Peripheral Perception (PP)

Test for analyzing peripheral perception during a simultaneous tracking task Test administration: 02.06.2016 - 14:34...14:42, Duration: 8 min.

Test results - Adults:

Test variable	Raw score	PR	Т
Peripheral perception and Controlvariables			
Field of vision	176.4°	79 (66-88)	58 (54-62)
Visual angle left	89.3°		
Visual angle right	87.1° ¹		
Tracking deviation	11.5	53 (42-66)	51 (48-54)
Additional variables			
Hits left ²	13		
Hits right ²	13		
Incorrect reactions ³	1		
Omitted reactions	13		
Reaction times			
Median reaction time (left stimuli) ⁴	0.87		
Median reaction time (right stimuli) ⁴	0.73		
Median reaction time ⁴	0.82		

Comment(s): Percentile rank (PR) and T-score (T) result from a comparison with the entire comparative sample 'Adults'. The confidence intervals given in parentheses next to the comparison scores have a 5% probability of error.

¹Only an estimation of the minimum field of vision is possible, because at least two times an extreme stimuli was detected and therefore it is not possible to measure the maximum field of vision.

²Foot pedal pressed when a required stimulus was presented (cross-hairs were within the range of tolerance).

³Foot pedal pressed although a required stimulus was not presented.

⁴Median reaction time in seconds

Comments and explanations on the test variables:

Field of vision:

This score gives the total field of vision in degrees; it results from the sum of the left and right visual angles.

The total field of vision resulting from the addition of the monocular fields can be up to approx. 200 degrees in the horizontal plane. Within the field of traffic psychology, values of less than 120 degrees raise concerns about the person's fitness to drive. German driving law (Driving Licence Ordinance, FeV, 1998) stipulates that the driver of a motor vehicle must have a total visual field of at least 120 degrees (for professional drivers 140 degrees, which must consist of at least 70 degrees on the left and 70 degrees on the right). Thus a person with a narrower field of vision may not be entitled to drive a motor vehicle.

Tracking deviation:

This variable provides information about the individual's ability to divide his attention, since available cognitive resources must be split between the peripheral perception task and a tracking task. High percentile ranks indicate that the respondent's ability to divide his attention is good.

Notes:

- The above-mentioned comments and explanations on the test variables can be switched on or off at the "Extended Settings" tab of the Vienna Test System.

- A detailed description of all test variables with comprehensive notes on interpretation will be found in the digital test manual which can be displayed and printed out via the user interface of the Vienna Test System.

Profile - Adults:

Т	20	30	40	50	60	70	80
Field of vision				F			
Tracking deviation							
PR	0.1	2.3	15.9	50.0	84.1	97.7	99.9

Comment(s): The shaded area represents the usual average ranges on the norm score scale.

Test protocol:

Stimulus	Side	Grid- position	Reaction	Head- distance (cm)	Visual angle (degree)	Tracking deviation (pixels)	Reaction time (sec)	Pause (sec)
1	Left	33	+	50.5	67.4	9.9	1.316	4.0
2	Left	43	+	52.0	69.5	24.0	0.708	5.0
3	Right	33	+	50.5	67.5	7.3	0.560	7.0
4	Left	53	_	50.5*	83.5	7.0		2.0
5	Right	43	+	56.5	70.6	10.0	0.850	5.0
6	Right	53	+	56.5	81.1	8.5	1.023	3.5
7	Left	48	+	51.5	78.4	7.0	0.906	7.0
8	Left	51	+	52.0	77.1	6.1	1.141	5.0
9	Right	63	_	52.0*	83.4	6.9		3.0
10	Right	58	+	52.5	78.2	5.8	0.685	6.5
11	Left	54	+	52.5	83.2	8.3	0.778	2.0
12	Left	59	_	52.5*	79.4	13.5		5.0
13	Right	61	+	52.5*	81.3	6.8	0.588	8.0
14	Left	56	+	52.5	82.2	7.3	0.867	5.0
15	Right	64	+	52.5*	87.6	10.5	0.700	7.5
16	Right	64	+	52.5*	87.7	13.3	0.742	3.0
17	Right	64	_	52.5*	87.9	8.4		8.0
18	Left	58	_	52.5*	79.7	7.2		5.0
19	Right	59	_	52.5*	79.1	5.2		6.5
20	Left	57	+	46.5	90.5	13.1	0.998	2.0
21	Left	58	_	46.5*	93.5	8.5		6.0
22	Right	54	+	46.5	88.1	7.1	0.650	5.5
23	Left	57	+	47.5	(83.9)	15.9	0.659	4.0
24	Right	57	+	47.5	86.9	20.6	0.927	7.5
25	Right	60	_	47.5*	88.1	10.0		4.5
26	Left	58	+	47.0	89.7	7.1	0.652	3.0
27	Left	59	_	47.0*	91.0	8.5		4.5
28	Right	58	_	47.0*	89.2	9.5		6.0

Stimulus	Side	Grid- position	Reaction	Head- distance (cm)	Visual angle (degree)	Tracking deviation (pixels)	Reaction time (sec)	Pause (sec)
29	Right	56	+	47.0*	85.0	9.8	0.731	2.5
30	Left	58	+	47.0	87.1	9.6	0.545	2.5
31	Right	57	_	47.0*	87.0	8.6		4.5
32	Left	59	+	47.5	90.4	7.7	1.003	7.0
33	Left	60	+	48.0	89.3	11.5	0.867	3.0
34	Right	56	+	49.0	87.3	9.4	0.925	3.0
35	Right	57	+	48.0	85.8	13.6	0.649	5.5
36	Left	62	_	48.0*	92.4	11.8		8.0
37	Right	58	_	48.0*	81.0	30.9		3.0
38	Left	61	+	53.5	78.9	17.1	0.960	5.5
39	Left	62	+	50.0	87.5	8.5	0.790	7.5
40	Right	57	+	53.0	81.4	9.2	1.225	6.5

Test protocol (continued):

Comment(s): Grid position: Position of critical stimulus on the display, 1 (inside) ... 64 (outside); Reaction: +=stimulus recognized, -=stimulus not recognized; Head distance: Distance between head and measurement device (*=the last actual measurement was taken); Visual angle calculated taking grid position, position of cross-hairs and distance between head and measuring device into consideration (values in parentheses are not scored, since the cross-hairs were located outside of the range of tolerance at the time of reaction); Tracking deviation: weighted deviation of the cross-hairs from the target symbol; Pause: time interval from the last critical stimulus

Progress chart:

