

# Methods and Techniques in Behavioral Research,

7th International Conference  
24-27 August 2010 Eindhoven

Behavior Measurement  
Autism Spectrum Disorders

Workshop  
*A Recipe for Measuring Behavior  
in Autism Research*

August 26,

10.00 h AM – 0.30 h PM

# Behavioral Measurement and Autism Spectrum Disorders

Arnold Bartels PhD

Dr. Leo Kannerhuis,

Doorwerth/Oosterbeek/Arnhem/Amsterdam

The Netherlands

26 August 2010

# Behavioral measurement ASD

- There are a lot of observational checklists and behavior observation instruments for ASD.
- For example: class room behavior, self management, interactive reacting
- Here three: a diagnostic list, a screening list and an instrument for evaluating program progress in problematic behavior

# Diagnostic & Evaluative Checklist ASD

- Originally developed for screening ASD.
- Later on also used for arriving at a diagnosis.
- 160 items, 6 point scale.
- Completion takes 30 minutes, rater must know the person in daily life for 2 months
- In progress. Reliability high (scores from 0-60, seldom a difference of more than 5 between 2 independent raters.
- Also used for program evaluation.

# Dimensions Checklist ASD

- 1 Being alone, withdrawal from contact  
rejecting contact
- 2 Responding to emotional behaviors
- 3 Use of language
- 4 Cognitive information processing
- 5 Obsessions, rituals, preoccupations
- 6 Reacting on change
- 7 Sensory modalities
- 8 Locomotion, movements

# VISV (1)

- Vragenlijst Inventarisatie Sociaal Gedrag Volwassenen
- Questionnaire Inventarization Social Behavior Adults
- ASD-screenings questionnaire
- On the basis of a questionnaire for children.
- First version: 180 items

# VISV (2)

- Two formats: other report (OR, completion by others, raters) and self report (SR, completion by the person himself).
- Expected: OR valuable, SR no value (e.g. OR: ‘He/she does not understand the essence of a joke’. SR: ‘You don’t understand the essence of jokes and humor.’)

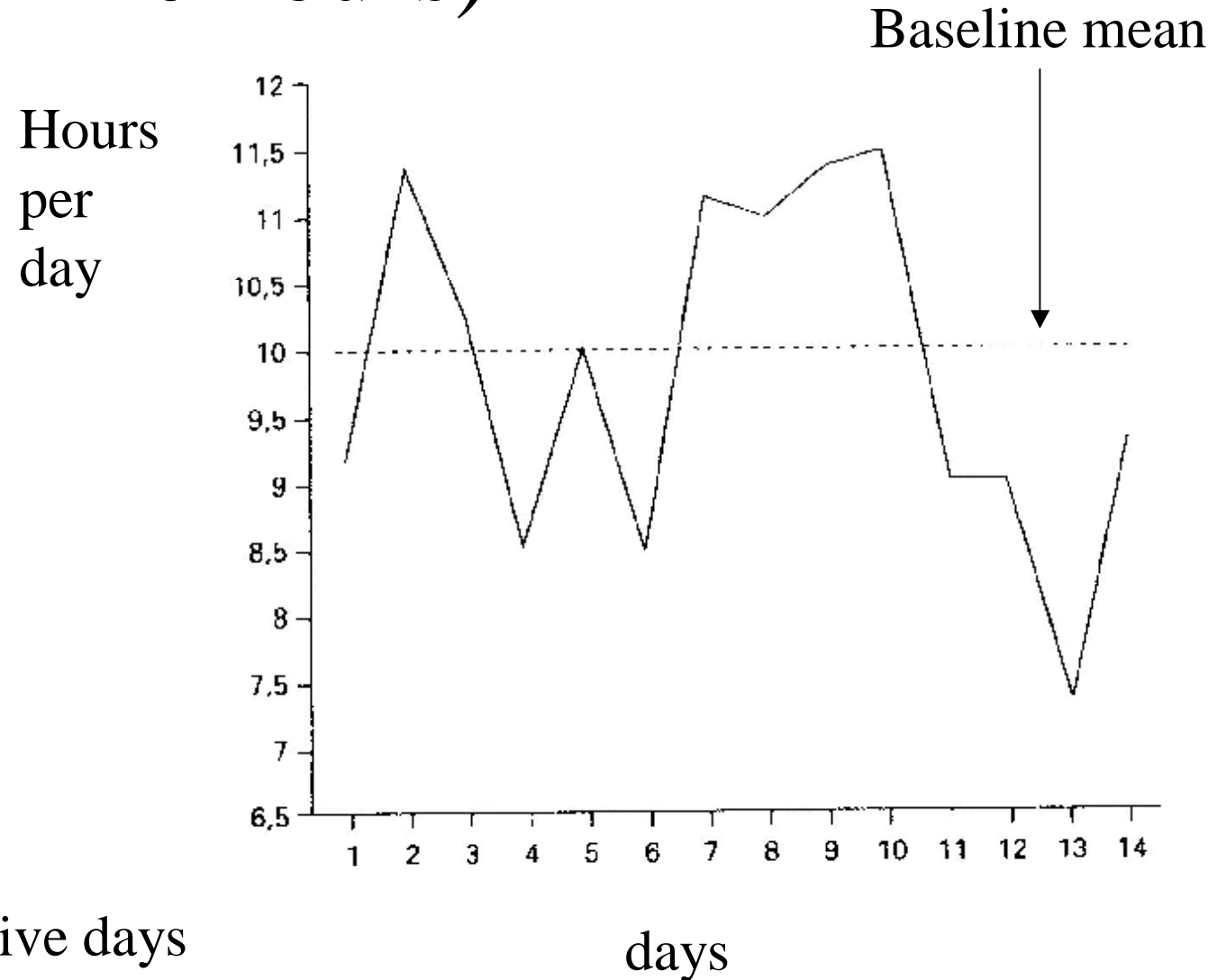
# VISV (3)

- Dimensions for children: acting-out, social contact, social understanding, anxieties and rigidities, stereotypical behavior.
- Presently: reliability, factor analyses, ready for use in 2011.
- Institute: UMCG-psychiatry (University Medical Center Groningen, psychiatry, Ernst Horwitz)

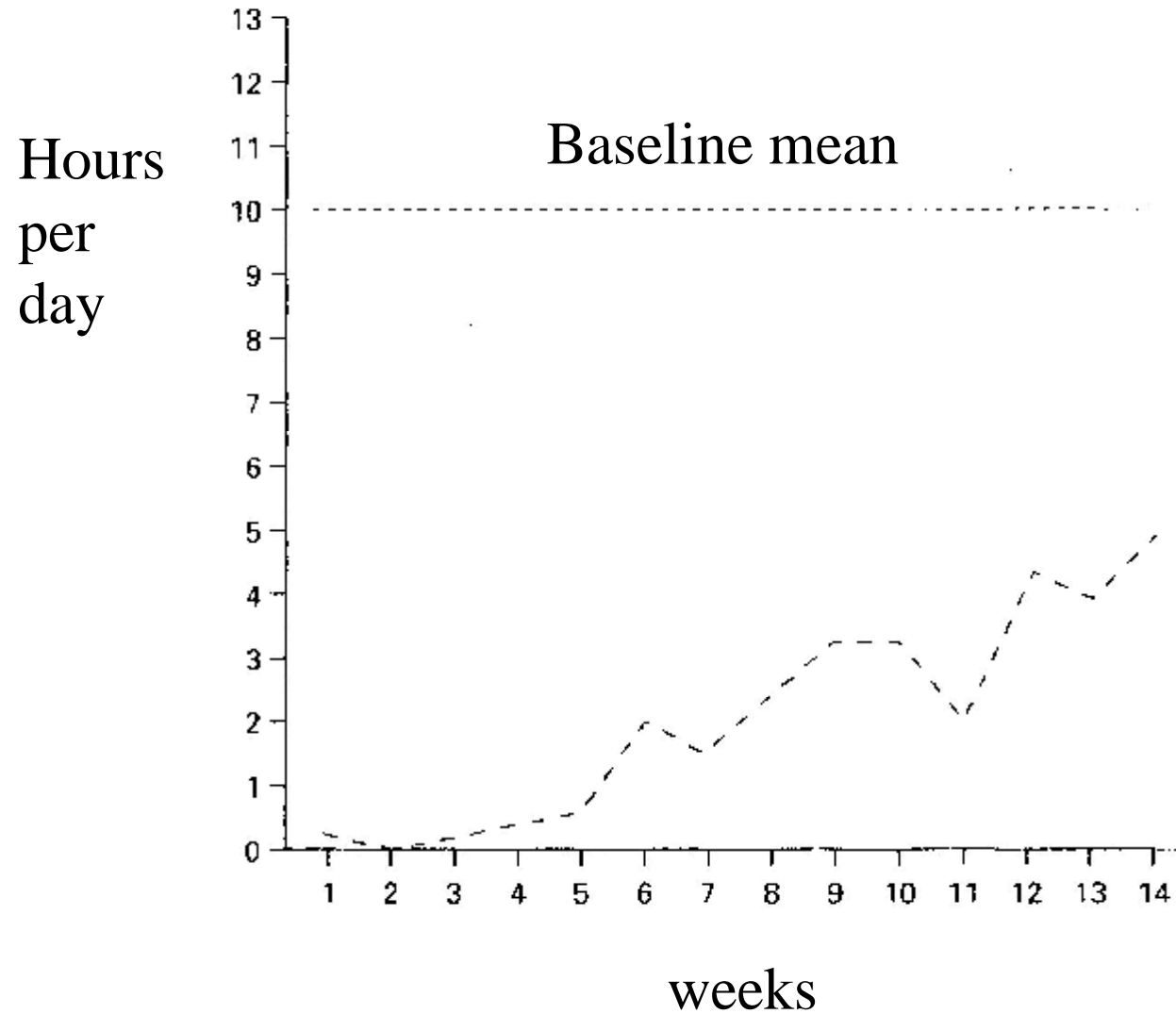
# Single Case Measurement of Problematic Behavior

- Man, autistic, fixated on bed because of serious aggression and destruction.
- Counted: hours on bed per day involuntarily + 50% of hours per day on bed voluntary + 25% hours spent in room on instruction.
- 3 Phases: baseline (14 days, representative), intervention I (new room), intervention II (behavior therapy).

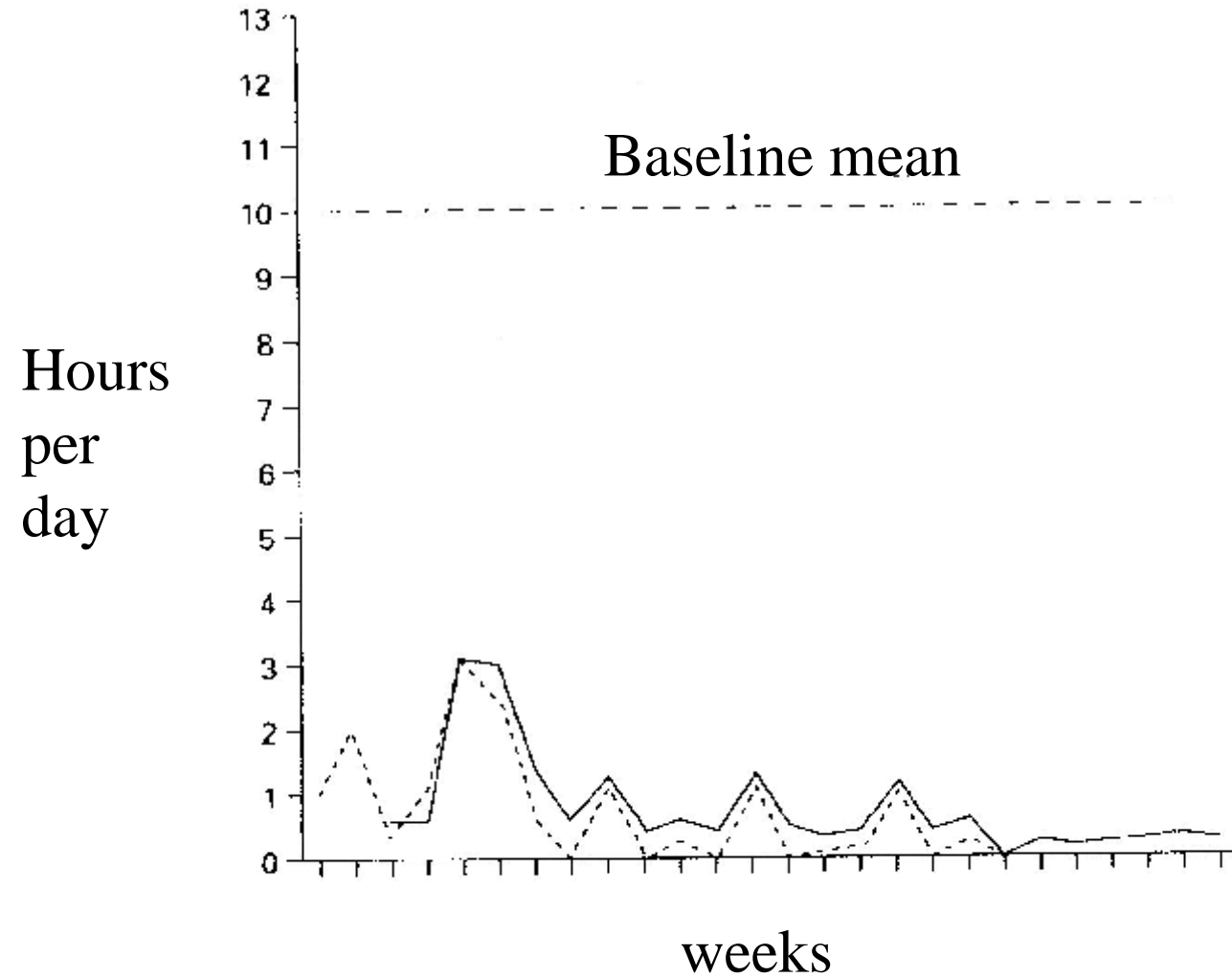
# Phase A: baseline (mean = 10 hours)



# Phase B: Intervention I (new room)



# Phase C: Intervention II (program)



Thank you

[a.bartels@leokannerhuis.nl](mailto:a.bartels@leokannerhuis.nl)