

Miebach et al.

Appendix. Subjective Cognitive Decline Interview 1.0

(as used in the DELCODE study. Jessen et al. 2018)

1. Open question

The purpose of this question is to elicit a short free report of the most salient cognitive changes experienced during recent years.

The interviewer may take notes and may classify the presented complaints into one or more of the following categories: memory, language, organization and planning, attention and concentration, other.

Qualitative content analysis can be applied to recorded interviews.

(Responses to this open question were not analysed in the present paper)

„During the past few years, have you noticed any changes in your mental abilities? Could you give an example from everyday life?“

2. Structured interview with participant/patient

Five questions on experienced cognitive decline are asked by the interviewer. Only for the endorsed items, the interviewer asks up to five additional questions A to E, as stated below.

“Now I will ask you about specific changes of mental abilities which you may have observed”

1.	“Has your memory become worse?”	<input type="checkbox"/> yes <input type="checkbox"/> no
A. <input style="width: 30px; height: 20px;" type="checkbox"/>	B. <input style="width: 30px; height: 20px;" type="checkbox"/>	C. <input style="width: 30px; height: 20px;" type="checkbox"/>
D. <input style="width: 30px; height: 20px;" type="checkbox"/>	E. <input style="width: 30px; height: 20px;" type="checkbox"/>	<input style="width: 30px; height: 20px;" type="text"/> <input style="width: 30px; height: 20px;" type="text"/> months ago
2.	“Do you have increasing word finding difficulties?”	<input type="checkbox"/> yes <input type="checkbox"/> no
A. <input style="width: 30px; height: 20px;" type="checkbox"/>	B. <input style="width: 30px; height: 20px;" type="checkbox"/>	C. <input style="width: 30px; height: 20px;" type="checkbox"/>
D. <input style="width: 30px; height: 20px;" type="checkbox"/>	E. <input style="width: 30px; height: 20px;" type="checkbox"/>	<input style="width: 30px; height: 20px;" type="text"/> <input style="width: 30px; height: 20px;" type="text"/> months ago
3.	“Do you have increasing difficulties planning ahead or staying organized?”	<input type="checkbox"/> yes <input type="checkbox"/> no
A. <input style="width: 30px; height: 20px;" type="checkbox"/>	B. <input style="width: 30px; height: 20px;" type="checkbox"/>	C. <input style="width: 30px; height: 20px;" type="checkbox"/>
D. <input style="width: 30px; height: 20px;" type="checkbox"/>	E. <input style="width: 30px; height: 20px;" type="checkbox"/>	<input style="width: 30px; height: 20px;" type="text"/> <input style="width: 30px; height: 20px;" type="text"/> months ago
4.	“Do you make increasingly more errors when not paying full attention to a task?”	<input type="checkbox"/> yes <input type="checkbox"/> no
A. <input style="width: 30px; height: 20px;" type="checkbox"/>	B. <input style="width: 30px; height: 20px;" type="checkbox"/>	C. <input style="width: 30px; height: 20px;" type="checkbox"/>
D. <input style="width: 30px; height: 20px;" type="checkbox"/>	E. <input style="width: 30px; height: 20px;" type="checkbox"/>	<input style="width: 30px; height: 20px;" type="text"/> <input style="width: 30px; height: 20px;" type="text"/> months ago
5.	“Have you noticed any other cognitive changes?”	<input type="checkbox"/> yes <input type="checkbox"/> no
	Please describe briefly:	

A. <input style="width: 30px; height: 20px;" type="checkbox"/>	B. <input style="width: 30px; height: 20px;" type="checkbox"/>	C. <input style="width: 30px; height: 20px;" type="checkbox"/>
D. <input style="width: 30px; height: 20px;" type="checkbox"/>	E. <input style="width: 30px; height: 20px;" type="checkbox"/>	<input style="width: 30px; height: 20px;" type="text"/> <input style="width: 30px; height: 20px;" type="text"/> months ago

Coding:

A. Does this worry you?

0 = no. 1 = yes

B. When was the onset of this decline?

1 = within the last six months. 2 = between six months and two years ago. 3 = between two and five years ago. 4 = more than five years ago

C. Do you think your performance in this area is worse as compared to other people of your age?

0 = no. 1 = yes

D. Have you talked to a physician about these problems?

0 = no. 1 = yes. if yes, please answer

E. when for the first time?

3. Structured interview with an informant

Six questions on observed cognitive decline are asked by the interviewer. Only for the endorsed items, the interviewer asks about the onset of the change.

“Now I will ask you about specific changes of mental abilities which you may have observed in the (participant/patient)”

1.	<i>“Has her/his memory become worse?”</i>	<input type="checkbox"/> yes	<input type="checkbox"/> no
A.	<input type="checkbox"/>		
2.	<i>“Does (s)he have increasing word finding difficulties?”</i>	<input type="checkbox"/> yes	<input type="checkbox"/> no
A.	<input type="checkbox"/>		
3.	<i>“Does (s)he have increasing difficulties planning ahead or staying organized?”</i>	<input type="checkbox"/> yes	<input type="checkbox"/> no
A.	<input type="checkbox"/>		
4.	<i>“Does (s)he make increasingly more errors when not paying full attention to a task?”</i>	<input type="checkbox"/> yes	<input type="checkbox"/> no
A.	<input type="checkbox"/>		
5.	<i>“Have you noticed any other cognitive changes? Please describe briefly”</i>	<input type="checkbox"/> yes	<input type="checkbox"/> no

6.	<i>“Have you noticed any changes in behavior or personality?”</i>	<input type="checkbox"/> yes	<input type="checkbox"/> no
A.	<input type="checkbox"/>		

Coding:

A. When was the onset of this decline?

1 = within the last six months. 2 = between six months and two years ago. 3 = between two and five years ago. 4 = more than five years ago

Appendix. Table 1. Linear regression with the number of fulfilled SCD-plus features predicting AD-biomarkers

Predictor variables	Dependent variables											
	CSF A β -42-level (pg/ml)			CSF A β -42/tau-ratio			CSF- total Tau (pg/ml)			CSF-p-tau-181 (pg/ml)		
	B	SE (B)	β	B	SE (B)	β	B	SE (B)	β	B	SE (B)	β
<i>Unadjusted model</i>												
	R ² =.054. F for change in R ² =11.49***			R ² =.047. F for change in R ² =10.024***			R ² =.001. F for change in R ² =.001			R ² =.001. F for change in R ² =.150		
Sum of fulfilled SCD-plus features	-0.059	0.017	-0.233***	-0.056	0.019	-0.056	2.798E-05	0.018	0.000	-.006	0.016	-0.028
<i>Covariate-adjusted model</i>												
	R ² =.076. F for change in R ² = 1.57			R ² =.110. F for change in R ² =4.679**			R ² =.091. F for change in R ² =6.548***			R ² =.067. F for change in R ² =4.488**		
Sum of fulfilled SCD-plus features	-0.057	0.018	-0.225***	-0.053	0.022	-0.189**	-0.011	0.017	-0.043	-.016	0.016	-0.074
Age	-0.004	0.006	-0.056	-0.017	0.006	-0.186**	0.020	0.005	0.258***	0.015	0.005	0.214**
Education	0.014	0.011	0.095	0.013	0.012	0.073	-0.001	0.011	-0.007	0.003	0.010	0.025
sex	0.114	0.064	0.131	0.153	0.069	0.158*	-0.117	0.062	-0.137	-.094	0.057	-0.124
	R ² =.109. F for change in R ² = 7.35**			R ² =.135. F for change in R ² =5.657*			R ² =.115. F for change in R ² =5.430*			R ² =.088. F for change in R ² =4.298*		
Sum of fulfilled SCD-plus features	-0.053	0.017	-0.210**	-0.050	0.019	-0.177**	-0.014	0.017	-0.056	-1.037	0.863	-0.083
Age	-0.002	0.006	-0.025	-0.015	0.006	-0.163*	0.019	0.005	0.234***	0.677	0.276	0.196**
Education	0.009	0.011	0.063	0.009	0.012	0.052	0.003	0.011	0.020	0.414	0.541	0.051
sex	0.067	0.065	0.077	0.106	0.071	0.110	-0.077	0.064	-0.090	-3.539	3.225	-0.080
Delayed recall	0.048	0.018	0.194**	0.046	0.019	0.167*	-0.041	0.017	-0.166*	-1.964	.895	-0.152*

Notes. * $p < .05$; ** $p < .01$; *** $p < .001$; SE= Standard Error

Appendix . Table 2. Linear regression with the number of reported SCD-I-Domains predicting AD-biomarkers

Predictor variables	Dependent variables											
	CSF Aβ-42-level (pg/ml)			CSF Aβ-42/tau-ratio			CSF- total Tau (pg/ml)			CSF-p-tau-181 (pg/ml)		
	B	SE (B)	β	B	SE (B)	β	B	SE (B)	β	B	SE (B)	β
<i>Unadjusted model</i>												
	R ² =.044. F for change in R ² = 9.213**			R ² =.029. F for change in R ² = 6.015*			R ² =.003. F for change in R ² =.610			R ² =.006. F for change in R ² =1.139		
SCD-I Domains	-.062	0.020	-0.209**	-0.056	0.023	-0.170*	-0.016	0.020	-0.055	-0.020	0.019	-0.077
<i>Covariate-adjusted model</i>												
	R ² =.067. F for change in R ² = 1.64			R ² =.096. F for change in R ² = 4.953**			R ² =.097. F for change in R ² = 6.816***			R ² =.075. F for change in R ² = 4.731**		
SCD-I Domains	-0.060	0.020	-0.203**	-0.048	0.022	-0.146*	-0.026	0.020	-0.090	-0.030	0.018	-0.118
Age	-0.005	0.006	-0.063	-0.018	0.006	-0.197**	0.021	0.005	0.260***	0.015	0.005	0.215**
Education	0.013	0.011	0.091	0.012	0.012	0.073	0.000	0.011	-0.001	0.004	0.010	0.031
sex	0.115	0.064	0.132	0.154	0.070	0.159*	-0.119	0.062	-0.140	-0.097	0.057	-0.127
	R ² =.103. F for change in R ² = 7.908**			R ² =.123. F for change in R ² = 6.040*			R ² =.122. F for change in R ² = 5.524*			R ² =.095. F for change in R ² = 4.257*		
SCD-I Domains	-0.057	0.020	-0.193**	-0.045	0.022	-0.138*	-0.028	0.020	-0.098	-0.031	0.018	-0.122
Age	-0.003	0.006	-0.033	-0.015	0.006	-0.172*	0.019	0.005	0.235***	0.014	0.005	0.197**
Education	0.009	0.011	0.060	0.008	0.012	0.047	0.004	0.011	0.025	0.007	0.010	0.056
sex	0.065	0.066	0.075	0.105	0.072	0.109	-0.079	0.064	-0.092	-0.064	0.059	-0.084
Delayed recall	0.050	0.018	0.201**	0.048	0.020	0.174*	-0.041	0.017	-0.167*	-0.033	0.016	-0.151*

Notes. *p<.05; **p<.01***p<.001; SE= Standard Error