

# 25 years of research on teacher-student interpersonal relationships

Prof. dr. Perry den Brok, February 21, 2018

General keynote for Nanyang Technological University



# Content of the session

1. Brief personal intro
2. Interpersonal theory
3. Questionnaire on teacher interpersonal behaviour (QTI)
4. Interpersonal profiles
5. Relation to student outcomes
6. Development over a year and over a career
7. Some other findings

# Personal background Perry den Brok

- Full professor in education and learning sciences
- PhD on teacher behaviour and student outcomes (Utrecht University, 2001)
- Experience as teacher educator (since 2005), researcher (since 1996) and consultant (since 2003)
- Chair/director of a group on education and learning (since 2017, Wageningen University and Research)
- Dean of teacher education at Eindhoven University of Technology (2015-2017), director of research (2010-2015)
- Expertise: learning environments, science & engineering education, teacher professional development

# Wageningen University and Research



Focus: agriculture & life sciences  
12,000 students  
1,975 PhD students  
5,961 Staff  
#1 in education in NL  
#1 worldwide in agriculture  
#4 in environmental science  
#47 in Times Higher Ed World rankings

4TU

TU Delft

UNIVERSITEIT TWENTE.

WAGENINGEN UR  
For quality of life

TU/e Technische Universiteit  
Eindhoven  
University of Technology

# Education and Learning Sciences Group

- 35 staff (+many assistants)
- Serving > 3000 students per year
- Courses in skills education, entrepreneurship education, environmental education, teacher education
- Research on competence development, educational environments, teaching and teacher education, higher education
- Valorisation: professional development courses, evaluation of schools, curriculum development

# Research team investigating teacher-student interpersonal relations in education - acknowledgement



Theo Wubbels



Jan van Tartwijk



Hans Creton



Tim Mainhard



Mieke Brekelmans



Perry den Brok



Anna  
van der Want



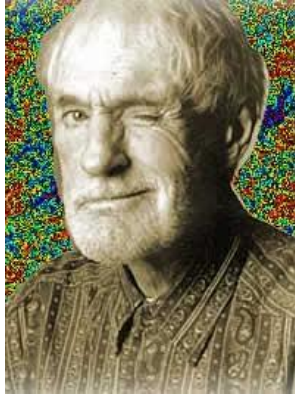
Heleen  
Pennings



Luce  
Claessens



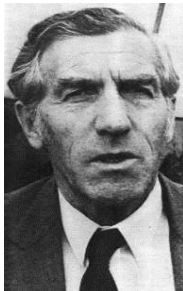
# Theoretical Background



Timothy Leary

1957 – Timothy Leary

- *Interpersonal Diagnosis of Personality*
- 2 dimensions in communication  
hostility-affection  
dominance-submission

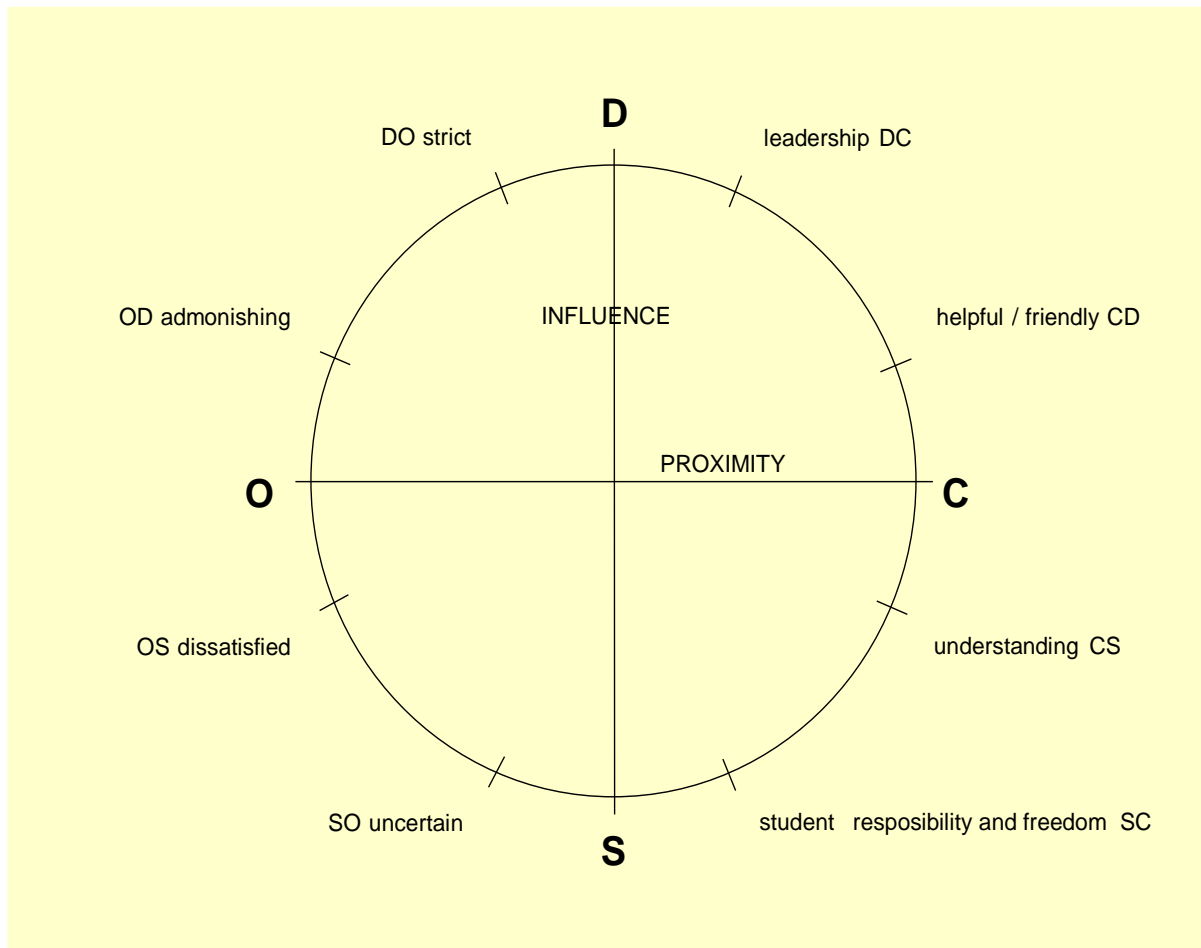


Paul Watzlawick

1967 – Watzlawick, Beavin, & Jackson

- *The pragmatics of human communication*

# Teacher-student interpersonal behaviour: a model





# Questionnaire on teacher interaction (QTI)

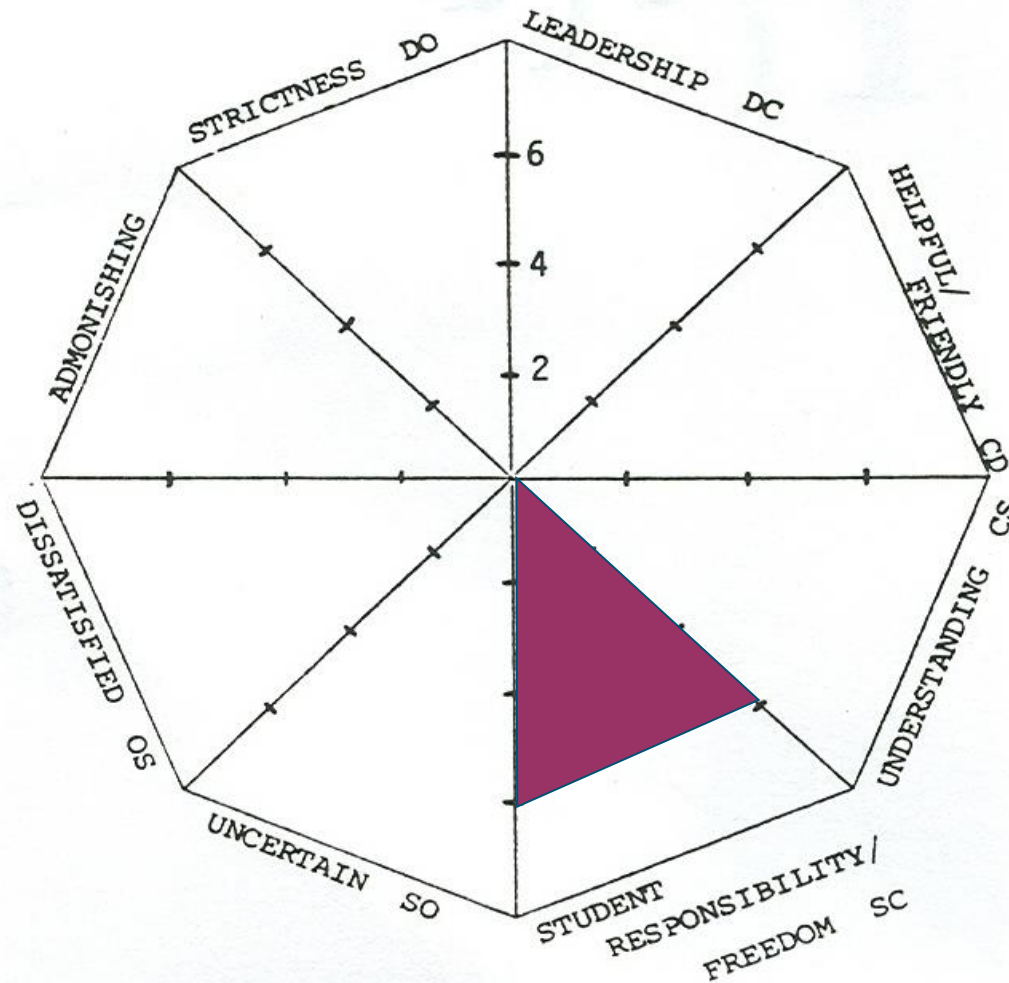
- Originally developed in Dutch (1984, Creton & Wubbels)
- Took 5 years to be developed, several rounds of interviews, pretesting, etc.
- Thirty language versions
- 48-77 questions (depending on version); 6-10 per sector
- Has appeared to be (cross-culturally) reliable and valid
- Has been used in Singapore!

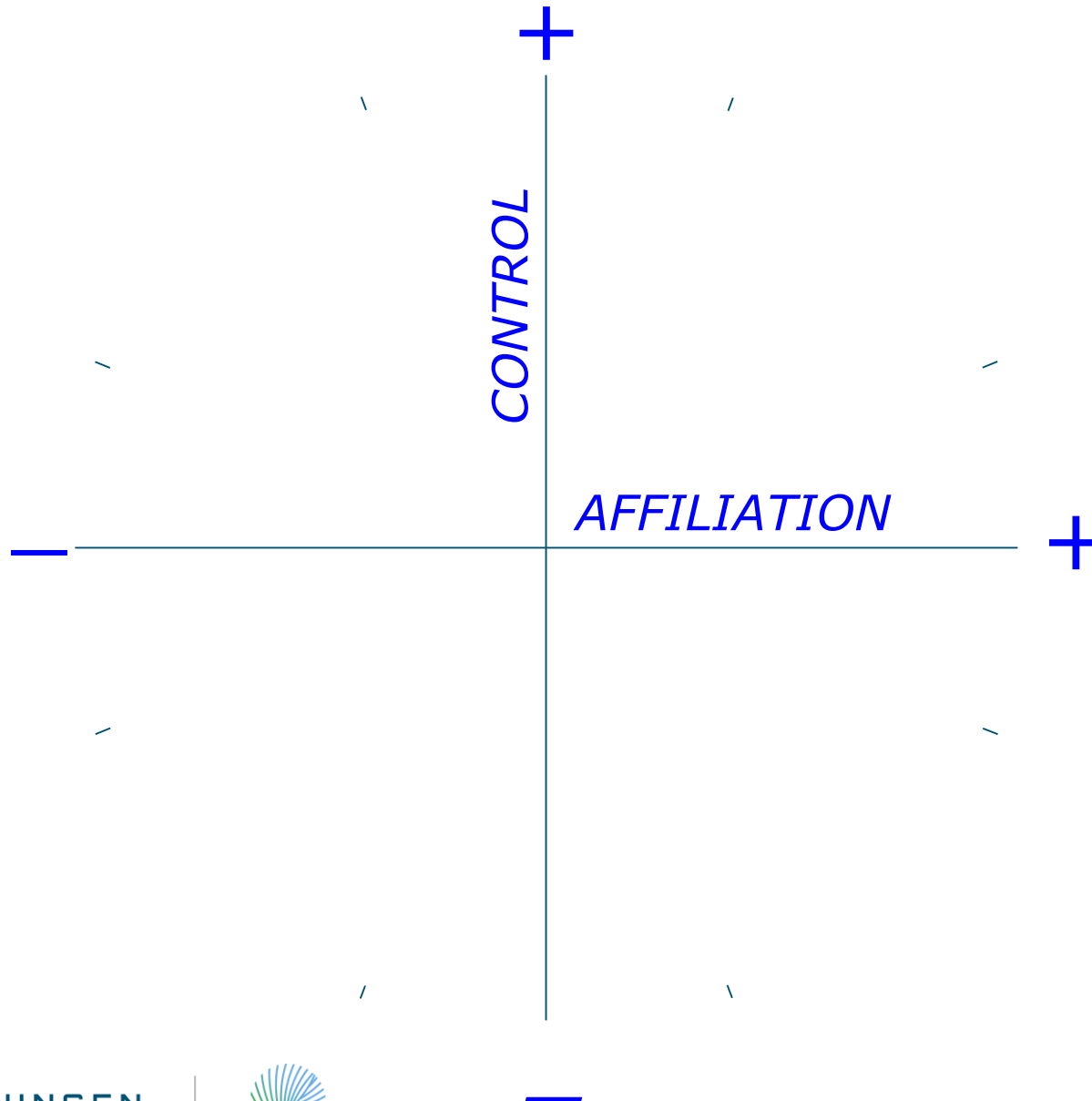


# Sample questions and scoring

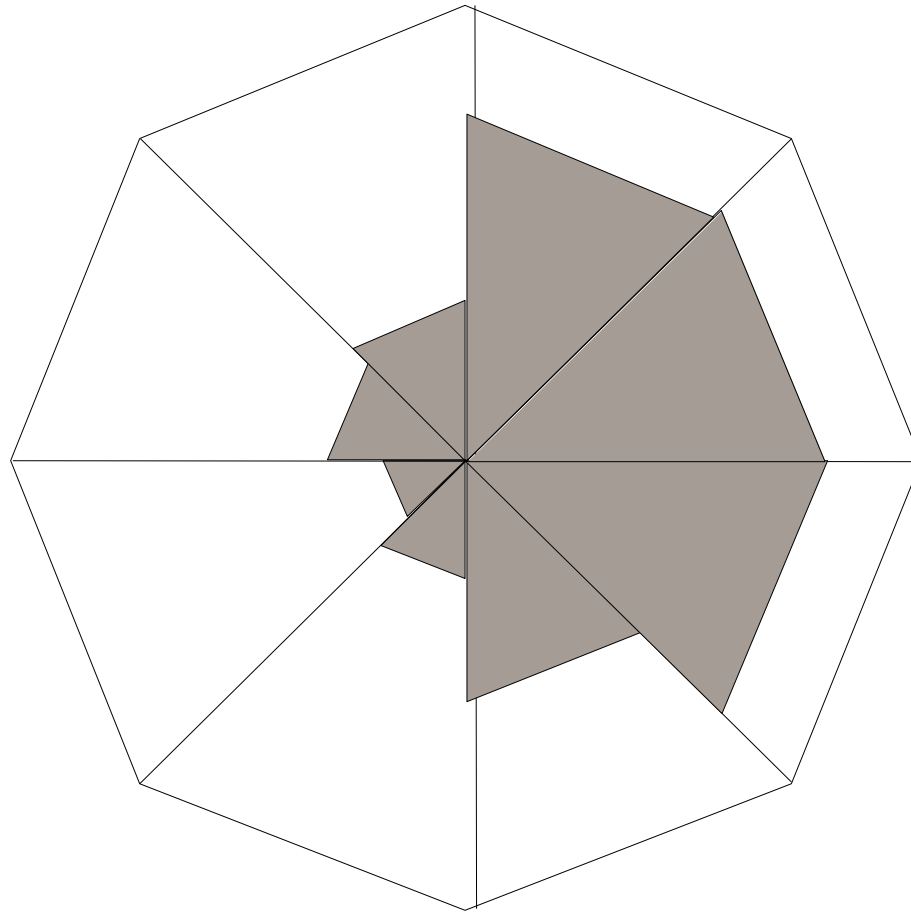
	Never					Always				DC	CD	CS	SC	SO	OS	OD	DO
1. This teacher gives us a lot of free time in class	0	1	<del>2</del>	3	4								<u>2</u>				
2. This teacher realizes when we don't understand	0	1	2	3	4						--						
3. This teacher is friendly	0	1	2	3	4						--						
4. This teacher seems dissatisfied	0	1	2	3	4										--		
5. This teachers' standards are very high	0	1	2	3	4								--				
6. This teacher is willing to explain things again	0	1	2	3	4				--								
7. This teacher has a bad temper	0	1	2	3	4						--						
8. We can influence this teacher	0	1	2	3	<del>4</del>						--		4				
9. This teacher gets angry unexpectedly	0	1	2	3	4										--		
10. This teacher is strict.	0	1	2	3	4								--				
11. This teacher is a good leader	0	1	2	3	4				--								
12. This teacher acts as if (s)he does not know what to do	0	1	2	3	4					--							
13. We learn a lot from this teacher	0	1	2	3	4				--								
14. This teacher gets angry quickly	0	1	2	3	4							--					
15. This teacher's class is pleasant	0	1	2	3	4				--								
16. This teacher is hesitant	0	1	2	3	4					--							
															6		
															+		

# Transforming scores into a profile



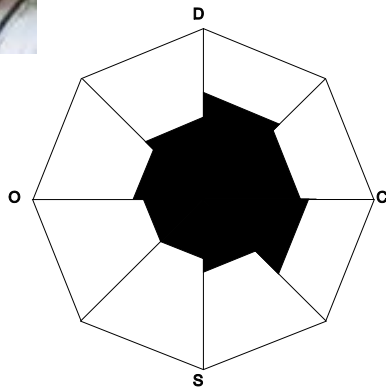


# Example teacher profile

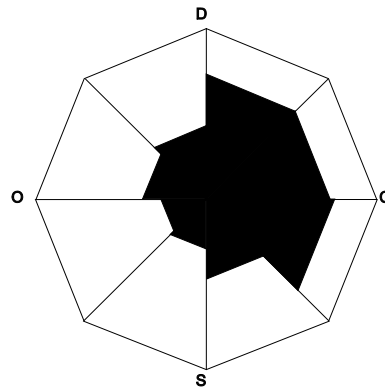




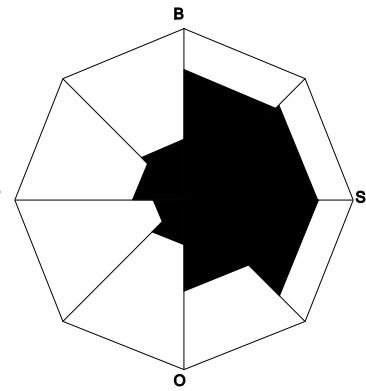
# Typology



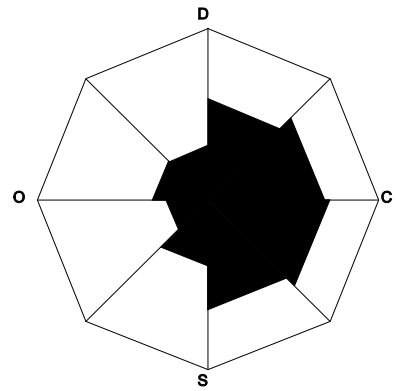
Directive



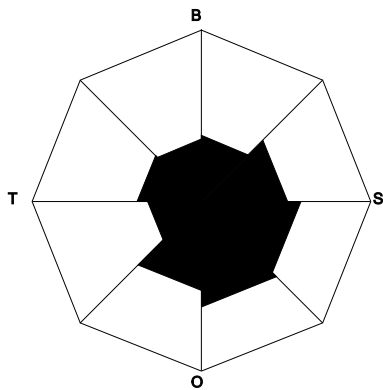
Authoritative



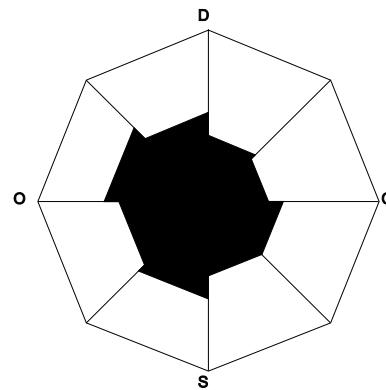
Tolerant &  
Authoritative



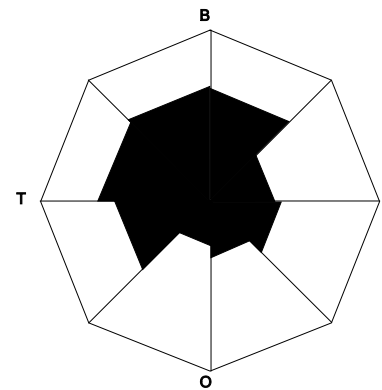
Tolerant



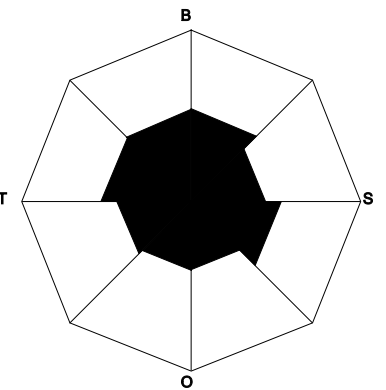
Uncertain/tolerant



Uncertain/aggressive



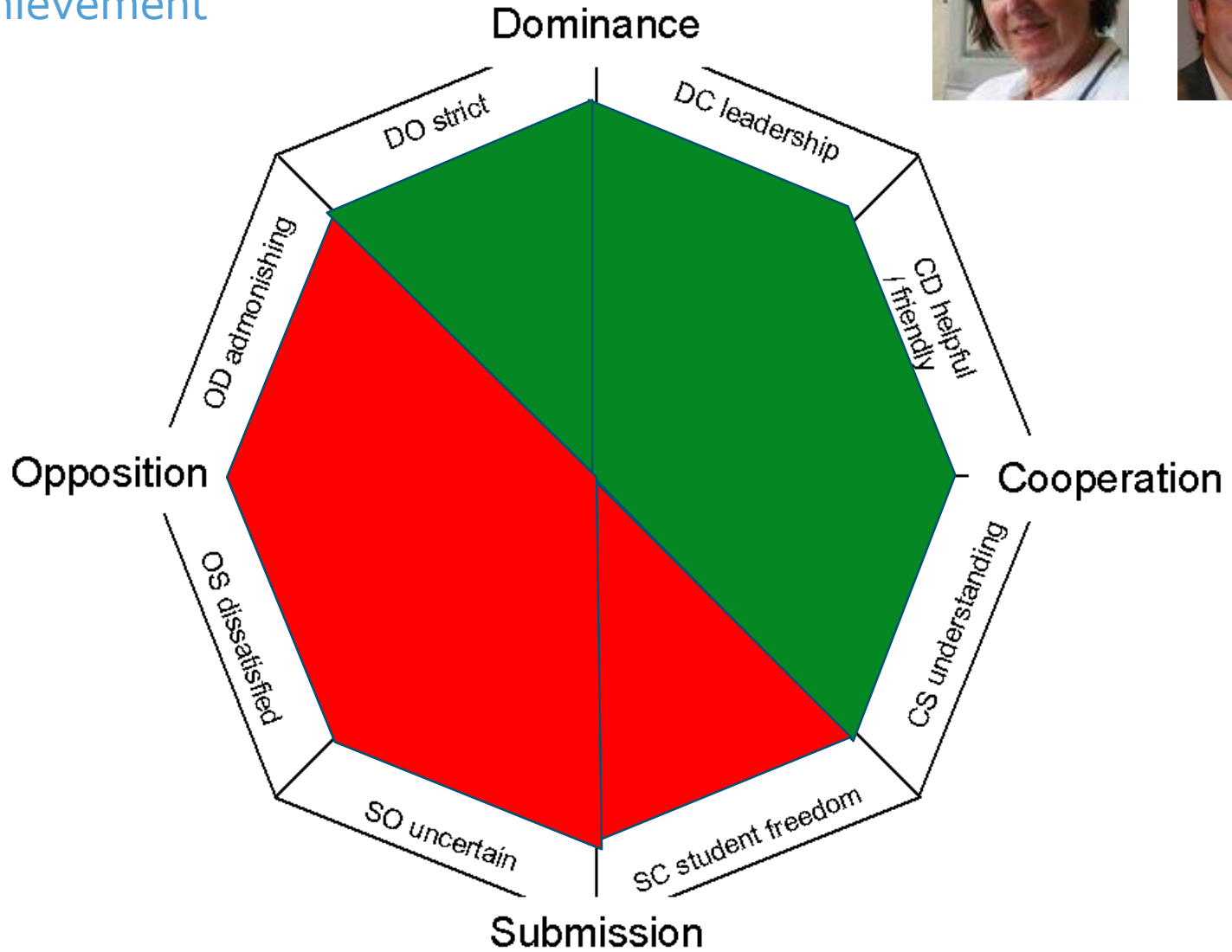
Repressive



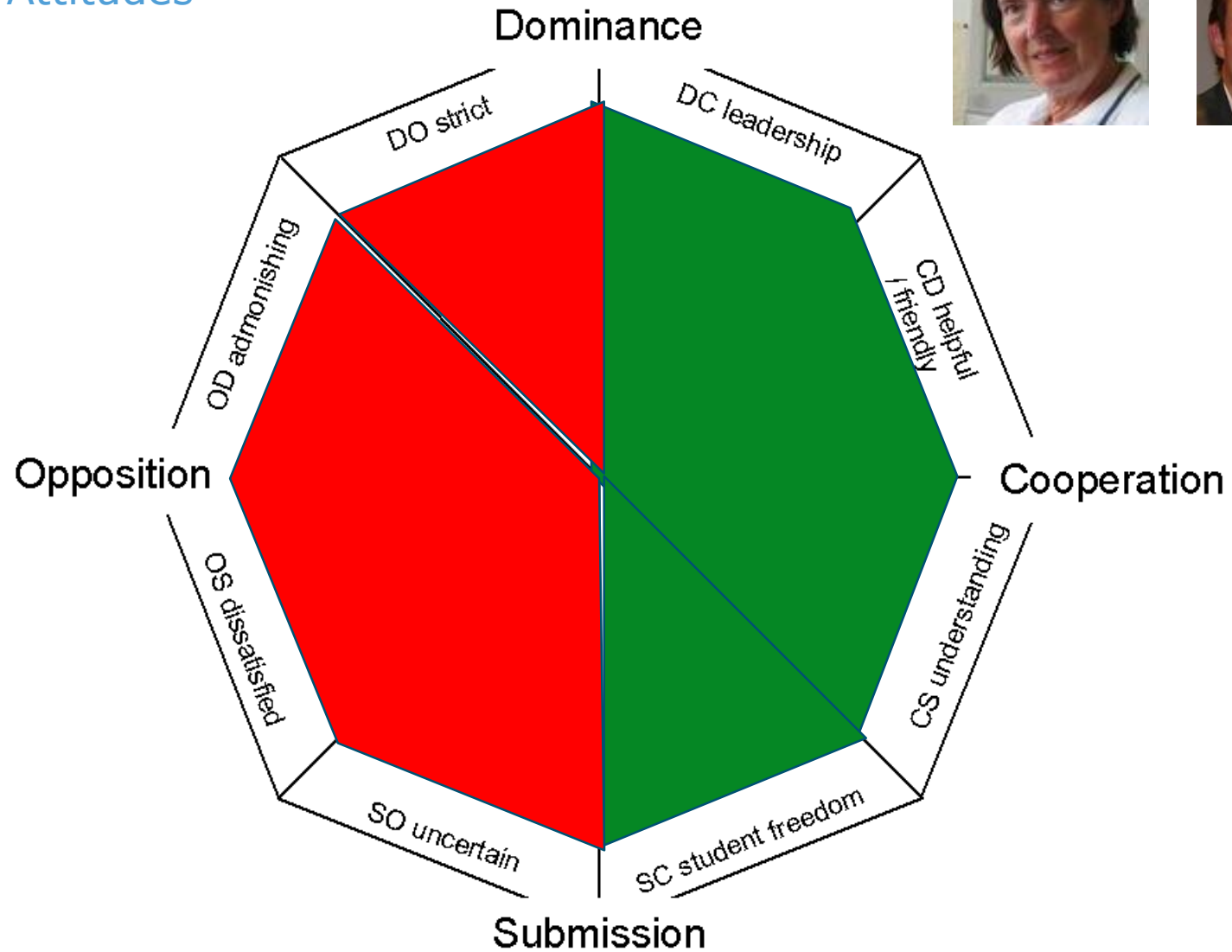
Drudging

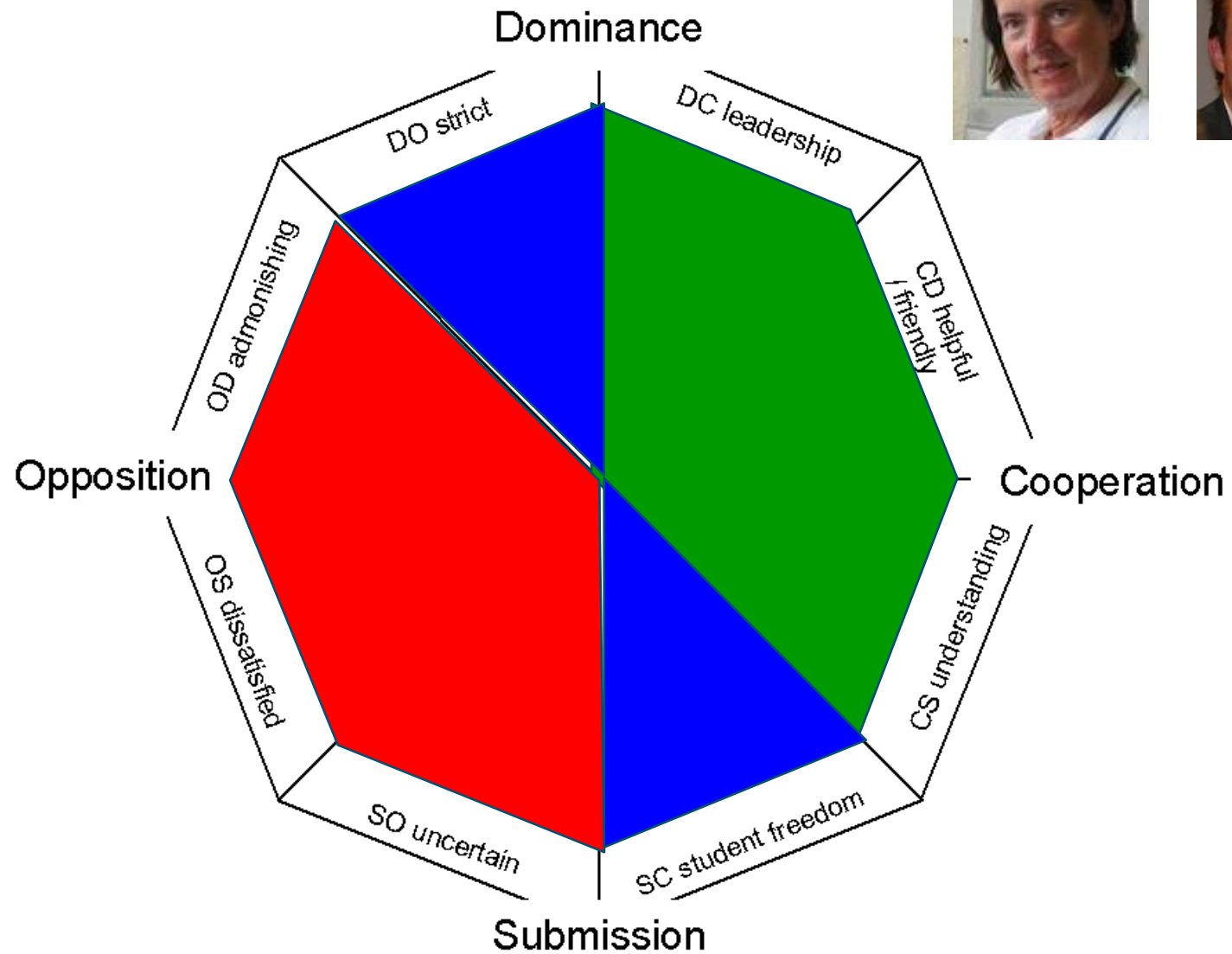


## Achievement

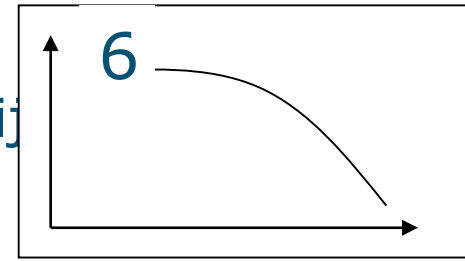
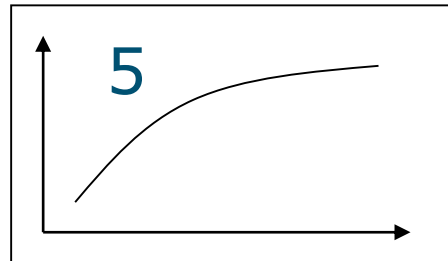
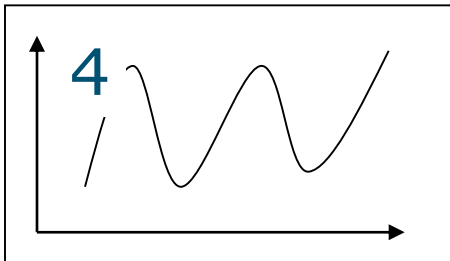
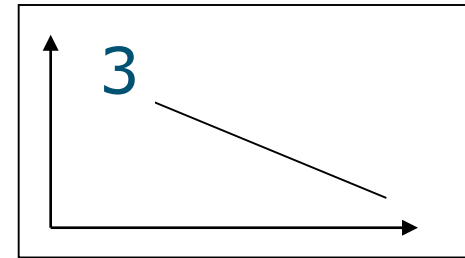
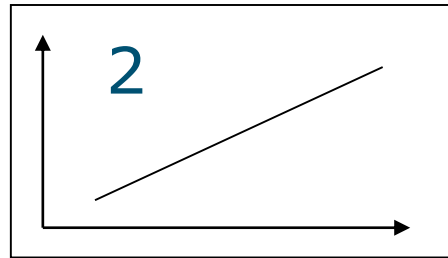
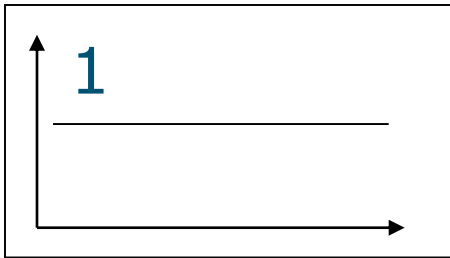


## Attitudes

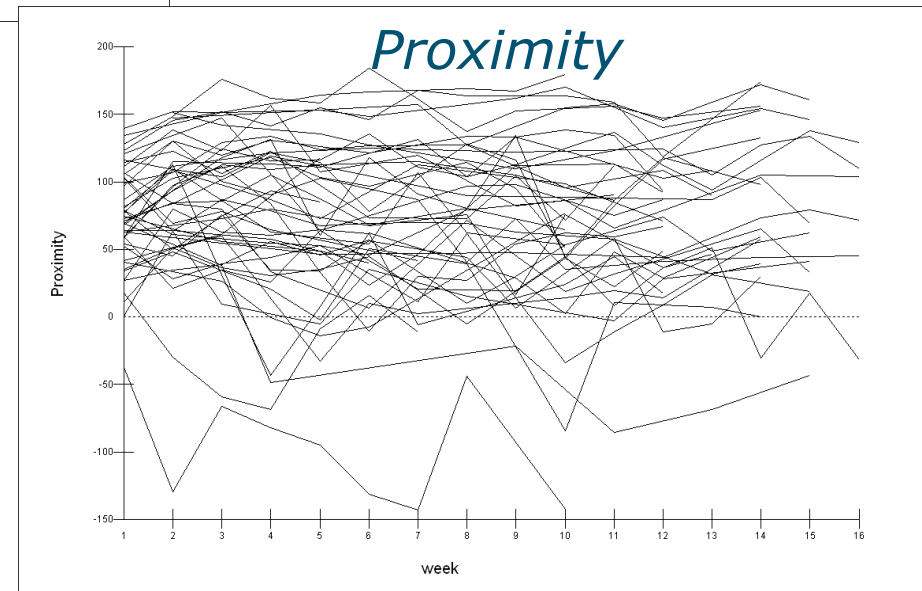
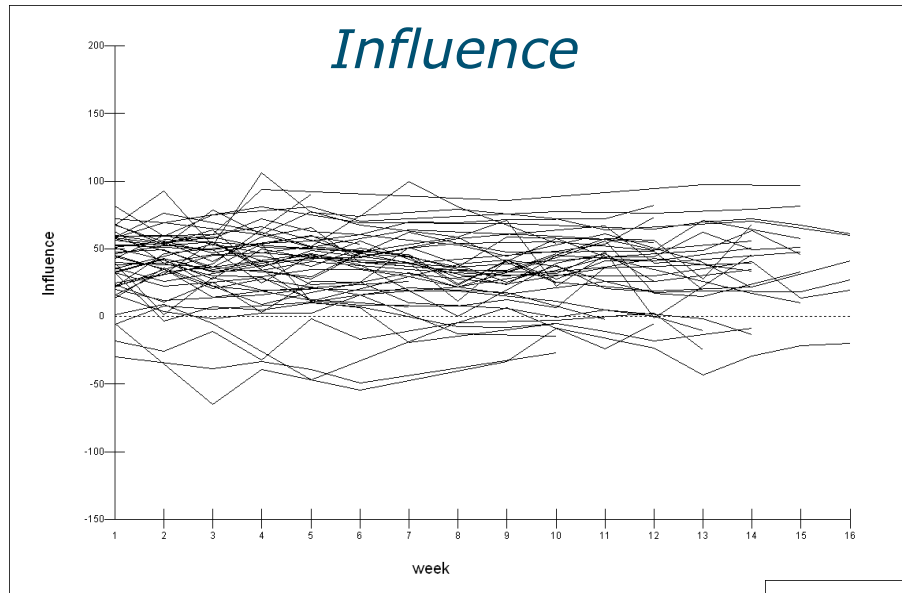


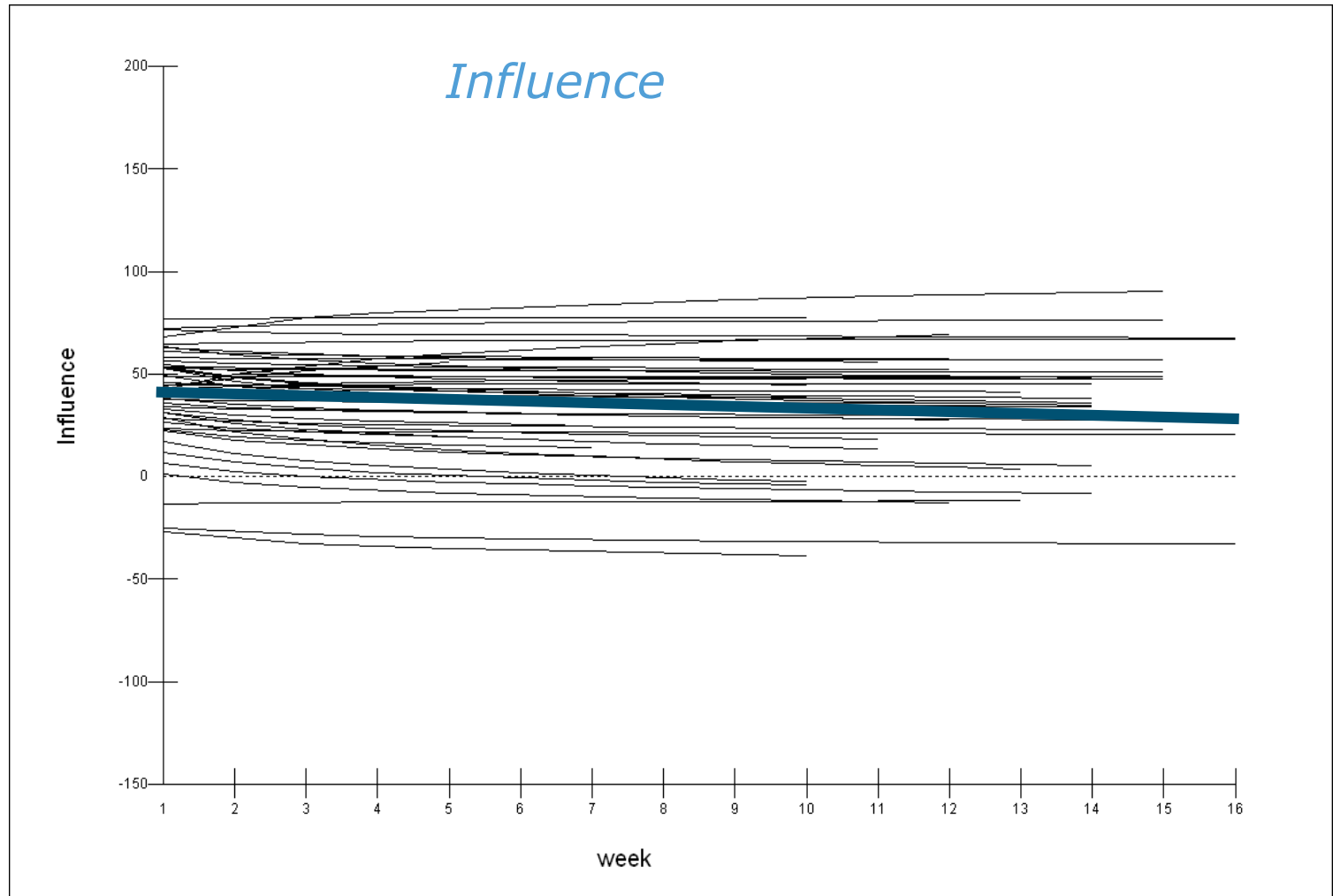


# Development during first 15 weeks?

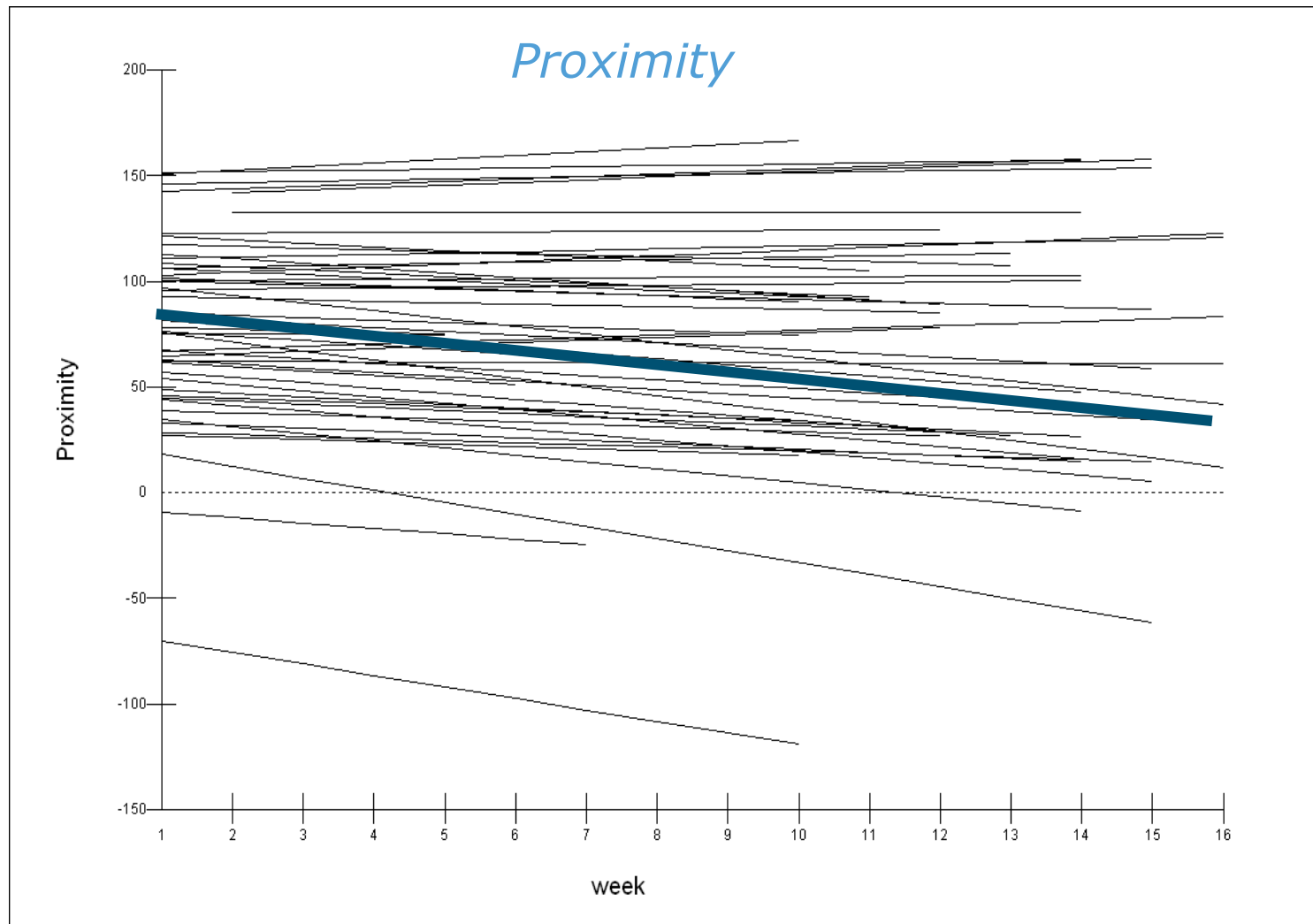


# RAW TRAJECTORIES

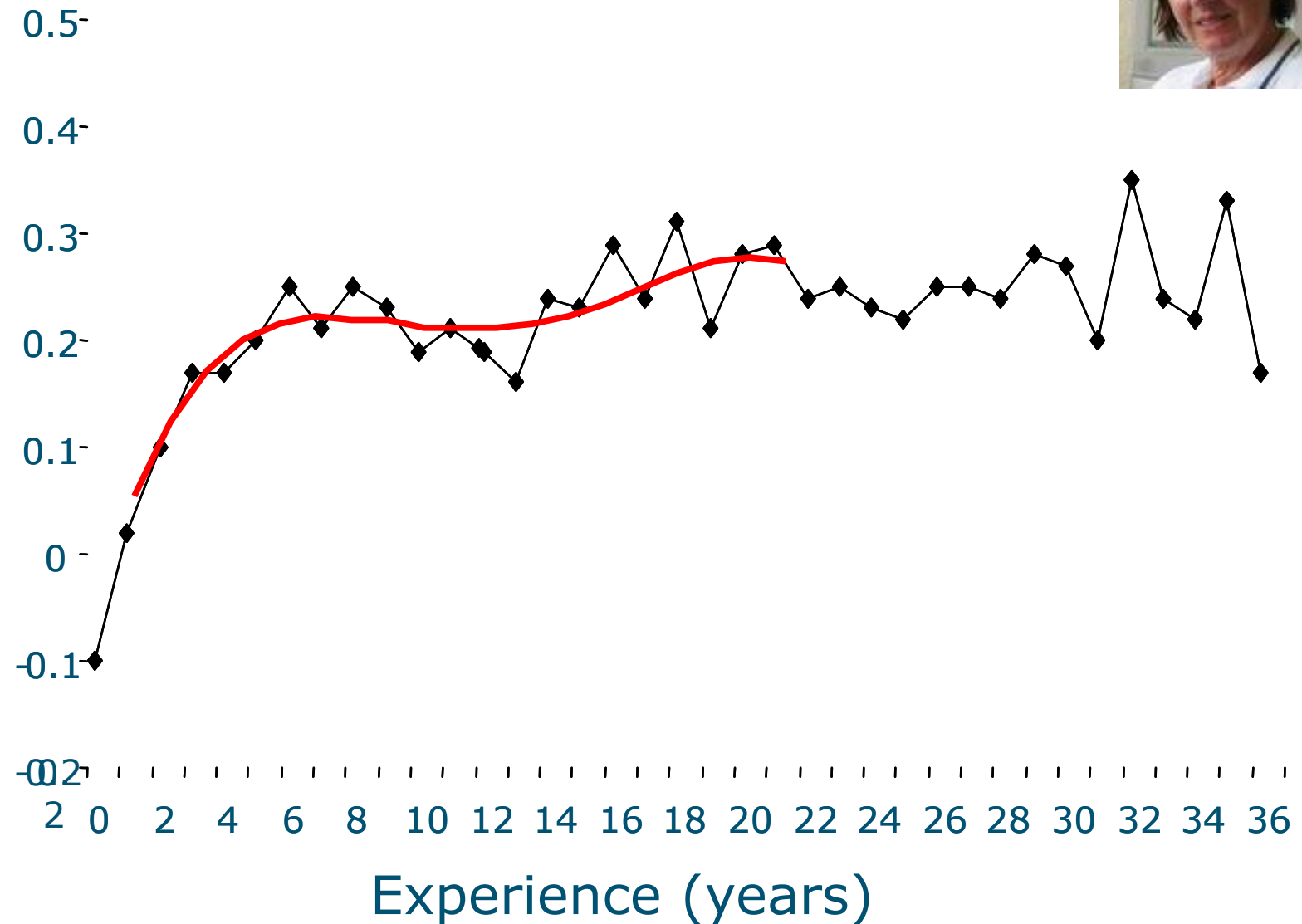








# Control

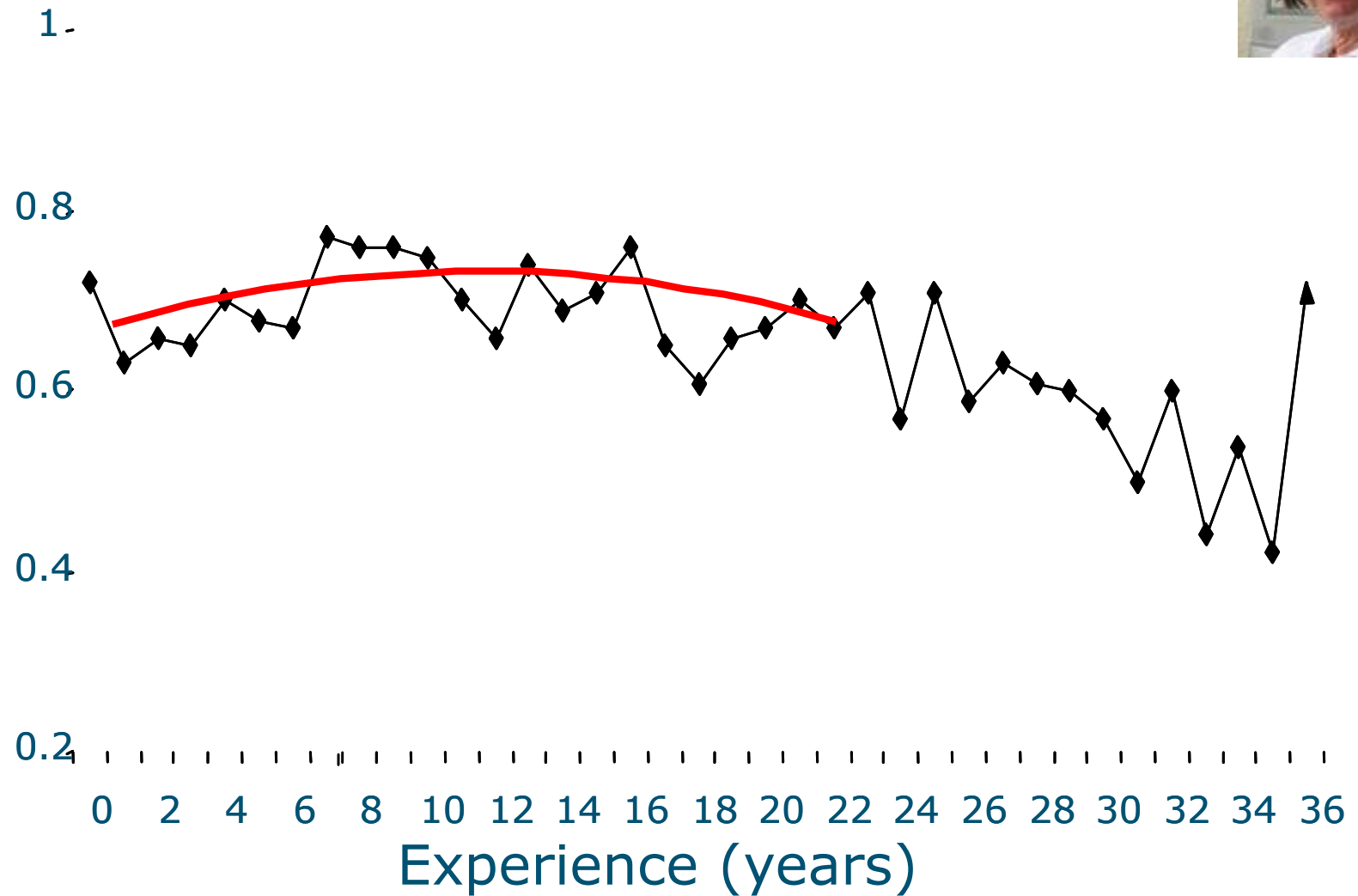


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Brekelmans, Wubbels & van Tartwijk 2005; Brekelmans 2010

# Affiliation



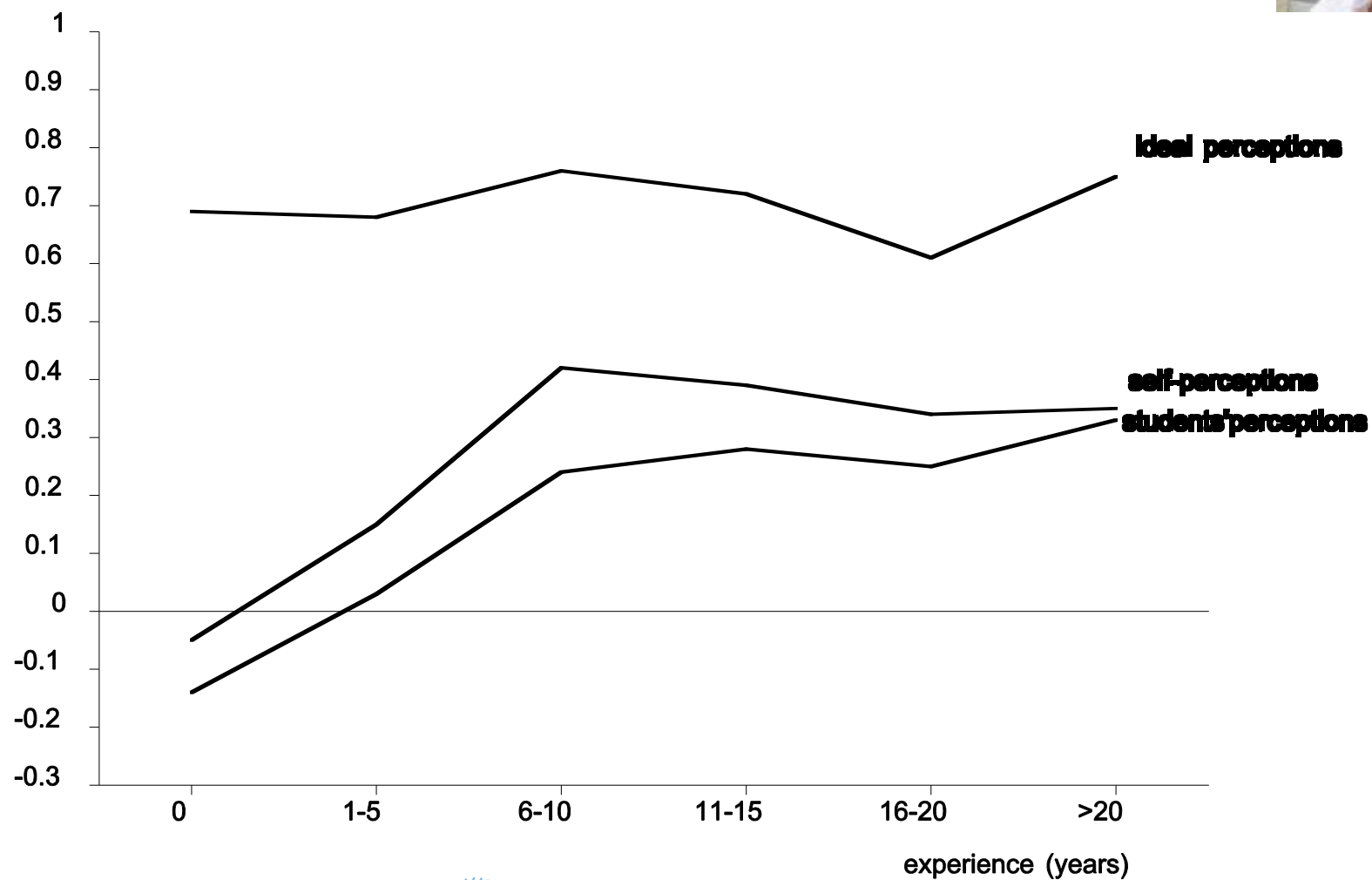
WAGENINGEN  
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Brekelmans, Wubbels & van Tartwijk 2005; Brekelmans 2010



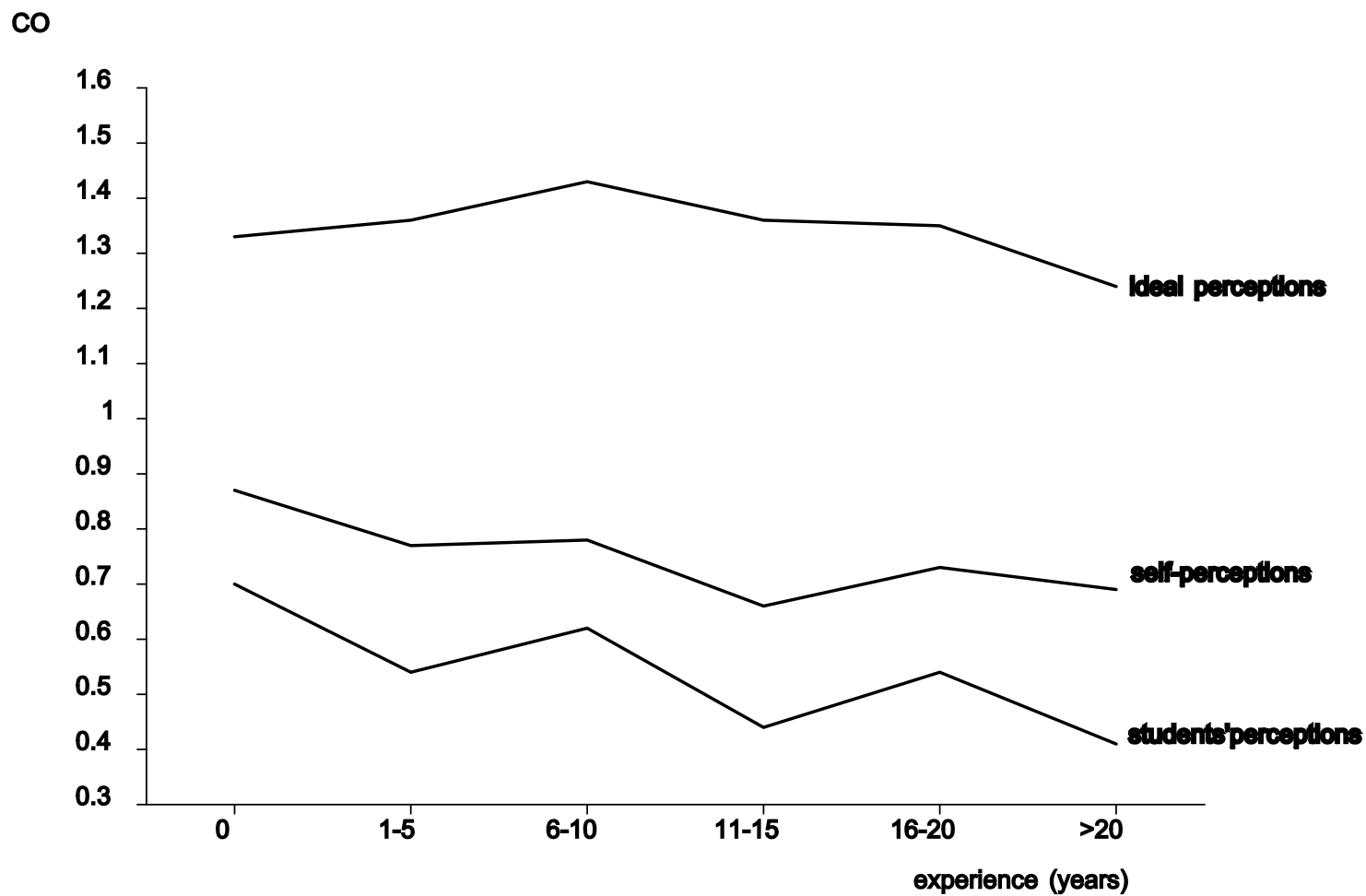
DS



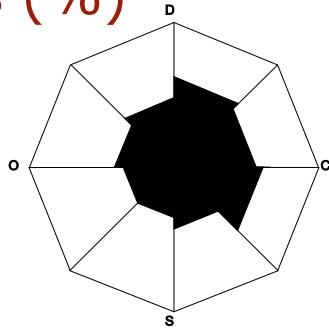
**WAGENINGEN**  
UNIVERSITY & RESEARCH



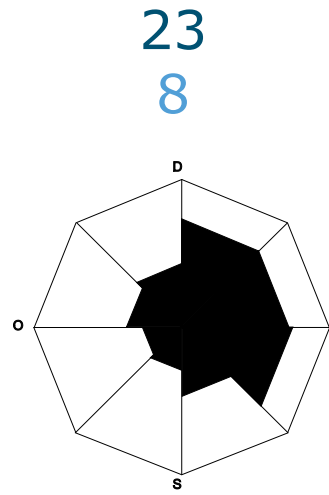
100years  
1918 — 2018



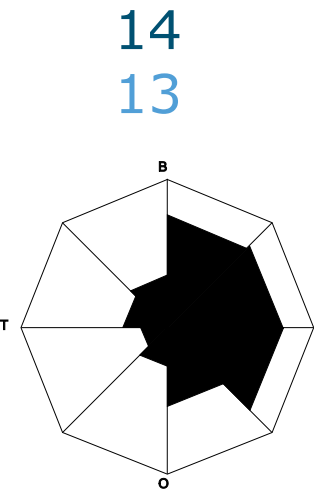
Experienced 19  
Student 5  
teachers (%)



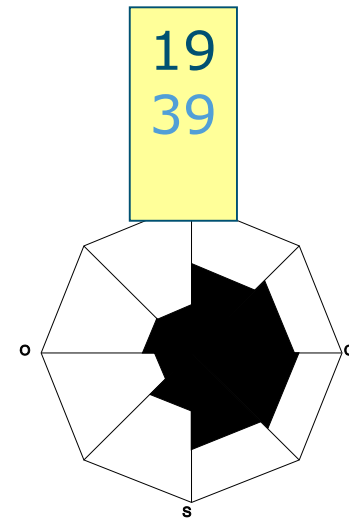
Directive



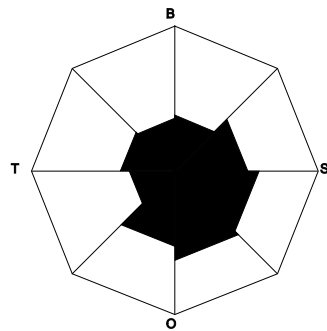
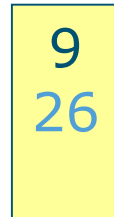
Authoritative



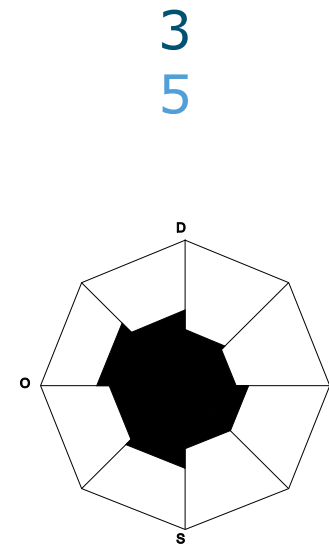
Tolerant &  
Authoritative



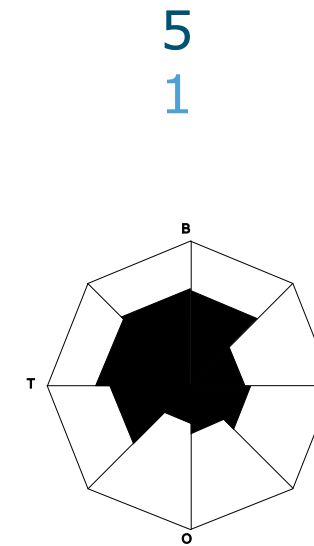
Tolerant



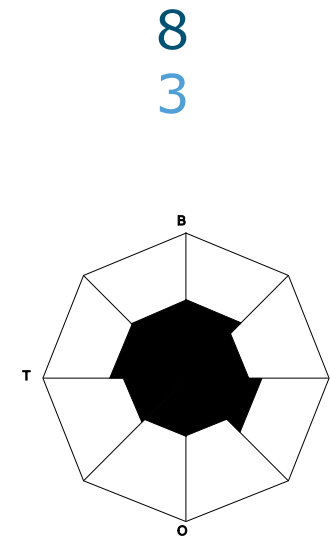
Uncertain/tolerant



Uncertain/aggressive



Repressive

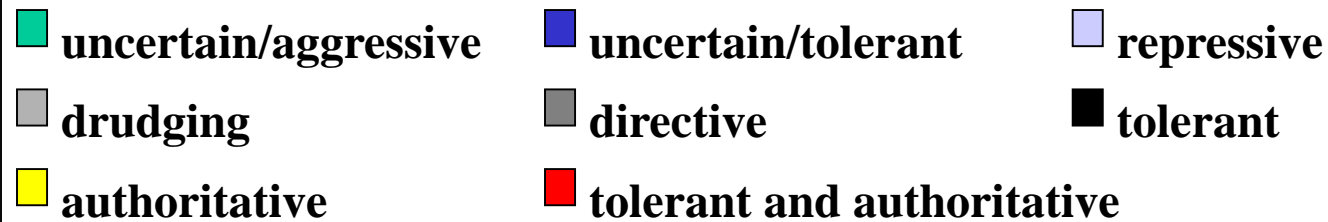
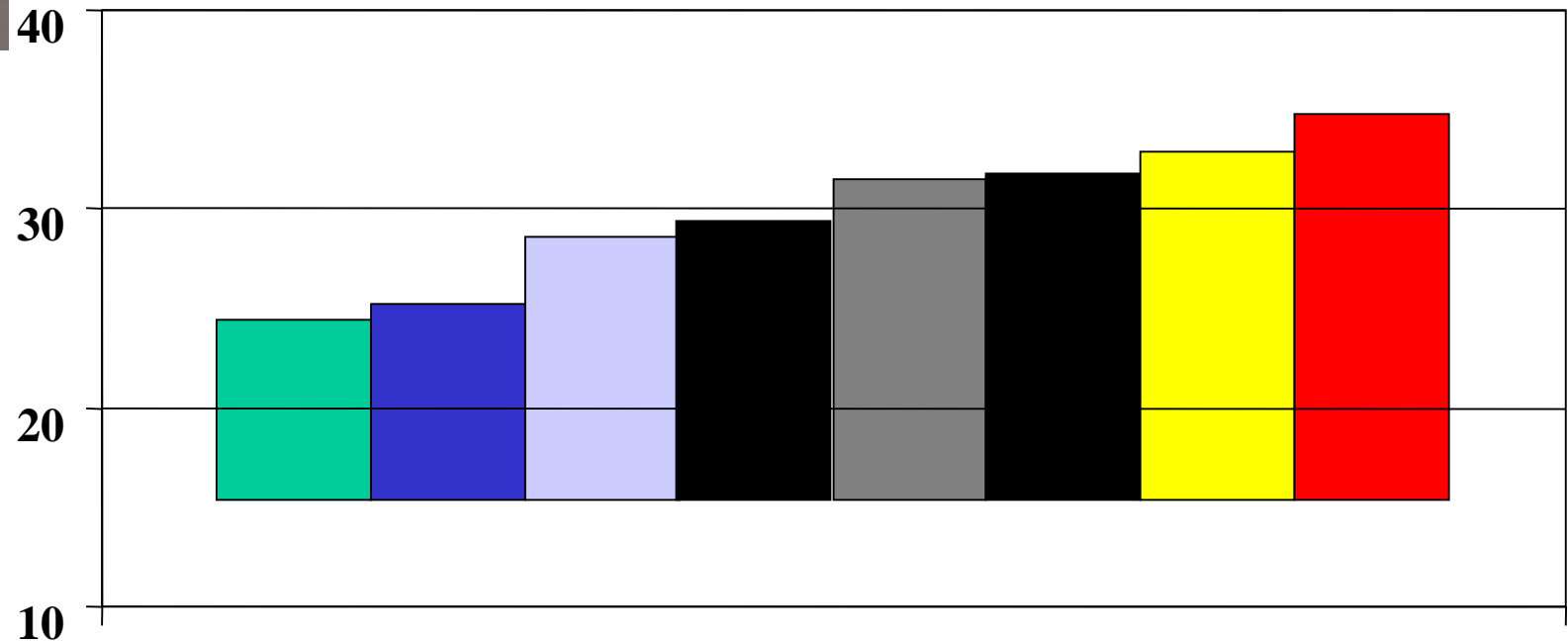


Drudging



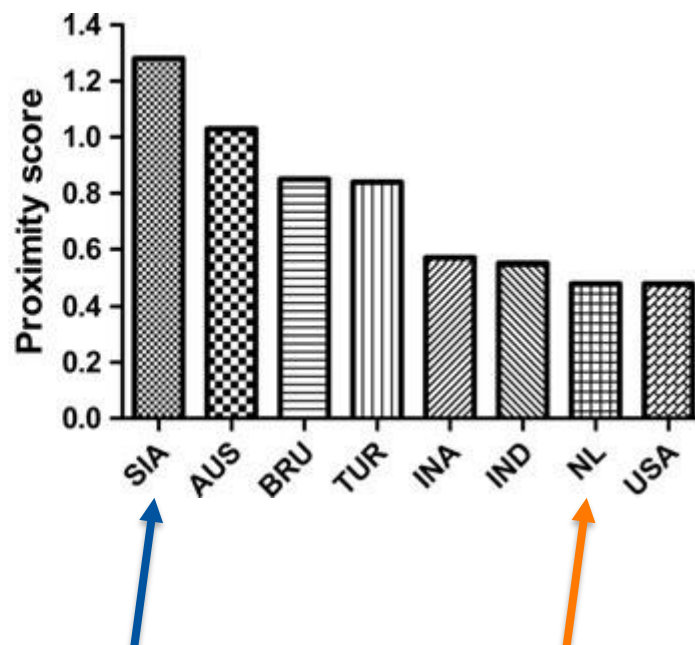
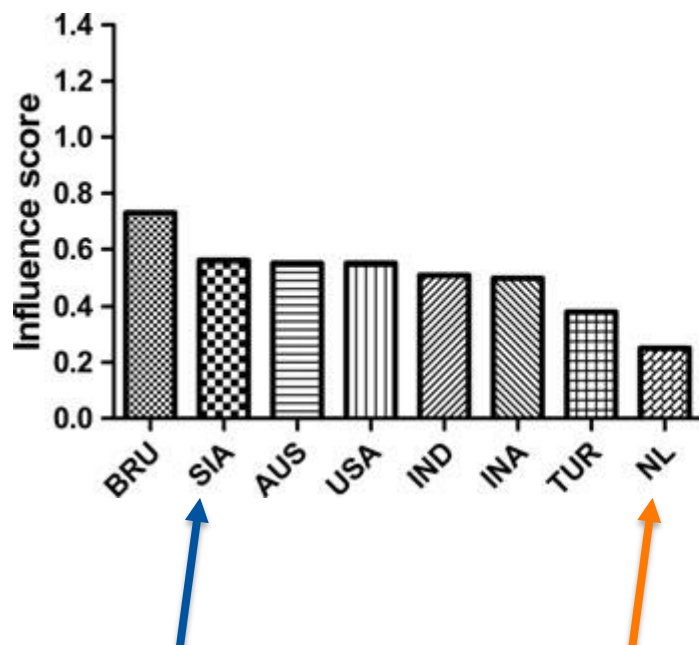


# Student activating teaching

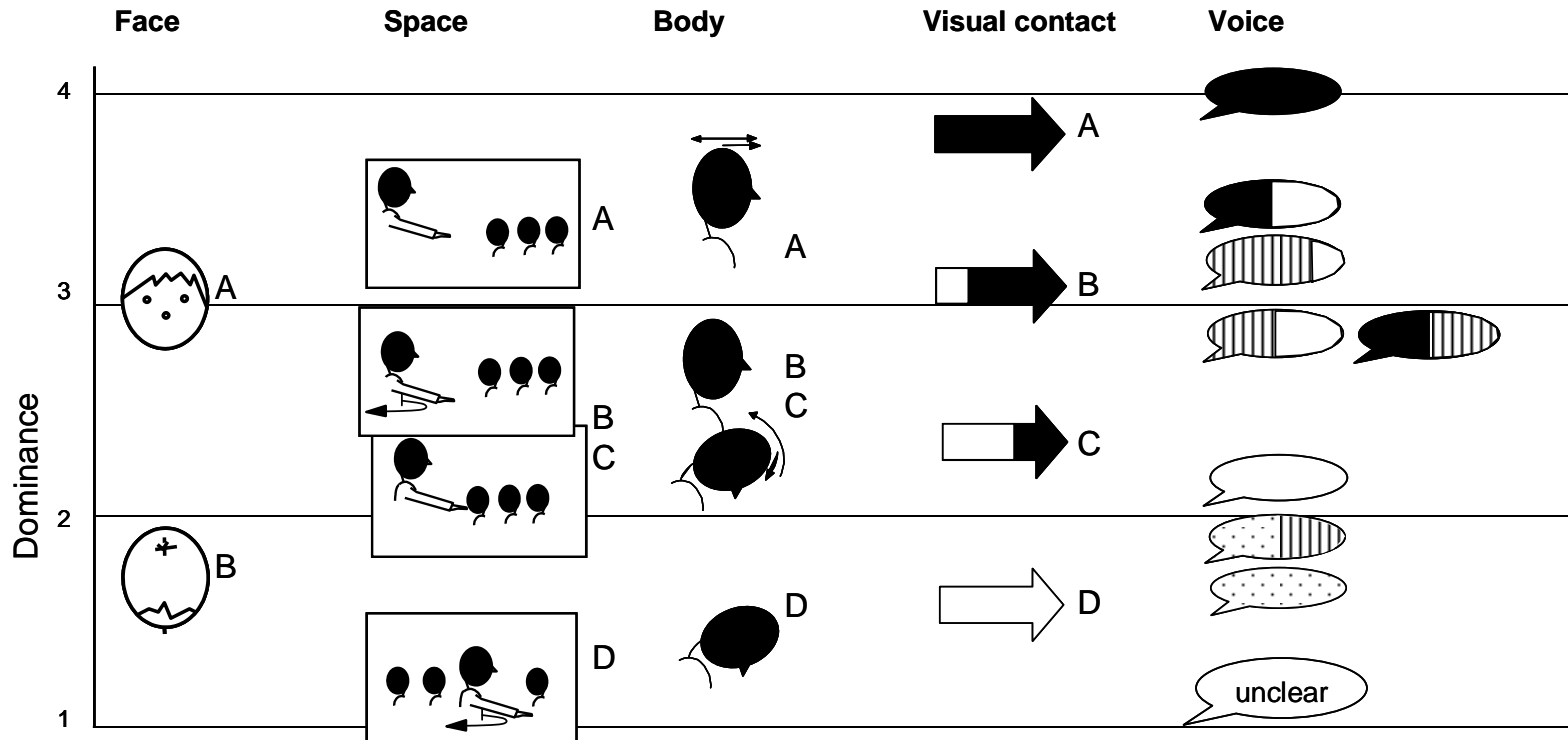




# Differences between countries



# Nonverbal behaviour & influence



A: Visible

B: Invisible

A: Frontal

Unable to touch

B: Also non-frontal

Unable touch

C: Frontal

Able to touch

D: Also non-frontal

Able to touch

A: Upright

Moving

B: Upright

Static

C: Bend

Moving

D: Bend

Static

A: Entire

fragment

B: Almost entire

fragment

C: Six seconds

or less

D: No visual

contact

Volume

High

Low

Duration

Entire frag.

Half the frag.

unclear

Moderate

Silent

unclear

unclear

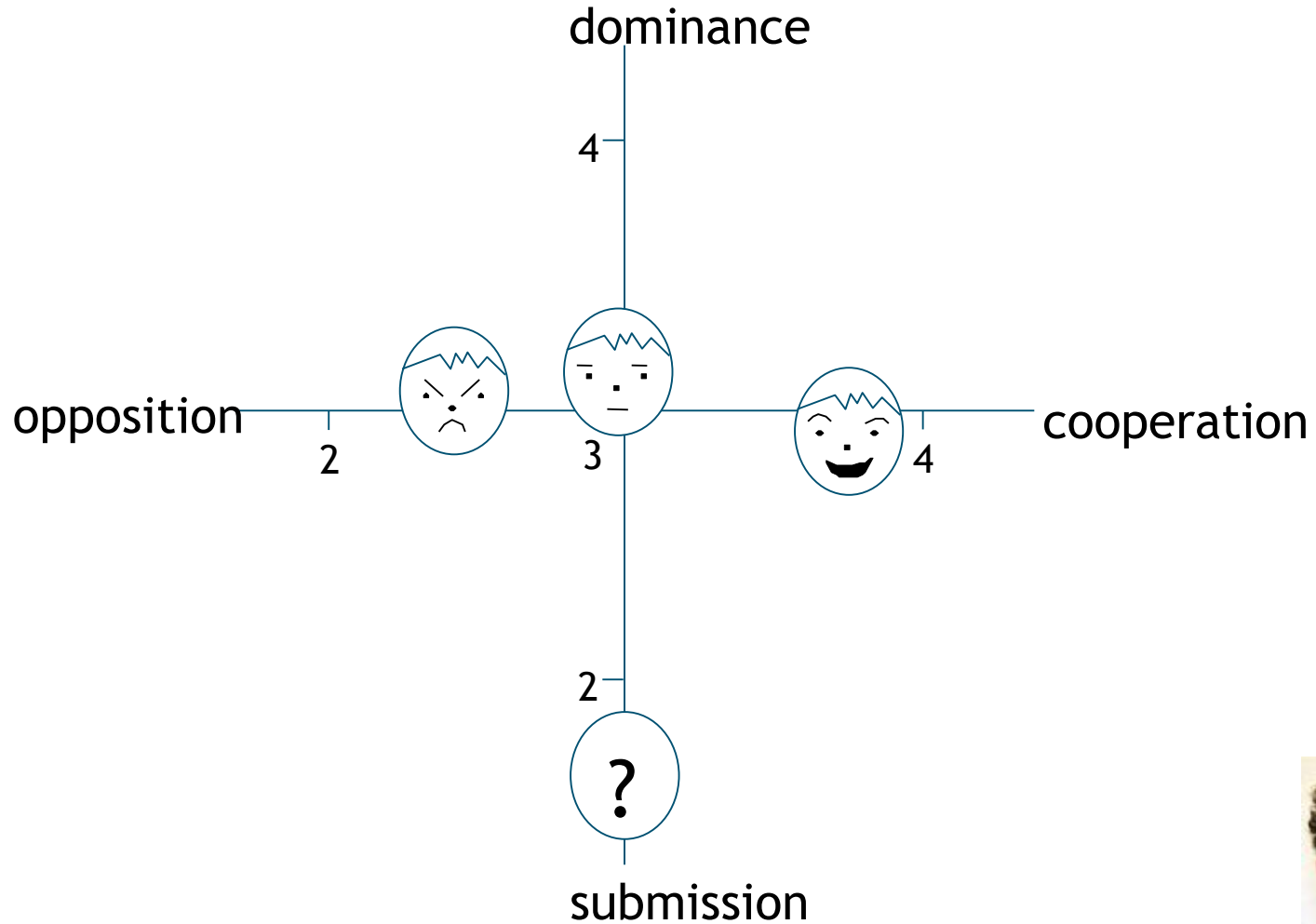
unclear

unclear

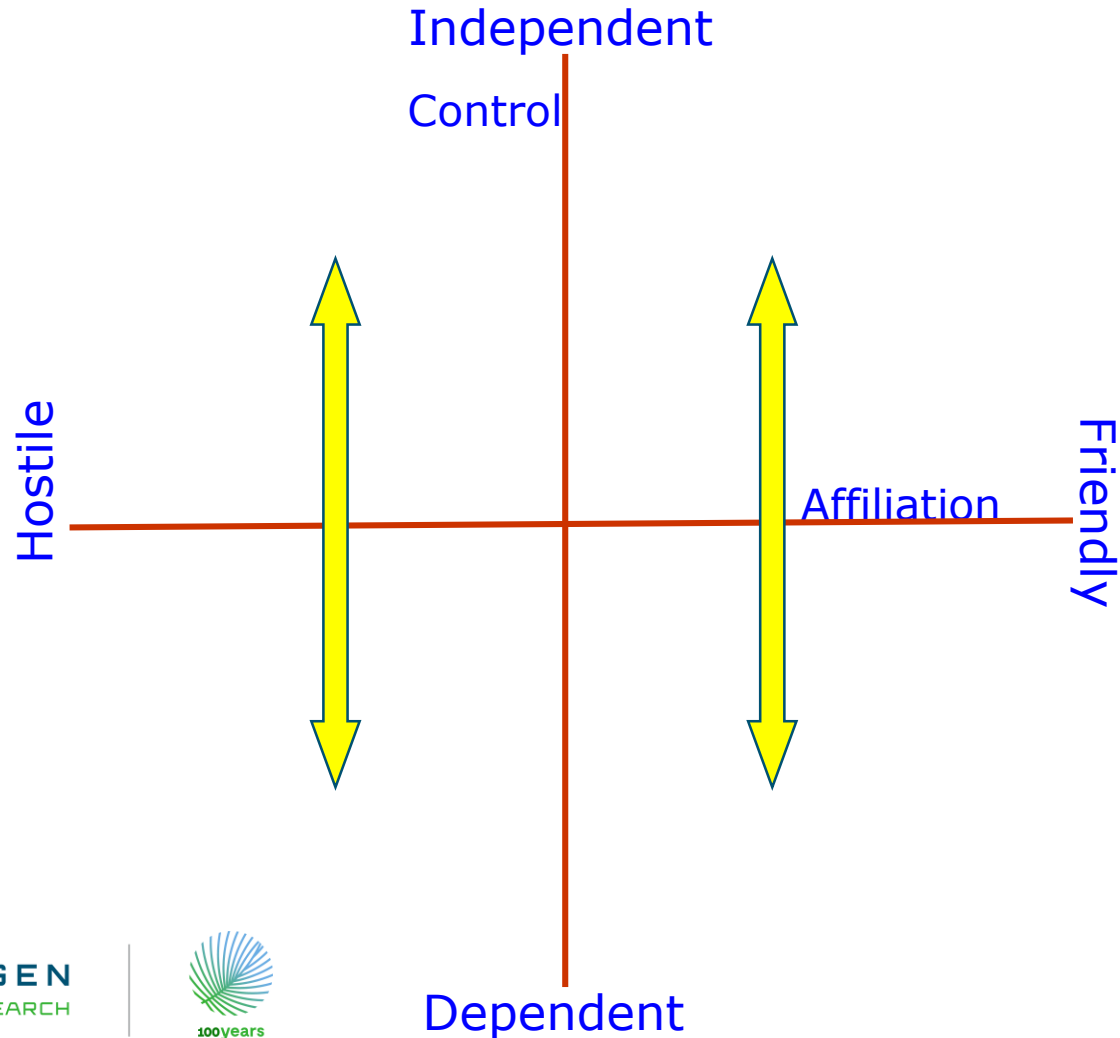
unclear



# Facial expressions



# complementarity

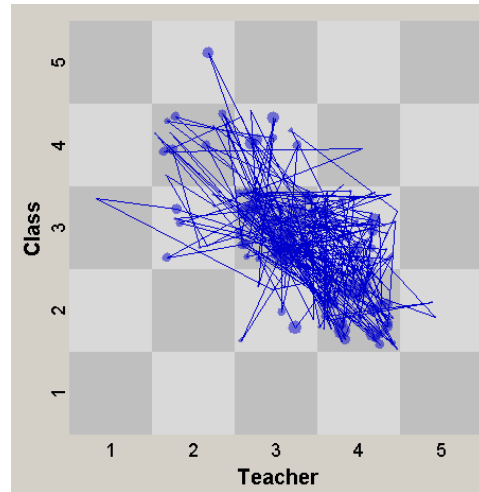


# A lesson: beginning teacher vs experienced teacher (Pennings e.a., 2011)

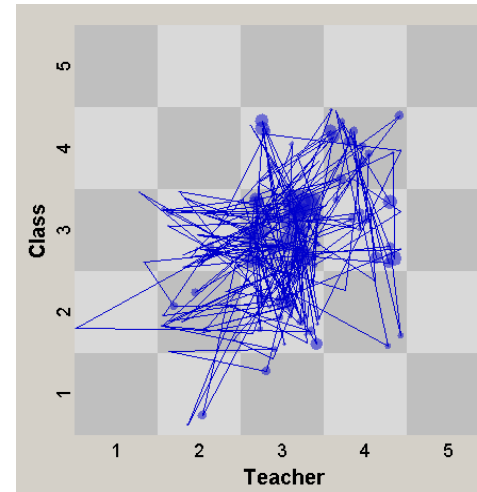


Beginning teacher

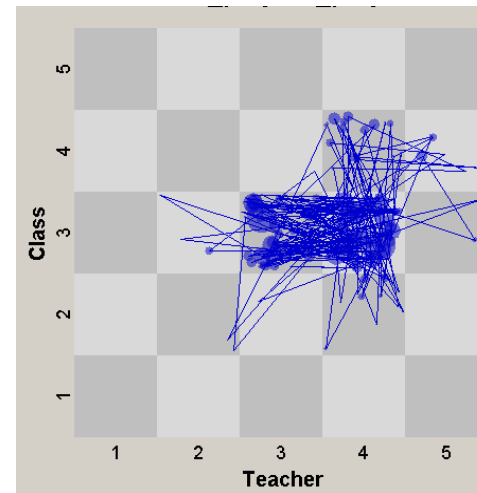
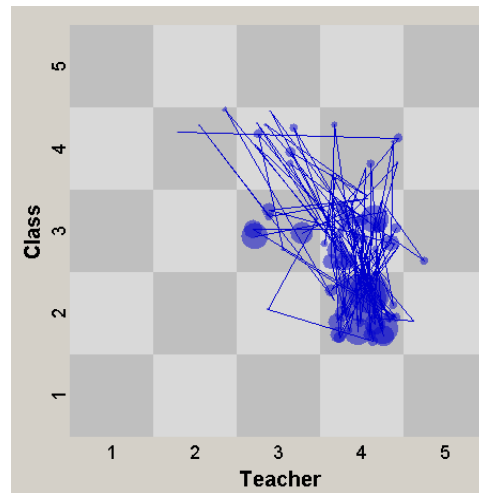
Influence



Proximity



Experienced teacher





# Two interpersonal pitfalls

Wubbels, Créton & Hermans 1992

