8-9	3.4	1.94
Financial Factor 10	1.88	1.27

The following table provides some correlation coefficients between the KCSS and other Kingston Scales and demographic variables.

Table 2 - Demographics

Variable	Mean	sd
<i>n</i> = 43		
M=23 F=20		
Age	74.19	6.76
Years of Education	13.5	3.47
Years of Reported Illness	2.16	1.87
MMSE	27.39	1.62
KSCAr	98.37	7.66
KSBA(comm)	12.65	9.82
NPT Behaviours	3.56	3.9
NPL Behaviours	9.09	6.65
KCSS	17.4	6.82

Table 3 - KCSS x KSBA(comm) Correlations.

KSBA Domains	KCSS Total	Care Total	Family Total	Financial Total
Daily Activities	0.819	0.825	0.434	0.238
Atten/Conc/mem	0.272	0.283	0.062	0.133
Emotional	0.571	0.585	0.335	0.034
Aggressive	0.387	0.450	-0.061	0.044
Misperceptions	0.327	0.275	0.282	0.389
Paranoid	0.512	0.529	0.197	0.153
Judgement	0.715	0.718	0.328	0.316
Perseveration	-0.063	-0.029	-0.134	-0.152
Motor Rest	0.603	0.574	0.448	0.254
Sleep	0.607	0.595	0.381	0.224
Motor Spatial	0.545	0.552	0.269	0.169
Language	0.579	0.560	0.374	0.259
TOTAL	0.827	0.834	0.414	0.277
NPT	0.751	0.768	0.328	0.235
NPL	0.782	0.782	0.420	0.272

Table 4 - KCSS Internal Correlations

	Q 1	Q 2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10
Question 2	0.73									
Question 3	0.67	0.68								
Question 4	0.49	0.31	0.32							
Question 5	0.40	0.28	0.37	0.71						
Question 6	0.59	0.51	0.53	0.46	0.37					
Question 7	0.20	0.29	0.20	0.30	0.37	0.32				
Question 8	0.65	0.65	0.63	0.11	0.04	0.59	0.01			
Question 9	0.49	0.44	0.48	0.23	0.18	0.29	0.25	0.53		
Question 10	0.47	0.54	0.53	0.17	0.07	0.37	-0.02	0.76	0.46	
Total	0.83	0.8	0.8	0.59	0.54	0.75	0.43	0.74	0.63	0.65

Profile:

The person filling out the form merely circles the number to the right of the question corresponding to the stress level associated with that item. By looking at the circles one can easily see a profile for each caregiver. See Figures 1 and 2.

References

Hopkins R, Kilik L. (2012) "The Relationship Between Behavioural Changes in Dementia and Caregiver Stress" (in preparation)

Hopkins R, Kilik L, Day D, Bradford L, Rows C, (2006) "Kingston Standardized Behavioural Assessment" *The American Journal of Alzheimer's Disease and Other Dementias*, **21**: 339-346.

Kilik L, Hopkins R, Day D, Prince C, Prince P, Rows C. (2008) "The progression of behaviour in dementia: An in-office guide for clinicians." *The American Journal of Alzheimer's Disease and Other Dementias*, **23**:242-249. (Originally published online Feb 13, 2008)

Figure 1

SUES					
worked,	1	2	3	4	5
ur spouse/relative?	1	2	3	4	5
commitments	1	2	3	4	5
/ the responsibilities	1	2	3	4	5
ence in your ability	1	2	3	4	5
ds of your	1	2	3	4	5
IES					
are decisions?	1	2	3	4	5
he amount	1	2	3	4	5
SUES					
with care giving?	1	2	3	4	5

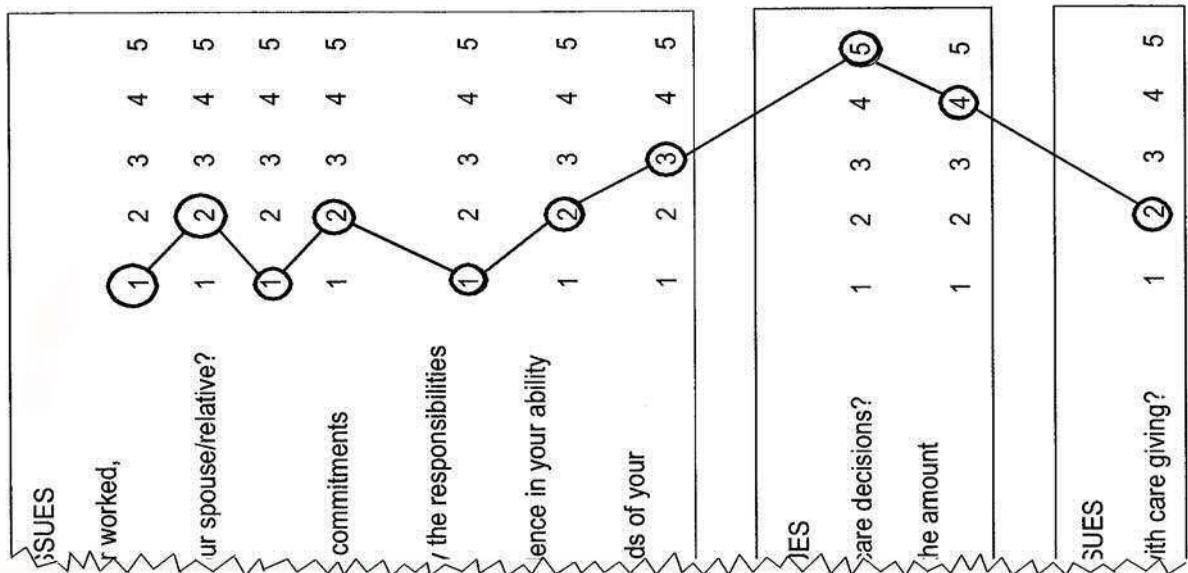


Figure 2