

Survey VARIED												
Item	¹ N	Subcategory 1 „intelligibility“		Subcategory 2 „comprehensibility“		Subcategory 3 „completeness“		³ I-CVI		⁴ p _c	⁵ k*	⁶ Evaluation
		² A	I-CVI (1)	² A	I-CVI (2)	² A	I-CVI (3)	² A	I-CVI			
⁶ 1.1	27	25	0.93	24	0.89	23	0.85	24	0.89	0.000	0.889	excellent
⁶ 1.2	11	11	1.00	11	1.00	11	1.00	11	1.00	0.000	1.000	excellent
2	27	25	0.93	25	0.93	24	0.89	25	0.91	0.000	0.914	excellent
3	27	24	0.89	25	0.93	25	0.93	25	0.91	0.000	0.914	excellent
4	27	27	1.00	27	1.00	26	0.96	27	0.99	0.000	0.998	excellent
5	27	27	1.00	27	1.00	24	0.89	26	0.96	0.000	0.963	excellent
6	27	22	0.81	26	0.96	25	0.93	24	0.90	0.000	0.901	excellent
7	27	22	0.81	27	1.00	26	0.96	25	0.93	0.000	0.926	excellent
⁶ 8.1	27	22	0.81	26	0.96	23	0.85	24	0.88	0.000	0.876	excellent
⁶ 8.2	11	11	1.00	11	1.00	11	1.00	11	1.00	0.000	1.000	excellent
9	27	25	0.93	25	0.93	26	0.96	25	0.94	0.000	0.938	excellent
10	27	25	0.93	25	0.93	26	0.96	25	0.94	0.000	0.938	excellent
11	27	23	0.85	24	0.89	23	0.85	23	⁷ 0.86	0.000	0.864	excellent
12	15	15	1.00	15	1.00	15	1.00	15	1.00	0.000	1.000	excellent
13	27	24	0.89	25	0.93	24	0.89	24	0.90	0.000	0.901	excellent
14	27	27	1.00	24	0.89	27	1.00	26	0.96	0.000	0.963	excellent
15	27	26	0.96	27	1.00	27	1.00	27	0.99	0.000	0.988	excellent
16	27	26	0.96	24	0.89	27	1.00	26	0.95	0.000	0.951	excellent
17	27	26	0.96	24	0.89	26	0.96	25	0.94	0.000	0.938	excellent
18	27	26	0.96	26	0.96	26	0.96	26	0.96	0.000	0.963	excellent
19	27	24	0.89	26	0.96	26	0.96	25	0.94	0.000	0.938	excellent
20	15	15	1.00	15	1.00	15	1.00	15	1.00	0.000	1.000	excellent
21	15	15	1.00	15	1.00	15	1.00	15	1.00	0.000	1.000	excellent
22	15	15	1.00	15	1.00	15	1.00	15	1.00	0.000	1.000	excellent
23	15	15	1.00	15	1.00	15	1.00	15	1.00	0.000	1.000	excellent
24	15	15	1.00	15	1.00	15	1.00	15	1.00	0.000	1.000	excellent
25	15	15	1.00	15	1.00	15	1.00	15	1.00	0.000	1.000	excellent
26	15	14	0.93	14	0.93	15	1.00	14	0.96	0.000	0.956	excellent
27	15	15	1.00	15	1.00	15	1.00	15	1.00	0.000	1.000	excellent
28	15	14	0.93	14	0.93	14	0.93	14	0.93	0.000	0.933	excellent
29	15	15	1.00	15	1.00	15	1.00	15	1.00	0.000	1.000	excellent
30	15	15	1.00	15	1.00	14	0.93	15	0.98	0.000	0.978	excellent

Survey VARIED (Continued)												
Item	¹ N	Subcategory 1		Subcategory 2		Subcategory 3		³ I-CVI		⁴ p _c	⁵ k*	⁶ Evaluation
		² A	I-CVI (1)	² A	I-CVI (2)	² A	I-CVI (3)	² A	I-CVI			
31	15	15	1.00	14	0.93	15	1.00	15	0.98	0.000	0.978	excellent
32	15	15	1.00	15	1.00	15	1.00	15	1.00	0.000	1.000	excellent
33	15	15	1.00	15	1.00	15	1.00	15	1.00	0.000	1.000	excellent
34	27	27	1.00	27	1.00	26	0.96	27	0.99	0.000	0.988	excellent
35	27	27	1.00	27	1.00	27	1.00	27	1.00	0.000	1.000	excellent
36	27	27	1.00	27	1.00	27	1.00	27	1.00	0.000	1.000	excellent
37	27	27	1.00	27	1.00	27	1.00	27	1.00	0.000	1.000	excellent
38	27	27	1.00	27	1.00	26	0.96	27	0.99	0.000	0.988	excellent
39	27	27	1.00	27	1.00	27	1.00	27	1.00	0.000	1.000	excellent
								⁸ S-CVI/Ave	⁹ 0.97			

Legend:

¹ N, number of experts; Items 1 and 8 were validated in a second round by 11 participants; Items 12 and 20-33: validation by all participants who are familiar with the topic of VSED = N - (number „less familiar“ + number „not familiar at all“)

² A = number of experts who agree to the item („agree“)

³ I-CVI = A/N

⁴ p_c, probability of a chance occurrence; $p_c = [N!/A!(N-A)!] \cdot 0.5^N$

⁵ k*, Kappa to determine relevance; $k^* = (I-CVI - p_c)/(1-p_c)$. Assessment: <0.40=poor, 0.40-0.75=fair to good, >0.75=excellent [37]

⁶ Item 1.1 and Item 8.1 are the results of the first round and Item 1.2 and Item 8.2 are the results of the second round.

⁷ Item 11 has been deleted

⁸ S-CVI/Ave = $\sum_{i=1}^n I - CVI / \text{number of items}$

⁹ S-CVI/Ave = („sum of the I-CVI of the items 1 to 39“ - „item 1.1 (1st round)“ - „item 2.1 (1st round)“ - item 11)/ 38 (items)

Additional file 1 Calculation of I-CVI, S-CVI and Kappa [47]

