

Establishing synchrony between client and therapist enhances interactive behavior

Anna M.T. Bosman, PhD*

Sonja van Veen, MSc*#

Carine Heijligers, MA*#

* Radboud University Nijmegen, the Netherlands

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Theoretical assumptions-1

- Clients with a ‘pre-problem’ cannot benefit from verbal treatments
- Clients without a Sense of Self and Sense of Others (Stern, 1985/2000) cannot benefit from verbal treatments
- Humans are born with the tendency to move with one another (related to Lorenz’ geese who tend to follow the first moving entity they encounter).

Being moved with one another

QuickTime™ and a
YUV420 codec decompressor
are needed to see this picture.

Theoretical assumptions 2

- Being moved with leads to synchronization in movements and all other behavior (the hoarseness-whisper effect)
- Synchronization occurs naturally in infant-caretaker interactions (e.g., Condon & Sander, 1974)
- Observing clients with a pre-problem and without a Sense of Self reveals that they are usually unable to synchronize with another
- Synchronization is required in a client-therapist dyad for change to emerge
- Synchrony can be established using a body-language approach called Emerging Body Language (EBL)
- Synchronizing in terms of EBL is being in each other rhythm with rhythmical pauses.

Participants

Three clients from a residential home for children with mild cognitive impairments and behavioural problems.

Three 3rd year bachelor students 'special education' from the Radboud University Nijmegen in the Netherlands

Treatment

Fall of 2009

baseline: aim of the first 6 to 8 sessions is to have a nice time together (no therapeutic goal).

Winter-spring 2010 (January-May)

intervention: individualized goal for each client
weekly sessions of 1 tot 2 hours (12 to 16 sessions)

All sessions were videotaped.

MATERIALS

For analysis (8 minutes per video):

- 3 Baseline videos
- 3 Intervention videos

Criteria for inclusion

- Audibility
- Visibility of both partners
- Quality of the video
- Baseline situations matches intervention situations
- No interventions from another person

Assessing *Interactional Dominance* using Linell's Initiative-Response Analysis (Linell et al, 1988)

Interactional dominance in a conversation depends on #

- Expanded responses
- Direct questions
- Abrupt topic changes
- Implicit turns (monologues, ignoring contributions)

high level means controlling the conversation

* Interactional dominance \neq Power

Assessing *Synchrony* using CRQA (Webber & Zbilut, 1994)

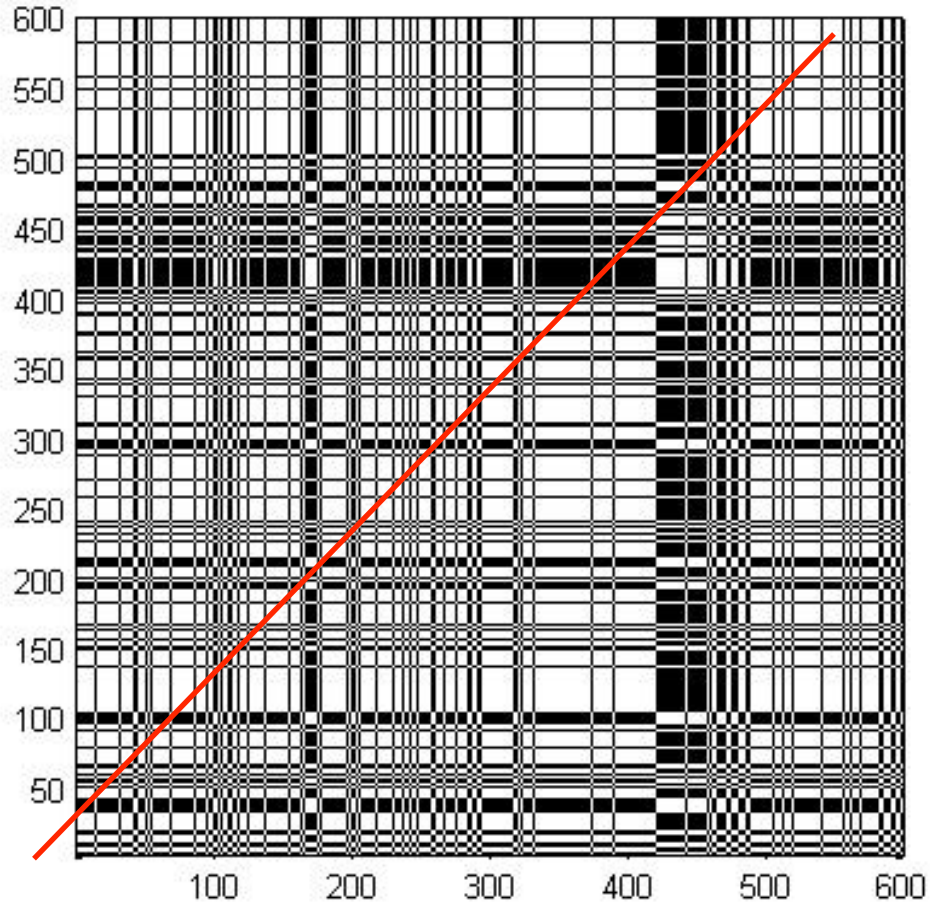
Synchrony is achieved when:

- Client speaks and therapist is silent
or
- Therapist speaks and client is silent

All sessions were scored assessing speaking and silence of both partners of the dyads

Recurrence plot Client-Therapist

Therapist



Client

Vignet Dyad 1

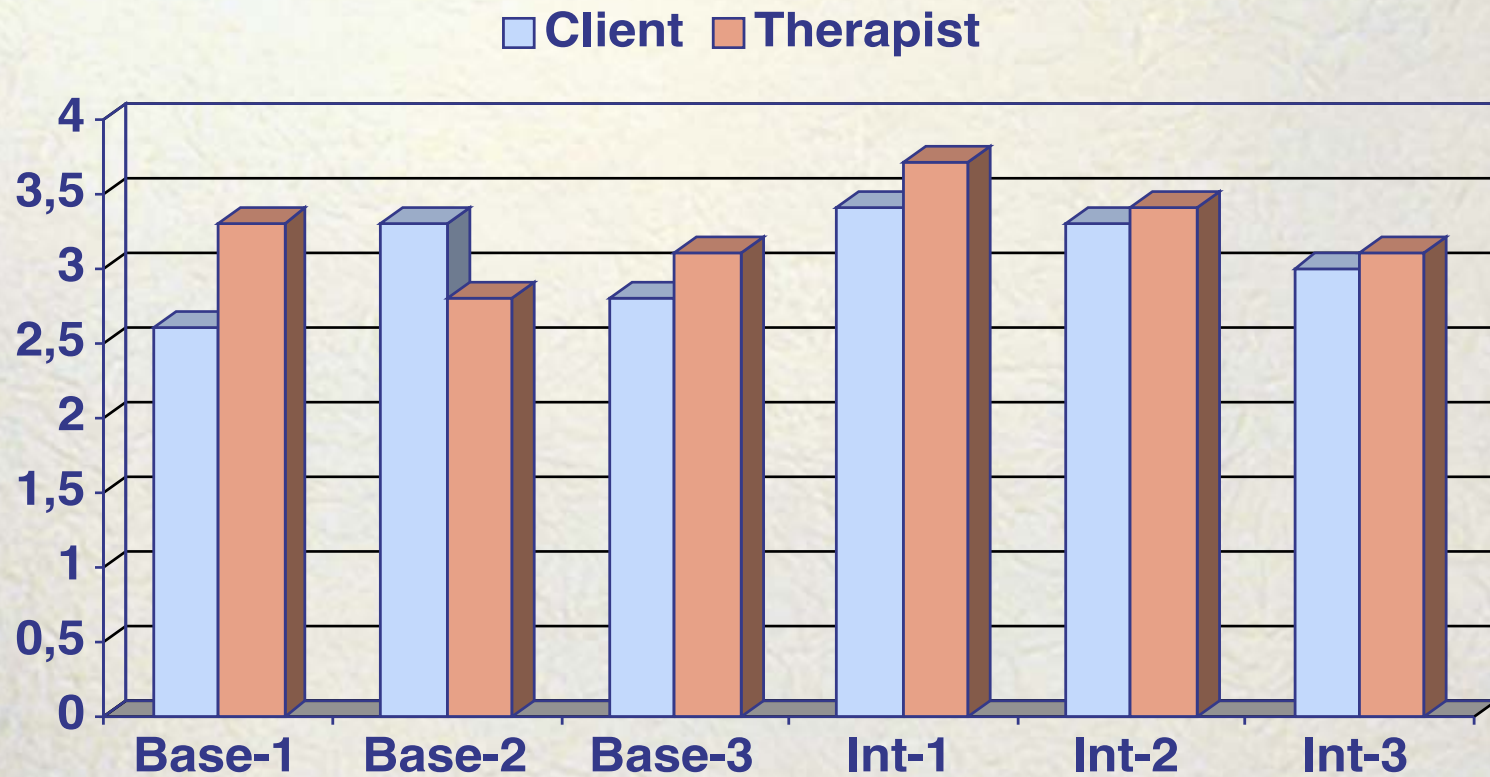
Client: 15 year old Dutch boy, ADHD, ODD, IQ = 80; socio-emotional level between 12 and 18 months

Problem: lacks self- and interactional synchronisation

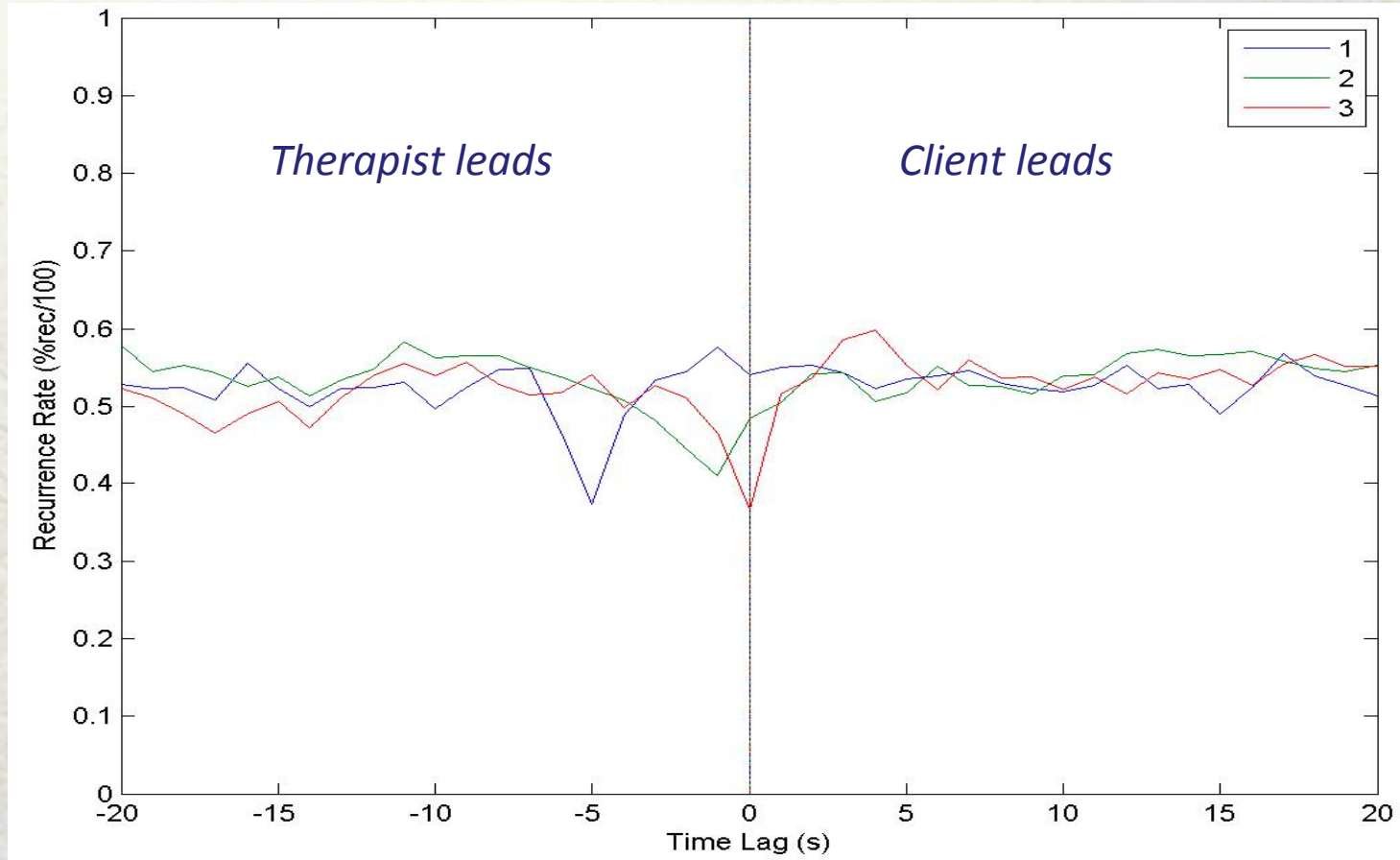
- verbal and physical aggression
- Clumsy, unintelligible speech
- Bossy with other children and adults

Therapist: 21-year old woman student bachelor special education

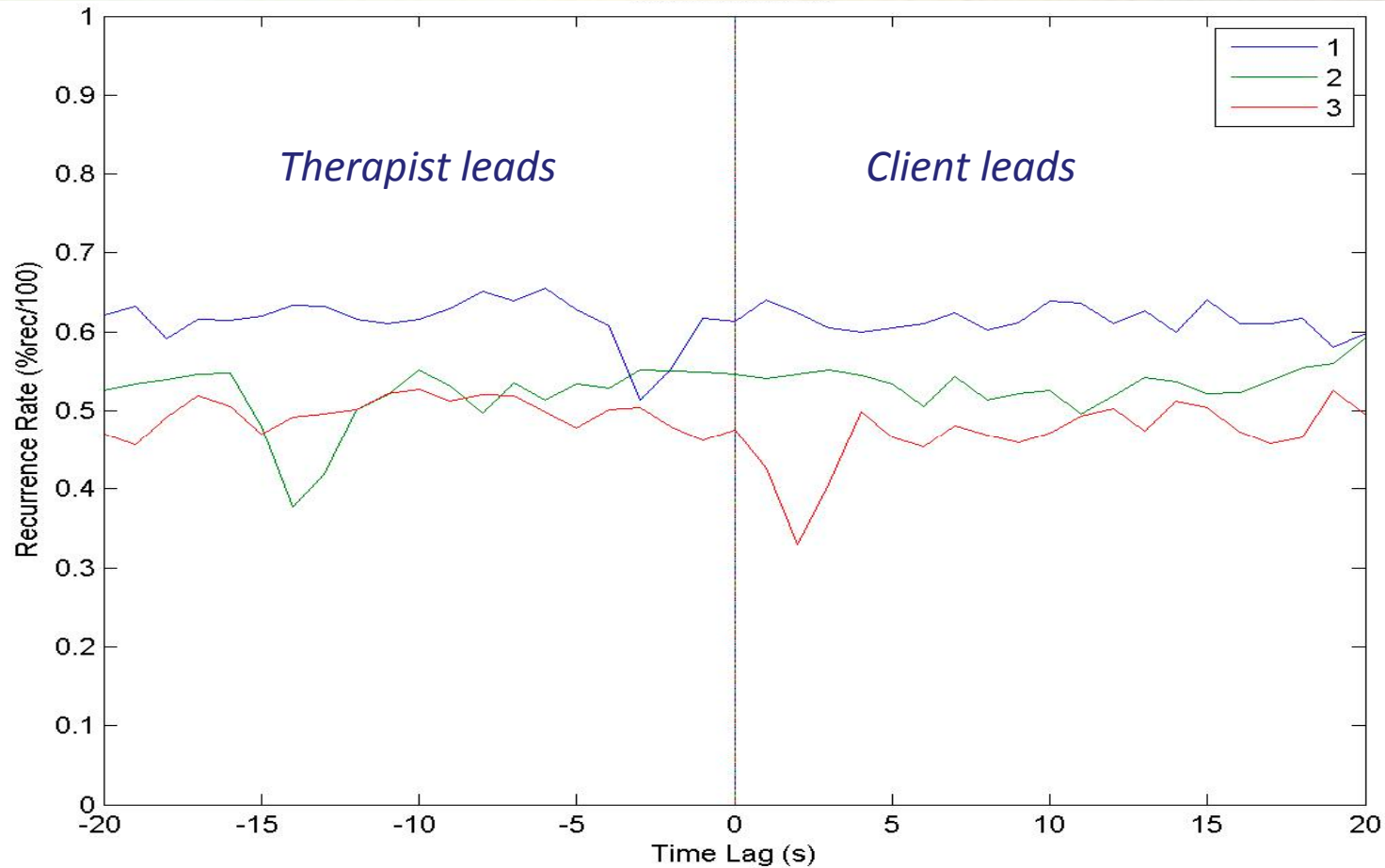
Interactional Dominance Dyad 1



Leading-Following Baseline Dyad 1



Leading-Following Intervention Dyad 1



Vignette Dyad 2

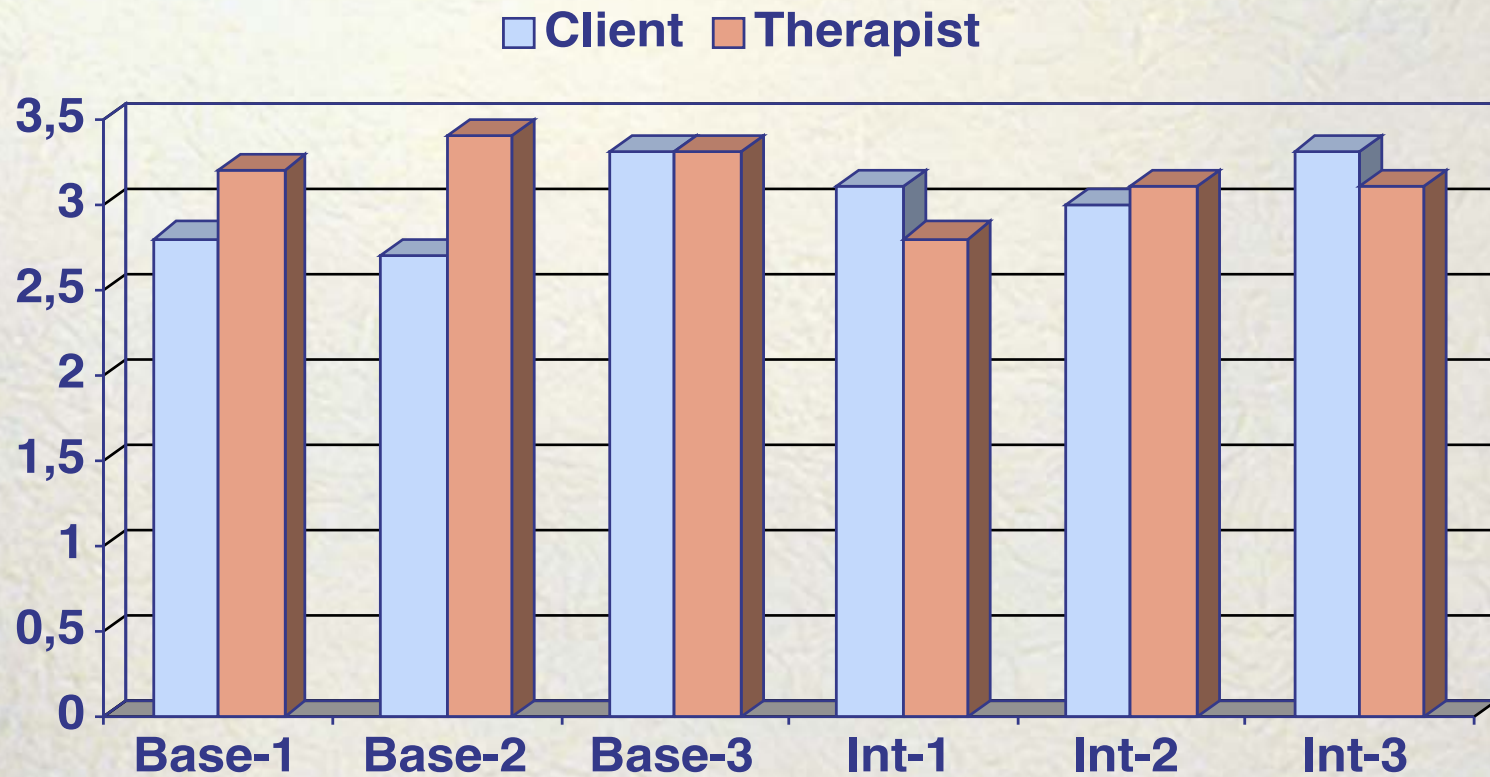
Client: 13 year old Dutch girl, reactive attachment disorder, IQ = 60; socio-emotional level between 12 and 24 months

Problem: lacks a Sense of Self, cannot decide not to synchronize (it happens)

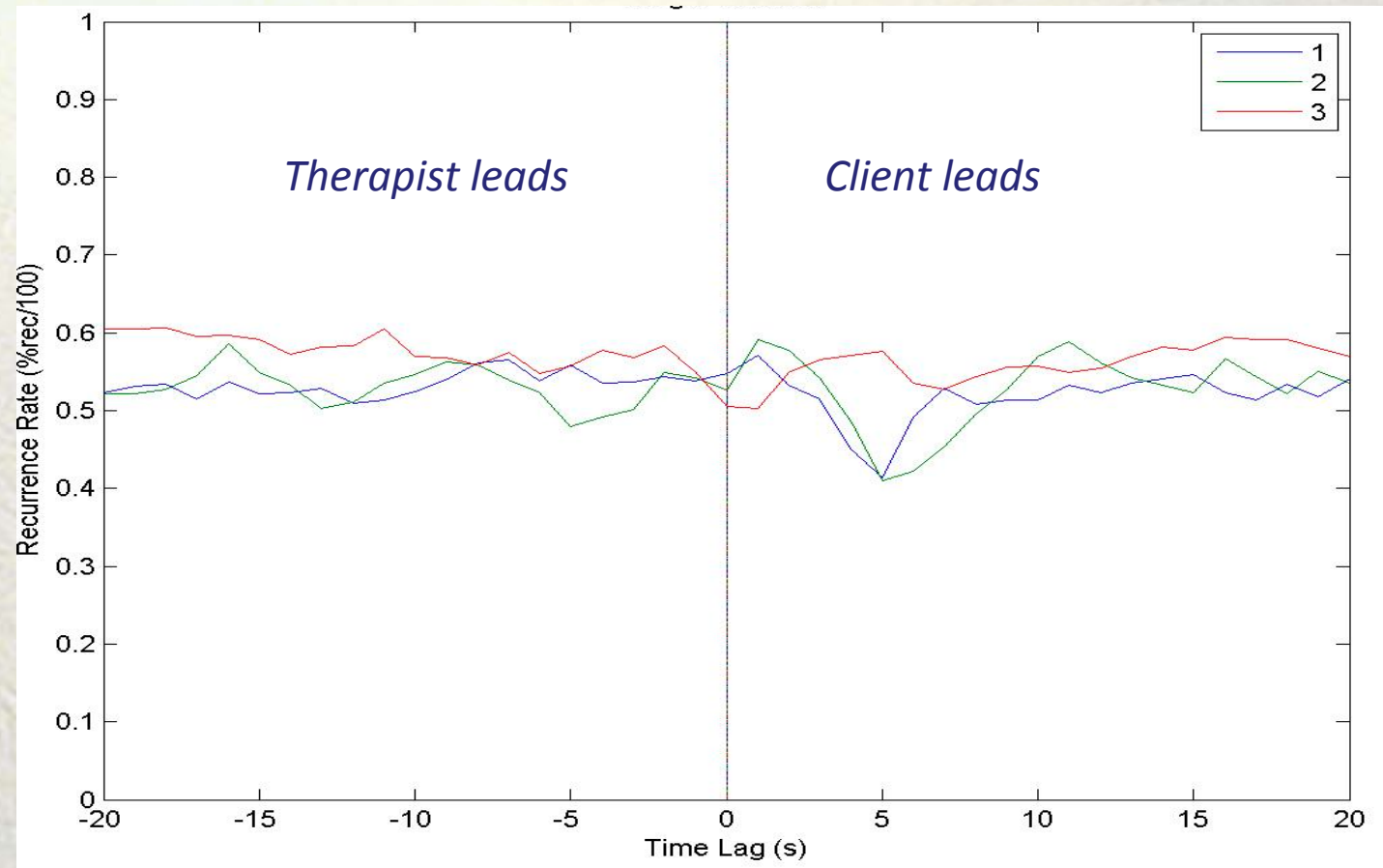
- Needs continuous attention, clinging behaviour
- Is focused on pleasing others
- Does not recognize her bodily emotions and sensations, not even hunger and thirst.

Therapist: 22-year old woman student bachelor special education

Interactional Dominance Dyad 2

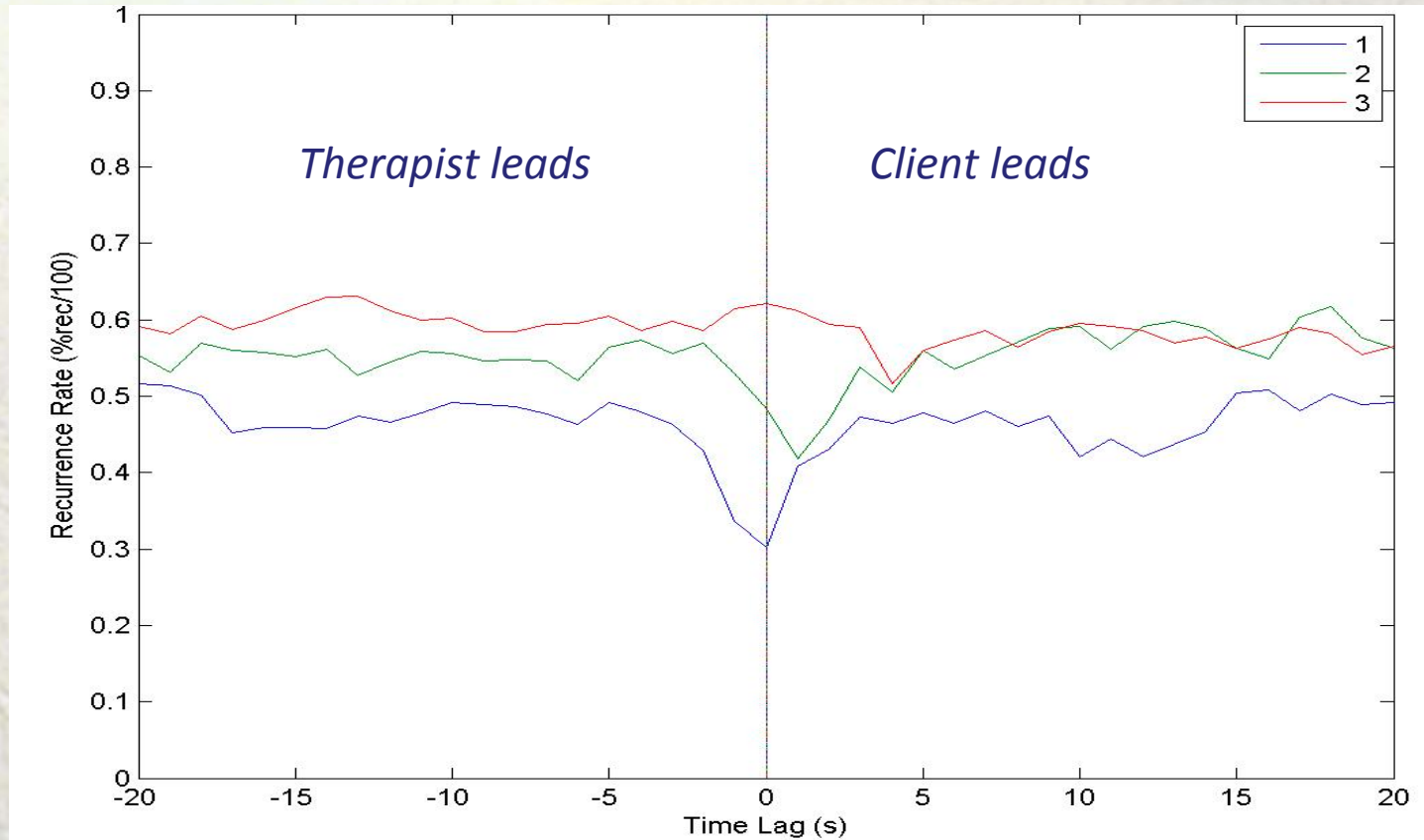


Leading-Following Baseline Dyad 2



Leading-Following Intervention Dyad

2



Vignet Dyad 3

Client: 14 year old Chinese boy, PDD-nos IQ = 74; socio-emotional level unknown

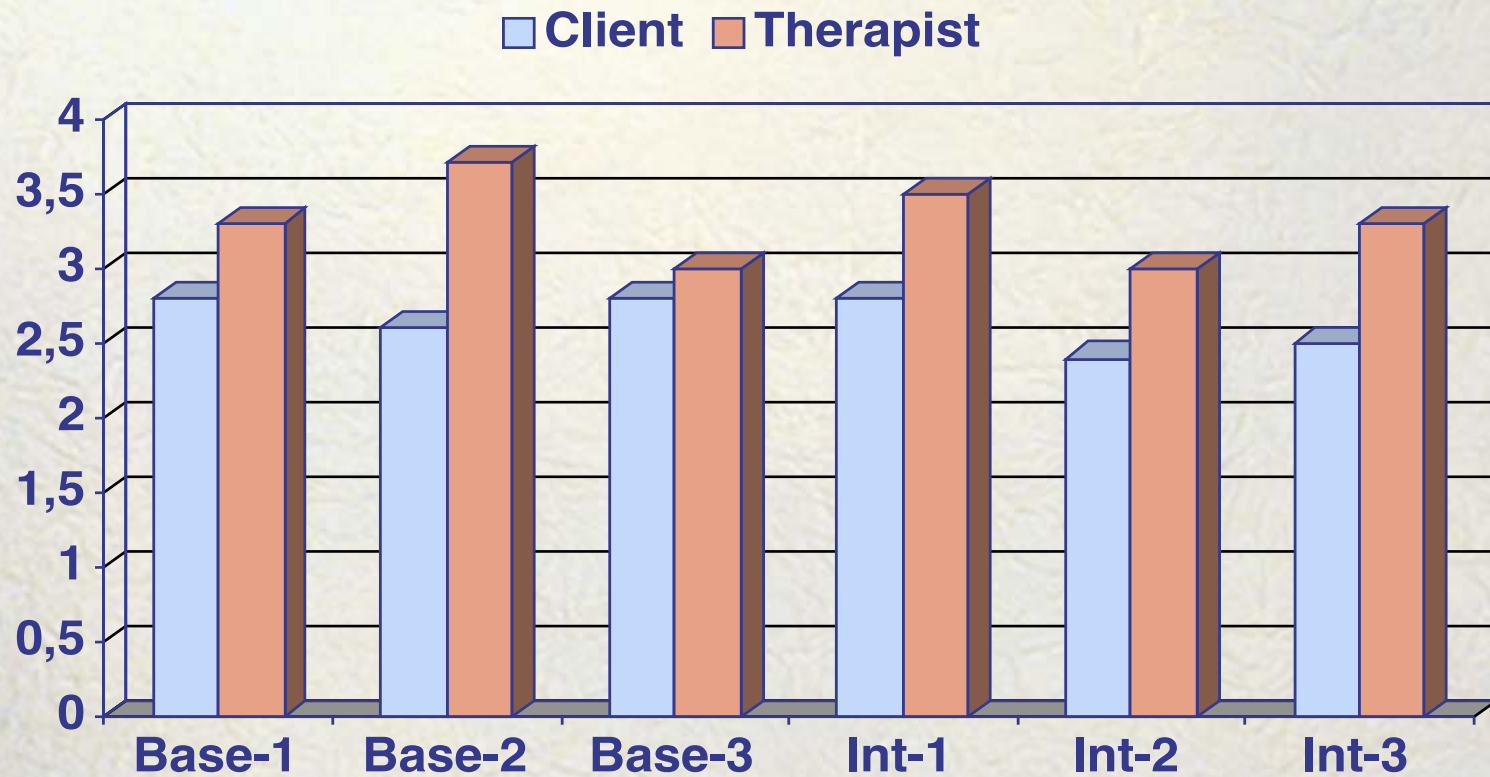
Problem: lacks the perspective of another, does not synchronize

- Unaware of thoughts and feelings of others
- Does not share thoughts and feelings with others
- Avoids making eye contact
- Difficulty starting a conversation

Therapist: 24-year old woman student bachelor special education

Interactional Dominance Dyad

3



Leading-Following Baseline Dyad 3

Therapist leads

Client leads

QuickTime™ and a
TIFF (Uncompressed) decompressor
are needed to see this picture.

Leading-Following Intervention Dyad 3

Therapist leads

Client leads

QuickTime™ and a
TIFF (Uncompressed) decompressor
are needed to see this picture.

Conclusion

Therapist needs to have flexibility to add noise to the system of the strong attractor behavior of the client.

Issues

- Assessing effectiveness is a tricky issue: What is a valid for whom?
- Solution: Convergence of different measures?
- Qualitative assessment and giving meaning appear required?

Thanks to

Ellen Reuzel, MSc, for her introduction to
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