



Attention please!

Alertness in individuals with profound intellectual and multiple disabilities

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Outline

- › Introduction:
 alertness
- › Literature review:
 alertness observations
- › The Alertness Observation Checklist:
 reliability
- › General discussion



Alertness

- › 'being open for/ focused on the environment'
- › Precondition for learning and development,
for assessment
- › Difficulty of determining alertness



Literature review: method

- › Gather existing knowledge
- › ERIC, PsycINFO
- › 1993 – 2007
- › Searching for “alertness” in combination with “PIMD”



Literature review: results en conclusion

- › 42 papers
- › Observations
- › Different scales
- › Continuous versus interval coding
- › Problem of reliability



The Alertness Observation Checklist (AOL)

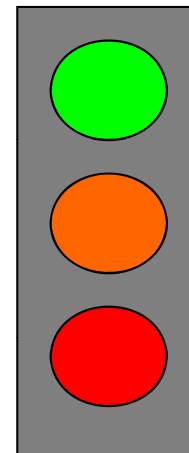
- > Aim: formulate individual alertness profile
- > Four steps:
 1. Is the day a normal day for the person?
 2. What is the person's pattern of alertness during the day?
 3. What is the person's reaction to stimuli in terms of alertness?
 4. What is the person's individual alertness profile?



The AOL

- Alert (green)
- Turned inward (orange)
- Asleep (red)

- Agitated,
discontent
(blue)





The AOL: method

- > 23 children,
pool of 120 situations
- > 3 groups of observers,
2 observers for each situation
- > 39 situations: inter-observer reliability,
39 situations: intra-observer reliability,
general agreement formula:
 $(\text{agreement} / (\text{disagreement} + \text{agreement})) * 100$



Inter-observer agreement:

Observers	Situations													<i>M</i>	<i>Mdn</i>	<i>SD</i>
	1	2	3	4	5	6	7	8	9	10	11	12	13			
T and E+	83.33	75.00	87.50	75.17	80.00	100.00	75.00	62.50	100.00	87.50	62.50	100.00	87.50	82.77	83.33	12.80
T and E-	50.00	75.00	70.83	79.17	83.33	91.67	100.00	100.00	87.50	91.67	79.16	66.67	75.00	80.77	79.17	13.98
E+ and E-	83.33	80.00	86.67	75.86	93.33	100.00	50.00	64.86	81.82	94.74	64.44	100.00	76.00	80.85	81.82	14.86
TOTAL													81.46	81.44	13.88	

Intra-observer agreement:

Observers	Situations													<i>M</i>	<i>Mdn</i>	<i>SD</i>
	1	2	3	4	5	6	7	8	9	10	11	12	13			
T	70.83	70.83	91.67	100.00	79.17	83.33	70.83	70.83	100.00	70.83	100.00	91.67	83.33	83.33	83.33	12.15
E+	95.83	66.67	76.67	93.10	93.55	100.00	88.89	61.11	87.10	78.95	86.36	100.00	85.00	85.63	87.10	12.02
E-	91.07	96.77	63.64	72.88	95.16	82.98	100.00	90.48	91.53	86.05	97.73	86.84	72.22	86.72	90.48	11.09
TOTAL													85.23	86.97	11.75	



The AOL: conclusion

- > Alertness can be observed reliably
- > However, (large) differences in results
 - for observed individuals
 - for situations
 - for groups of observers



General discussion

- › Subjectivity of observations
- › Optimal scoring frequency
- › Impact of external conditions
- › Additional information to complement alertness observations



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Thank you for your attention!