

Appendix 6. Evaluation of the combination of static visual variables for users of different age groups

Number of		COMBINATIONS OF VARIABLES														
items	variables															
0	4	1 2 3 4 α β γ (1)(2)(3)(4)(5)(6) (7)(8)														
1	4	1 2 3 4 ab, ac, βb, βc, γb, γc (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 aa, γa (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 ab, ac βb, βc γb, γc (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 aa,βa, γa, βc γb, γc (1)(2)(3)(4)(5)(6) (7)(8)											
1	5	1 2 3 4 5 βa, βb, γa (1)(2)(3)(4)(5) (6)(7)(8)	1 2 3 4 6 (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 7aa, ab, βa, βb (1)(2)(3)(4)(5) (6)(7)(8)	1 2 3 4 8aa, ab, βa, βb (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 9aa, ab ac (1)(2)(3)(4)(5)(6) (7)(8)										
2	4	1 2 3 4 (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 ab βb, βc γb, γc (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 (1)(2)(3)(4)(5)(6)(7) (8)	1 2 3 4aa, γa (1)(2)(3)(4)(5)(6)(7) (8)	1 2 3 4 (1)(2)(3)(4)(5)(6) (7)(8)									
2	5	1 2 3 4 5βb, (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 6 (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 7ab, βb (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 8ab, βb (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 9ab, ac (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 5γa (1)(2)(3)(4)(5) (6)(7)(8)	1 2 3 4 6 (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 7aa (1)(2)(3)(4) (5)(6)(7)(8)	1 2 3 4 8aa (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 9aa (1)(2)(3)(4) (5)(6)(7)(8)	1 2 3 4 5βb (1)(2)(3)(4)(5) (6)(7)(8)	1 2 3 4 6 (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 7ab, βb (1)(2)(3)(4) (5)(6)(7)(8)	1 2 3 4 8aa, ab, βb (1)(2)(3)(4)(5) (6)(7)(8)	1 2 3 4 9ab, ac (1)(2)(3)(4)(5) (6)(7)(8)
2	5	1 2 3 4 5 βa, γa (1)(3)(4)(5) (6)(7)(8)	1 2 3 4 6 (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 7aa, βa (1)(2)(3)(4)(5) (6)(7)(8)	1 2 3 4 8aa, βa (1)(3)(4)(5)(6) (7)(8)	1 2 3 4 9aa, (1)(3)(4)(5)(6) (7)(8)										
2	6	1 2 3 4 5 6 (1)(2)(3)(4)(5) (6)(7)(8)	1 2 3 4 5 7 βa, βb, (1)(2)(3)(4)(5) (6)(7)(8)	1 2 3 4 5 8 βa, βb, (1)(2)(3)(4)(5) (6)(7)(8)	1 2 3 4 5 9 (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 6 7 (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 6 8 (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 6 9 (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 7 8aa, βa, βb, (1)(2)(3)(4) (5)(6)(7)(8)	1 2 3 4 7 9ab (1)(2)(3)(4)(5) (6)(7)(8)	1 2 3 4 8 9aa, ab (1)(2)(3) (4)(5)(6)(7) (8)					
3	4	1 2 3 4 (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 βc, ⊕ ⊕ ⊕ (1)(2)(3)(4)(5)(6) (8)	1 2 3 4 (1)(2)(3)(4)(5)(6) (7)(8)											
3	5	1 2 3 4 5 (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 6 (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 7 (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 8 (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 9ab, ac (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 5 βb (1) (2)(3)(4)(5)(6) (7)(8)	1 2 3 4 6 (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 7βb (1)(2)(3)(4) (5)(6)(7)(8)	1 2 3 4 8ab, βb (1)(2)(3)(4)(5) (6)(7)(8)	1 2 3 4 9ab, ac (1)(2)(3) (4)(5)(6)(7) (8)	1 2 3 4 5βb (1)(2)(3)(4) (5)(6)(7)(8)	1 2 3 4 6 (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 7βb (1)(2)(3)(4) (5)(6)(7)(8)	1 2 3 4 8 (1)(2)(3)(4)(5) (6)(7)(8)	1 2 3 9 (1)(2)(3)(4)(5) (6)(7)(8)
3	5	1 2 3 4 5 (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 6 (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 7 (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 8 (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 9 (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 5 γa (1) (2)(3)(4)(5) (6)(7)(8)	1 2 3 4 6 (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 7aa (1)(2)(3)(4)(5) (6)(7)(8)	1 2 3 4 8aa (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 9aa (1)(2)(3)(4) (5)(6)(7)(8)	1 2 3 4 5 (1)(2)(3)(4)(5) (6)(7)(8)	1 2 3 4 6 (1)(2)(3)(4)(5)(6) (7)(8)	1 2 3 4 7 (1)(2)(3)(4)(5) (6)(7)(8)	1 2 3 4 8 (1)(2)(3)(4)(5) (6)(7)(8)	1 2 3 4 9ab, ac (1)(2)(3) (4)(5)(6)(7) (8)

[illegible]

5	5	<u>12345</u>	<u>12346</u>	<u>12347</u>	<u>12348</u>	<u>12349</u>										
5	6	<u>123456</u>	<u>123456</u>	<u>123456</u>	<u>123457</u>	<u>123457</u>	<u>123457</u>	<u>123458</u>	<u>123458</u>	<u>123458</u>	<u>123467</u>	<u>123467</u>	<u>123467</u>	<u>123468</u>	<u>123468</u>	<u>123468</u>
		<u>123469</u>	<u>123469</u>	<u>123469</u>	<u>123459</u>	<u>123459</u>	<u>123459</u>	<u>123456</u>	<u>123457</u>	<u>123458</u>	<u>123459</u>	<u>123467</u>	<u>123468</u>	<u>123469</u>	<u>123478</u>	<u>123479</u>
		<u>123478</u>	<u>123478</u>	<u>123478</u>	<u>123478</u>	<u>123479</u>	<u>123479</u>	<u>123479</u>								
5	7	<u>1234567</u>	<u>1234678</u>	<u>1234578</u>	<u>1234568</u>	<u>1234567</u>	<u>1234678</u>	<u>12345</u> <u>78βb</u> (1) (2) [3] [4] [5] [6] (7) (8)	<u>1234568</u>	<u>1234567</u>	<u>1234678</u>	<u>1234578</u>	<u>1234568</u>	<u>1234567</u>	<u>1234678</u>	<u>1234578</u>
		<u>1234568</u>	<u>1234567</u>	<u>1234678</u>	<u>1234578</u> αa (1) (2) [3] [4] [5] [6] (7) (8)	<u>1234568</u>	<u>1234567</u>	<u>1234678</u>	<u>1234578</u>	<u>1234568</u>	<u>1234569</u>	<u>1234679</u>	<u>1234579</u>	<u>1234589</u>	<u>1234569</u>	<u>1234679</u>
		<u>1234579</u>	<u>1234589</u>	<u>1234569</u>	<u>1234579</u>	<u>1234589</u>	<u>1234569</u>	<u>1234579</u>	<u>1234589</u>	<u>1234569</u>	<u>1234579</u>	<u>1234589</u>				

Key

Static visual variables

1 size; 2 form; 3 value; 4 colour; 5 grain; 6 orientation; 7 brilliance; 8 transparency; 9 aura; variables employed to show the phenomenons are underlined

Entities / measurement levels

α point entities; β line entities; γ area entities;

a - nominal scale measurable entities; b - ordinary scale measurable entities; c - quantitative scale measurable entities

Age groups

[1] [2] [3] [4] [5] [6] [7] - correct combination of variables for labelled age groups

{1} {2} {3} {4} {5} {6} {7} {8} conditional combination of variables for labelled age groups

Correct
combination

Combination
inaccessible
due to the
absence of *colour*
in the case
of achromatic
e-papers

Combination
inaccessible
due to the
absence of *aura*
in the case of part
of chromatic
e-papers

Combination
inaccessible
due to the absence of
colour and *aura*
in the case
of achromatic
e-papers