

Through the Looking Glass: Exploring the Relationship Between Nonverbal and Verbal Behaviour on Rapport and Dyadic Cooperation

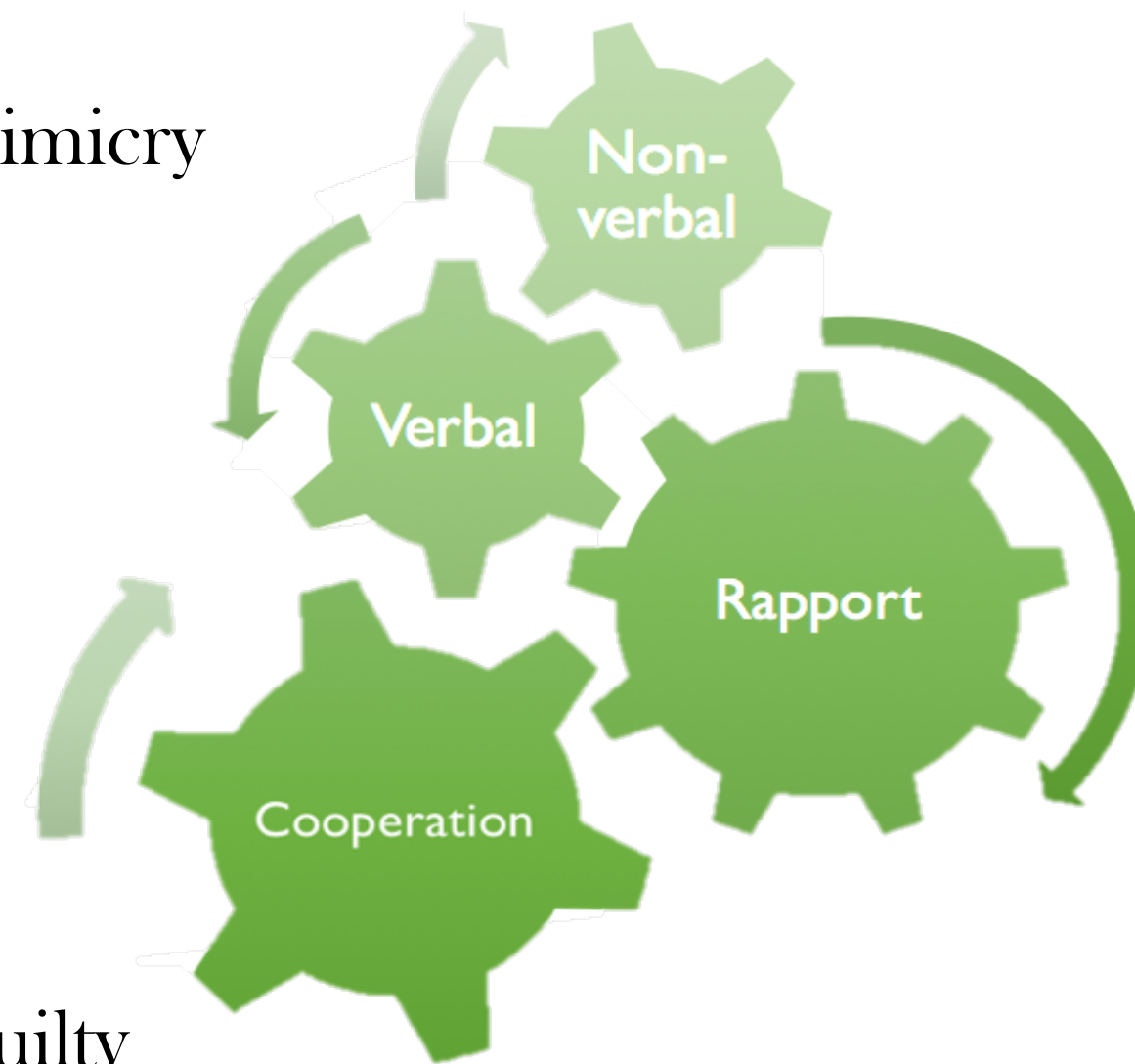
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Introduction – and open questions

Examining the complementary roles of verbal and nonverbal behaviours in investigative interviews

How do verbal and nonverbal mimicry

- 1) co-occur?
- 2) relate to the established outcomes of rapport (internal perception) or cooperation (external behaviour)?

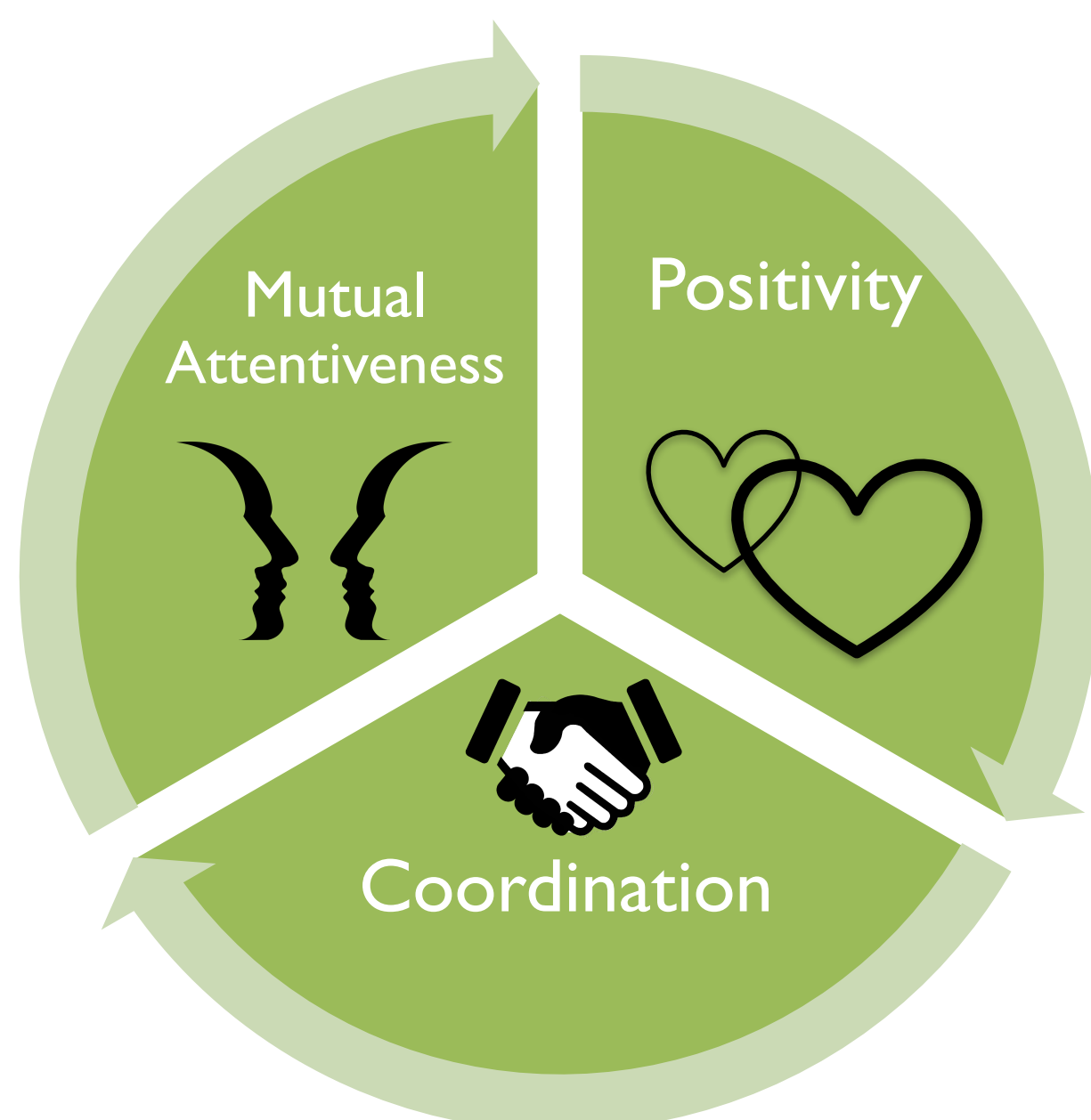


How do different motivations (e.g., being deceptive or hiding guilty knowledge) and goals (being cooperative vs. non-cooperative) influence rapport and its outcomes?

Background

Rapport – a definition

The goal of an investigative interview is to elicit and obtain information from a witness, suspect or victim. Broadly, rapport is a relationship-building technique that can create a strong bond between individuals.



3 main components named for rapport

Problem:

There is no clear definition of what rapport is yet. However, the literature agrees that rapport is detectable via its behavioural correlates. Therefore, these behavioural correlates hold a promising and objective measure for rapport.

Positive effects of Rapport:

- ✓ Impact on quality and precision of information recall
- ✓ Interaction is shaped by trust and friendliness
- ✓ Communication is 'in-sync'

Aim of this research:

- Find an objective and novel measure of rapport that is independent from self-report data.
- Move towards a definition of rapport.

Methodology I

Participants

78 participants (female = 54, $M_{age} = 22.17$, $SD = 4.08$)

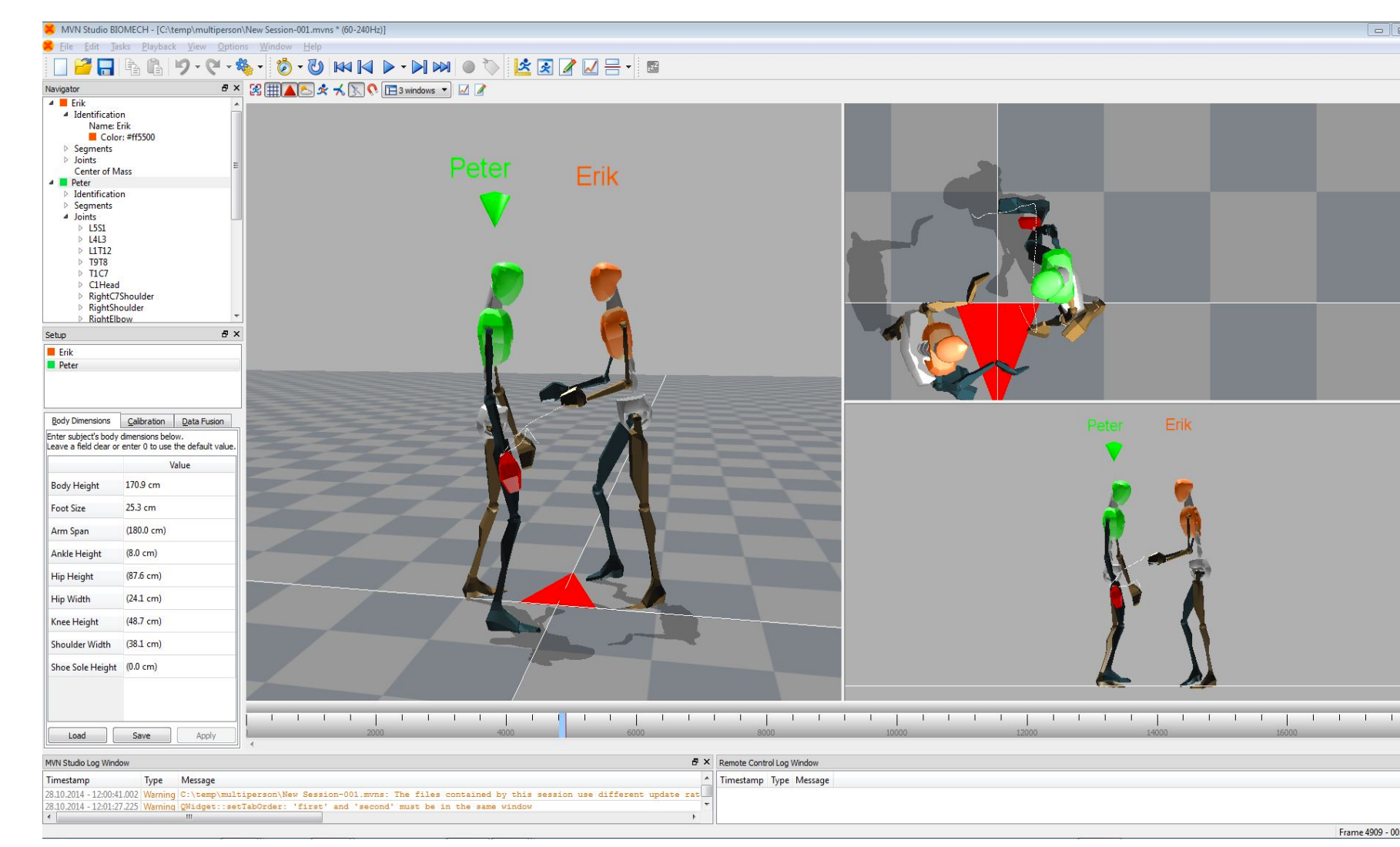
Measures

Nonverbal	Verbal	Emotional	Rapport
XSens motion tracking equipment: This allows us to measure human movements in real time.	LIWC = Linguistic Inquiry and Word Count ACID = Assessment Criteria Indicative of Deception Both coding schemes help us amongst others to detect deception.	Emotion Scale	Adapted Work Alliance Questionnaire (WAI)

Why do we use the XSens motion tracking equipment?

Participants will wear XSens MVN motion tracking suits to record **nonverbal behaviour**. These suits provide information about their body movement that goes beyond data that is coded by a human from a video recorded interaction, and is able to detect even the slightest changes in the natural flow of a human interaction.

The XSens suits involve 17 matchbox sized sensors that are attached via Velcro straps on the participant. These sensors measure body movement and the direction of the movement with high precision (120 times/sec).

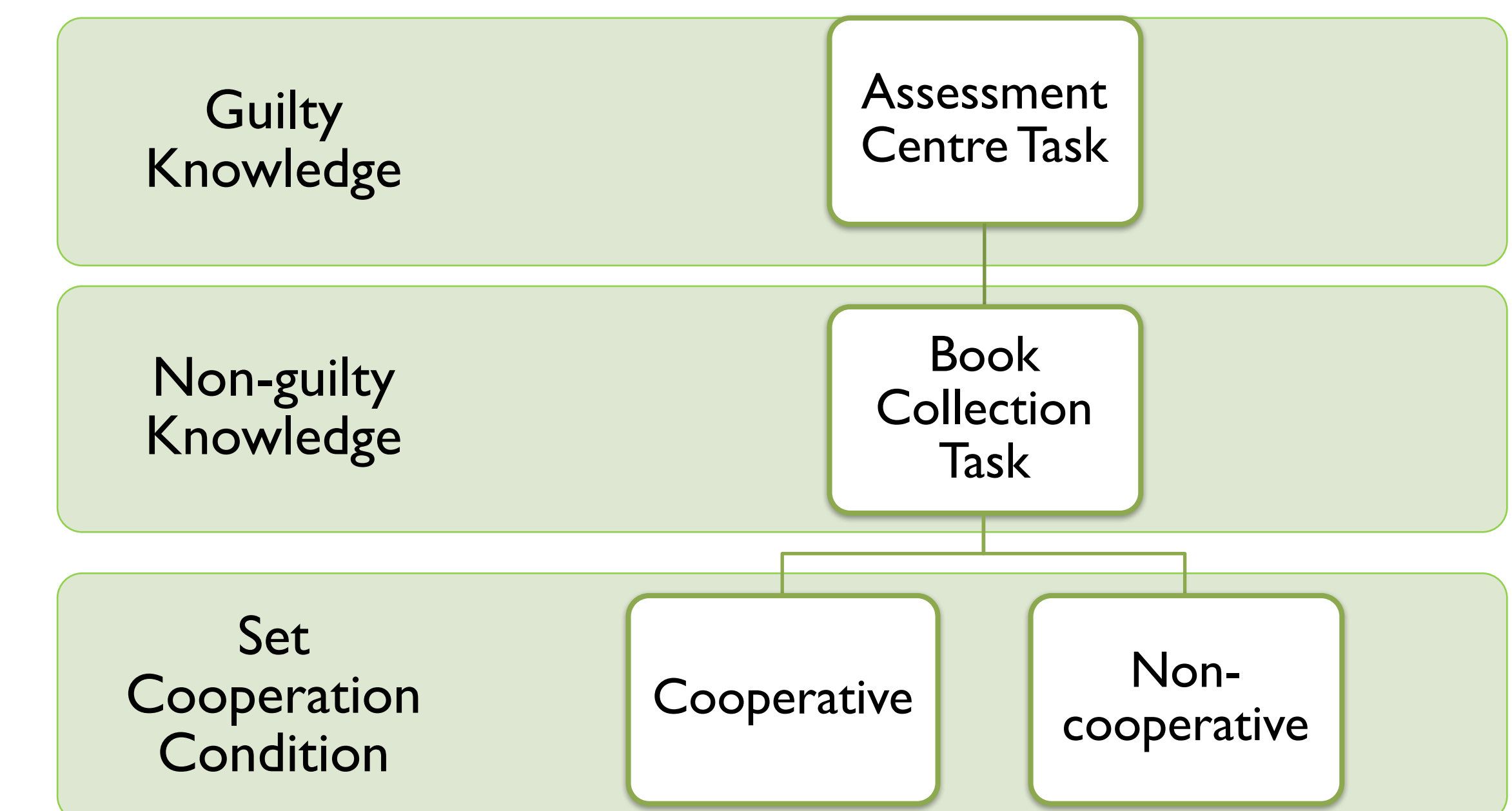


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Methodology II

Study design (mixed factorial design)

Interviewee task:



Interviewer task:

- Prepare for the interview with a standardised interview script.

Interview:

- Both participants wear the XSens motion tracking equipment and are video- and audio recorded.

Hypotheses

1. Cooperative participants will exhibit more verbal and nonverbal mimicry than non-cooperative participants.
2. More expressive nonverbal behaviour can be found in 'guilty' participants than 'non-guilty' participants.
3. Disturbed or lost rapport will result in more expressive nonverbal behaviour (i.e., greater body movement).
4. Higher mimicry results in higher quality of information provided.
5. Emotional mimicry: High mimicry scores lead to more similar emotions post-interview than pre-interview.

Conclusion

What does this research add to the real world?

- Understanding how verbal and nonverbal behaviour co-occur helps us comprehend the complexity of human interaction – the base for every interview.
- Further, if rapport can be measured, rapport can be manipulated and can be specifically applied in interview settings to help to elicit more detailed and trustworthy information.