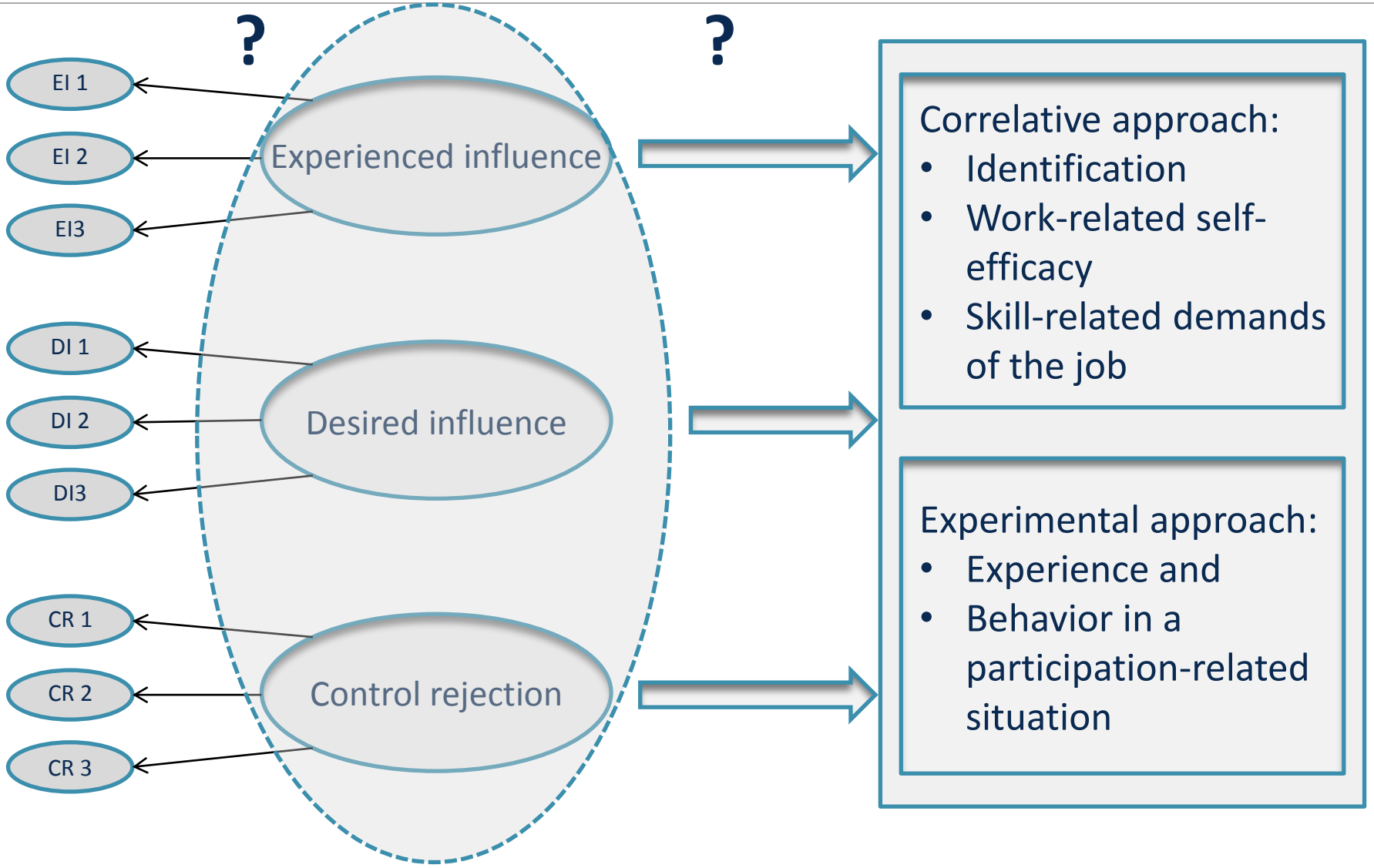
TECHNISCHE UNIVERSITÄT DRESDEN

Fakultät Mathematik und Naturwissenschaften, Fachrichtung Psychologie, Institut für Arbeits-, Organisations- und Sozialpsychologie, Professur Arbeits- und Organisationspsychologie

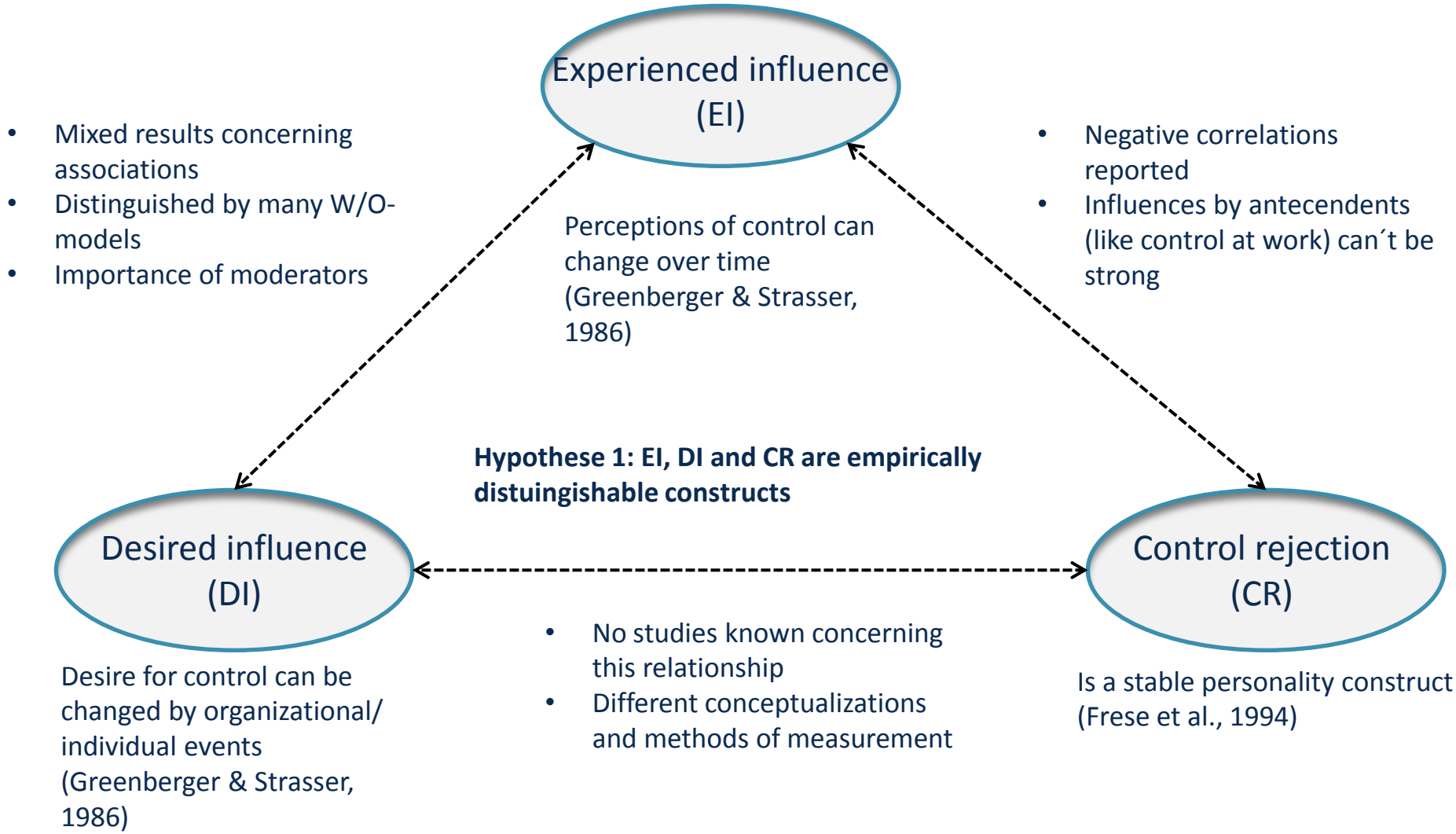
Experienced influence, desired influence and control rejection at work: An experimental study about their differential validity and effects

Dresden, 21 September 2012

1. Objectives of the study



2. Theoretical Background



- Mixed results concerning associations
- Distinguished by many W/O-models
- Importance of moderators

Perceptions of control can change over time (Greenberger & Strasser, 1986)

- Negative correlations reported
- Influences by antecendents (like control at work) can´t be strong

Hypothese 1: EI, DI and CR are empirically distuingishable constructs

- No studies known concerning this relationship
- Different conceptualizations and methods of measurement

Desire for control can be changed by organizational/ individual events (Greenberger & Strasser, 1986)

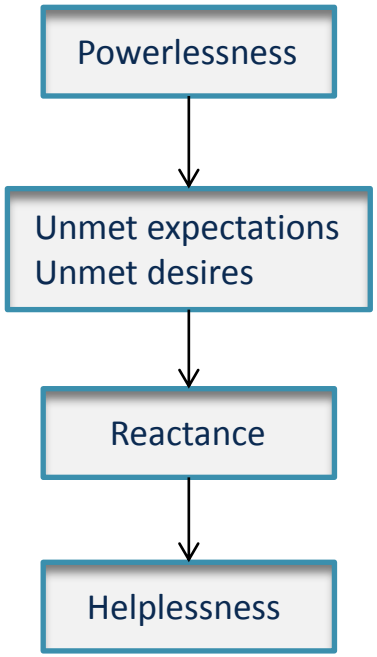
Is a stable personality construct (Frese et al., 1994)

2. Theoretical Background

Correlates of the constructs: Previous empirical and theoretical work		
Construct	Criteria	Empirical/theoretical support
Experienced influence **H2**	work-related self-efficacy **(+)**	Ashforth & Saks (2000); Frese et al. (2007)
	identification with job/work **(+)**	Ashforth & Saks (2000); Ruh et al. (1975); Wegge et al. (2006)
	qualification demands **(+)**	DIO (1979); Heller (1998); Heller & Wilpert (1981)
Desired influence **Q1**	work-related self-efficacy	Bandura (2001); Jeppesen et al. (2010)
	identification with job/work	Gardell (1977)
	qualification demands	Heller (1998); Mulder (1977)
Control rejection **H3**	work-related self-efficacy **(-)**	Frese et al. (1994)
	identification with job/work **(-)**	Frese et al. (1994)
	qualification demands **(-)**	Frese et al. (1994)

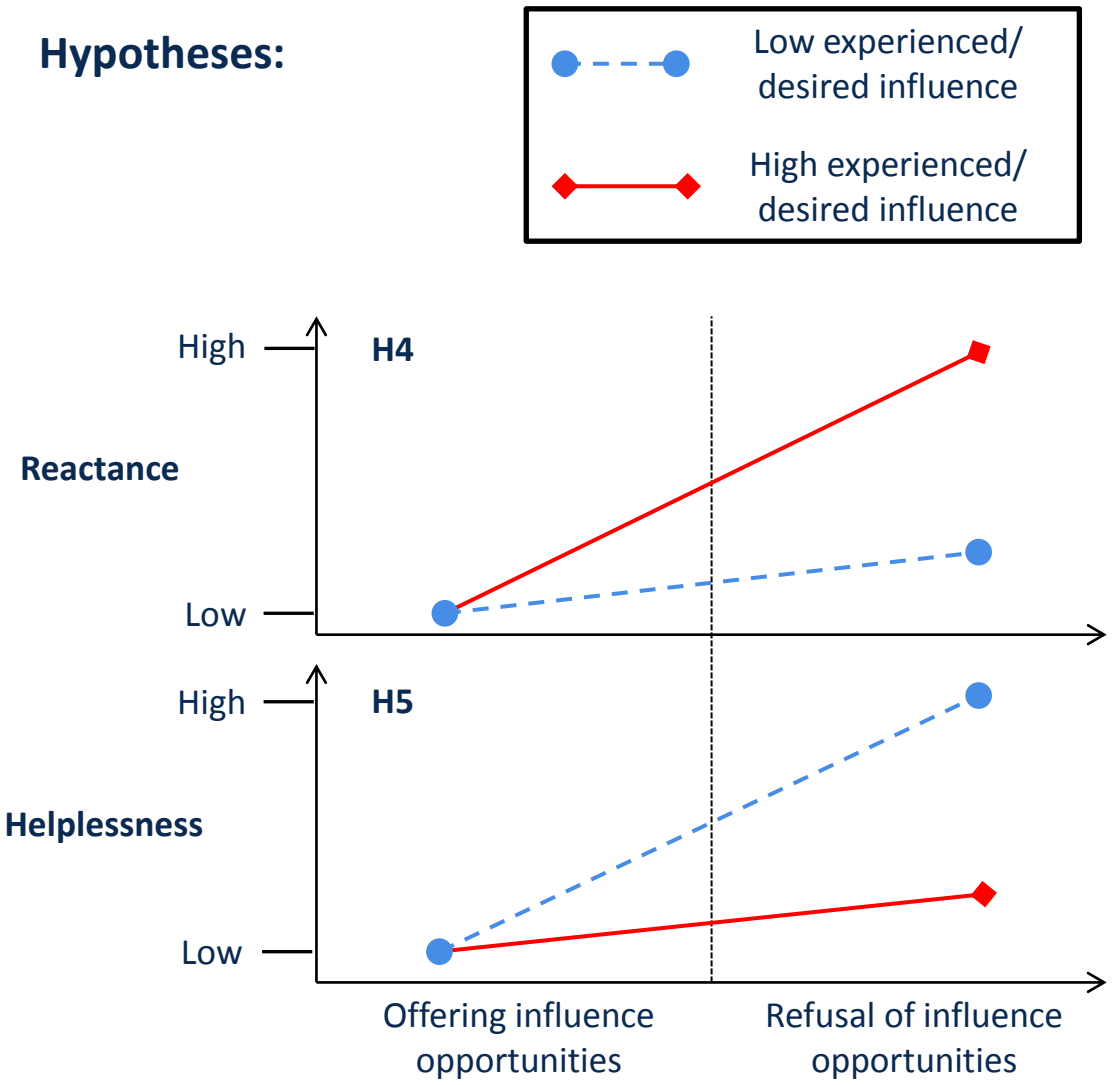
2. Theoretical Background

Model of powerlessness in organizations (Ashforth, 1989):



(simplified depiction)

Hypotheses:



4. Methods

Location: Behavioural observation laboratory (W/O-Psychology, TU Dresden)
Sample: N = 40 persons with work experience
Duration: approx. 1 hour

Examination procedure:

Written survey (correlative data)

Task „Trouble in the company“

Role play „dialogue with chairmen of the works council“

Written survey (experience of the role play)

4. Methods

Phase 1: Written survey

Example.: Scale for measuring experienced & desired influence at work (Jeppesen et al., 2010)

Wie viel Einfluss haben Sie **Ihrer Wahrnehmung nach** darauf/auf…	1 (gar nicht)	2 (ein wenig)	3 (mittel)	4 (viel)	5 (Sehr viel)
Wie die tägliche Arbeit ausgeführt wird					
Wie die Bereiche Gesundheit und Sicherheit gehandhabt werden					
Das Fällen von finanziellen Entscheidungen durch das Unternehmen					

- **Translation of the instrument and critical evaluation through a second person**
- **Adaption: scales for measuring desired participation were modified in order to ensure a fit with the operational circumstances of FRG**
- **Data-based modification: aggregation of scales for measuring medium and distal influence (de facto & desired) to each one scale**

Wer **sollte ihrer Meinung nach** den größten Einfluss haben darauf/auf…	Sie selbst	Ihre Arbeitsgruppe	Alle Mitarbeiter	Mitarbeiter-vertreter (z.B. Betriebsrat)	Arbeitgeber- und Arbeitnehmer-vertreter gemeinsam (z.B. Aufsichts-rat, Sicherheits-komitee)	Unternehmens-leitung

Further instruments:

- **Control rejection (Frese, 1984)**
- **Qualification demands & responsibility (Rimann & Udris, 1997)**
- **Work related self efficacy (Frese et al., 1996)**
- **Involvement-scale (Moser & Schuler, 1993)**

4. Methods

Phase 2: Completion of the task „Trouble in the company“

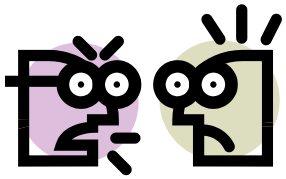
- Fictive scenario: operational conflict in the form of an unfair distribution of working time (context: assembly line work in dispatch sector)
- The participant was instructed to prepare a letter of complaint to the works council
- The task as well as the submitted letter formed the basis for the following role play

4. Methods

Phase 3: Role play „Dialogue with the chairmen of the works council“

- After finishing the letter of complaint the participant was invited for a meeting
- Roles: chairmen of the works council (experimenter) & employee (participant)
- Objective of the participant: Finding a satisfactory solution for all parties involved (together with the chairmen)
- Two different experimental conditions (behavior of the experimenter) were manipulated:

„stimulation condition“	„frustration condition“
Emotional neutrality, Compliance with conversational standards	
• Welcoming the initiative of complaint	• General rejection of the attempt to exert influence
• Joint search for/ discussion on adequate solutions • Treatment as an equal partner and active inclusion	• Demand for justification • Blocking and highlighting the hierachy of power
• Providing the opportunity of extended influence/ responsibility	• Request for withdrawal of the complaint



4. Methods

Phase 3: Collection of video-based data

- The behavior of the participant was analyzed after finishing the data collection
- Different gestural and mimic behaviors were coded by event samling
- All frequencies were divided by the duration of the role play
- 25 % of the coded videos were analyzed by a second observer

Variable	K_w (2-sec.)
Speaking time of the participant	.95
Head-nodding & verbal signals of agreement/ understanding	.70
Head-shaking	.50
Movements of the torso	.46
Duchenne-Smile	.50
Fake Smile	.45
Total	.84

4. Methods

Phase 4: Written survey (experience of the role play)

- **Submitting a modified version of the questionnaire for measuring experienced reactance and helplessness (Klocke, 2004)**

During the conversation I had the following **thoughts and convictions** (towards my conversation partner):	not at all	hardly	moderate	mainly	totally
	1	2	3	4	5
What rubbish! (R+)					
I know what to do (H-)					
I´m not able to think clearly (H+)					
He/she have good arguments (R-)					

In the situation I **felt** as follows:	not at all	hardly	moderate	mainly	totally
	1	2	3	4	5
annoyed (R)					
intimidated (H)					
furious (R)					
perplexed (H)					

5. Results & Discussion

Results of the confirmatory factor analysis (AMOS)

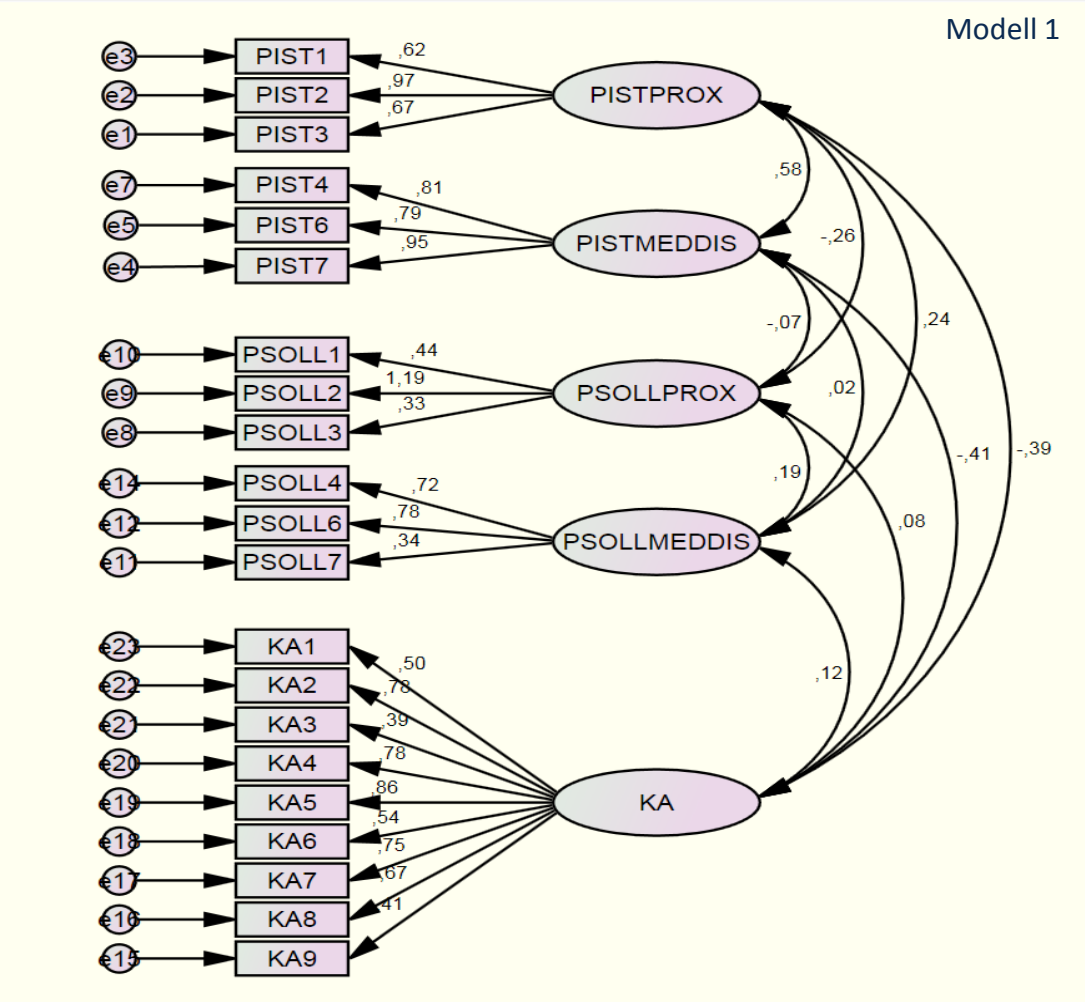


Table 1: Fit-indices for Model 1 and Model 2 (N = 40)

Fit-Indice	Model 1 (5 factors)	Model 2 (1 factor)
SRMR	.105	.149
CFI	.829	.447
RMSEA	.09	.158

H1

5. Results & Discussion

Correlates of Experienced influence, desired influence and control rejection

Table 2: Correlations of Experienced influence, desired influence and control rejection

Variable	Experienced influence (prox)	Experienced influence (med/dis)	Desired influence (prox)	Desired influence (med/dis)	Control rejection
Work-related self-efficacy	.50	.48	-	-	-.45
Identification	.32	.45	-	-	-.34
Qualification demands and responsibility	.50	.45	-	-	-

H2 

Q1

H3 

5. Results & Discussion

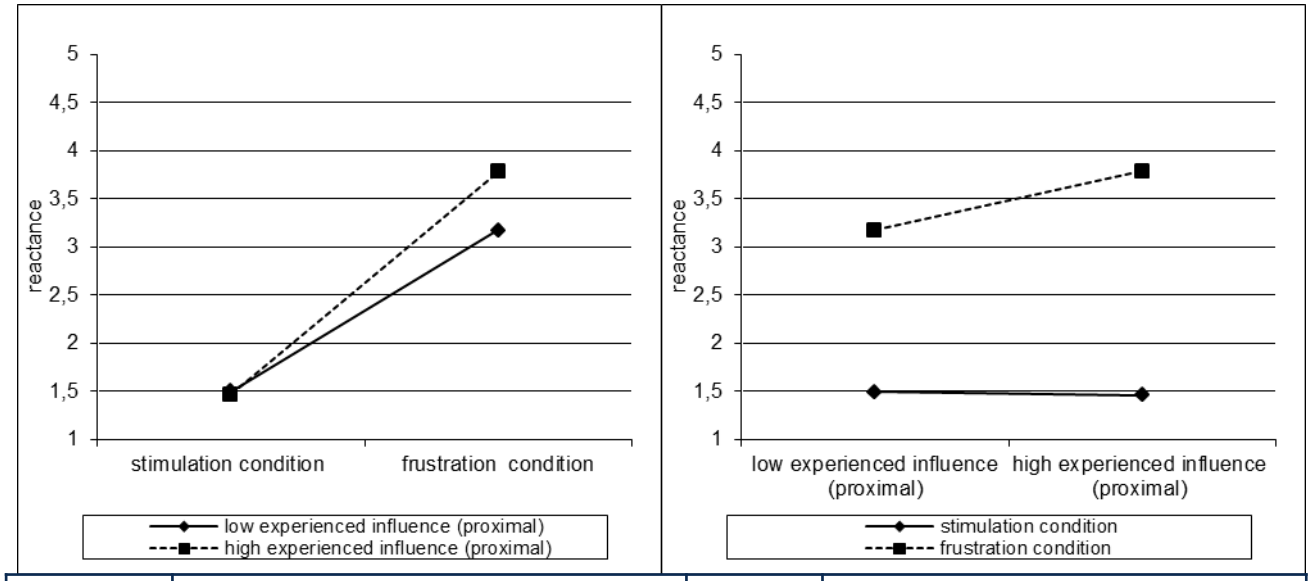
Results of the experimental part of the examination

Table 3: Descriptive statistics of the depend variables within the treatment groups and test of significant differences

	Stimulatiom condition			Frustration condition			Significant difference?
Variable	N	M	SD	N	M	SD	
Manipulation check	20	**4.66**	0.42	20	**1.36**	0.37	yes
Experienced reactance	20	**1.48**	0.36	20	**3.52**	0.65	yes
Experienced helplessness	20	**1.97**	0.45	20	**2.47**	0.66	yes
Speaking time of the participant	20	**44.48**	10.75	20	**52.25**	9.56	yes
Head-nodding & verbal signals of agreement/ understanding	20	**16.48**	5.36	20	**8.79**	7.32	yes
Head-shaking	20	**0.23**	0.35	20	**0.78**	0.78	yes
Duchenne-Smile	20	0.27	0.53	20	0.51	1.03	no
Fake smile	20	**0.10**	0.15	20	**0.78**	1.05	yes
Smile (total)	20	0.37	0.56	20	1.29	1.83	no
Movement of the torso	20	0.27	0.53	20	0.46	0.81	no

5. Results & Discussion

Significant interaction effect between treatment and experienced influence (proximal) for experienced reactance



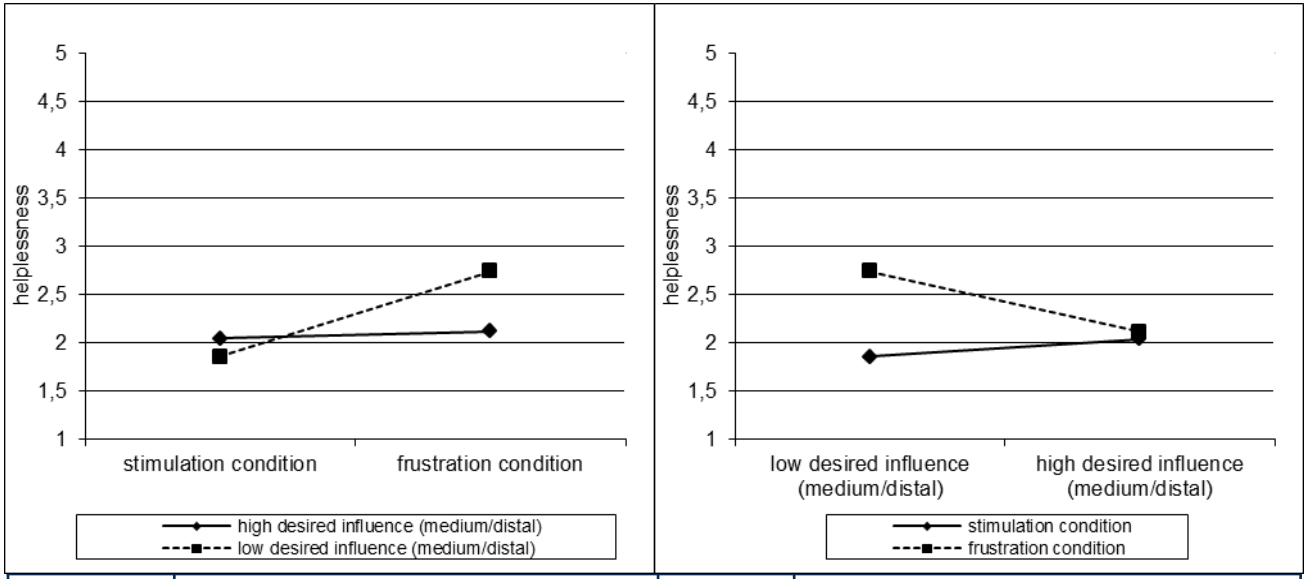
Low e.i.	b = 0.84, $t(36)$ = 8.16, p < .001	Stim.	b = - 0.02, t(36) = 0.16, n.s.
High e.i.	b = 1.16, $t(36)$ = 11.28, p < .001	Frust.	b = 0.32, t(36) = 2.89, p < .01

- Model (step 2): R^2 = .88, R^2korr = .86, F (5,34) = 48.60 (p < .001)
- product term: ΔR^2 = .02 (p < .05); β = .14 (p < .05)

H4 

5. Results & Discussion

Significant interaction effect between treatment and desired influence (medium/distal) for experienced helplessness



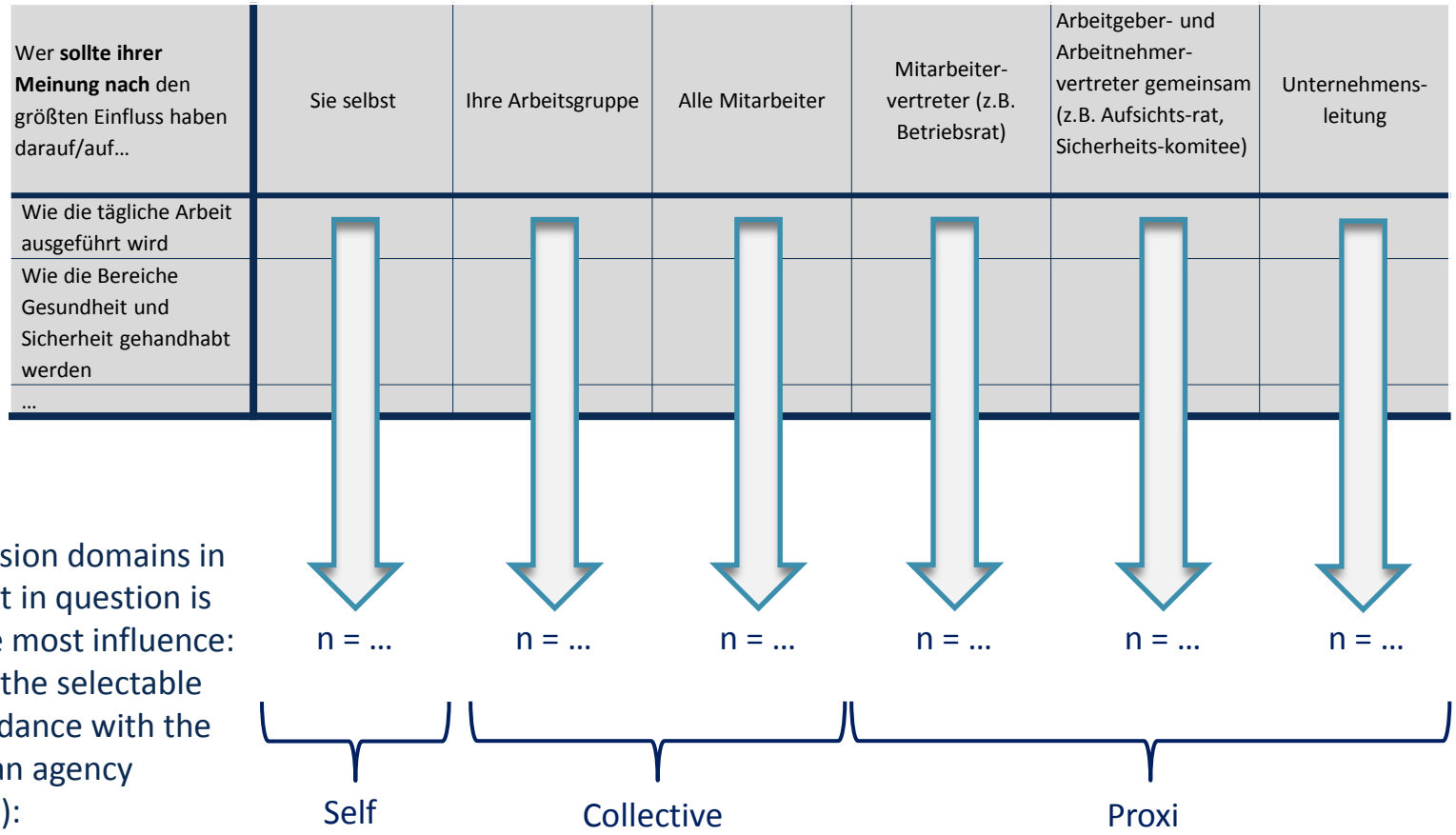
Low d.i.	$b = 0.44$, $t(36) = 3.43$, $p < .01$	Stim.	$b = 0.12$, $t(36) = 0.81$, n.s.
High d.i.	$b = 0.04$, $t(36) = 0.81$, n.s.	Frust.	$b = -0.40$, $t(36) = 2.06$, $p < .05$

- Model (step 2): $R^2 = .30$, $R^2korr = .20$, $F(5,34) = 2.92$ ($p < .05$)
- product term: $\Delta R^2 = .10$ ($p < .05$); $\beta = .33$ ($p < .05$)

H5 

5. Results & Discussion

A Detailed view on the preferred agents in control: Another analysis strategy (based on a procedure of Joensson, Jeppesen & Fausing, 2011):



1. number of decision domains in which the agent in question is wanted to have most influence:
2. Aggregation of the selectable agents in accordance with the modes of human agency (Bandura, 2001):

5. Results & Discussion

Summary of the results concerning the experimental effects of the preferences for certain organizational agents		
Significant interaction effect between treatment and the number of decisions in which … is preferred	Dependent variable	Interpretation of simple slope tests
Own work group/team (WG)	Frequency of torso movements	**High WG**-persons show a significant **increase** in **frustration condition**, **low WG**-persons show a significant **decrease**
Employee representatives (ER)	Frequency of fake smiling	**High ER-**persons show significant **increase** in **frustration condition**; **low ER**-persons **not**
Proxi-agents (PA)	Experienced helplessness	**High PA**-persons show a significant **increase** in **frustration condition**; **low PA**-persons **not**
Proxi-agents (PA)	Frequency of head-shaking	**Low PA**-persons show a significant **increase** in **frustration condition**; **high PA**-persons **not**

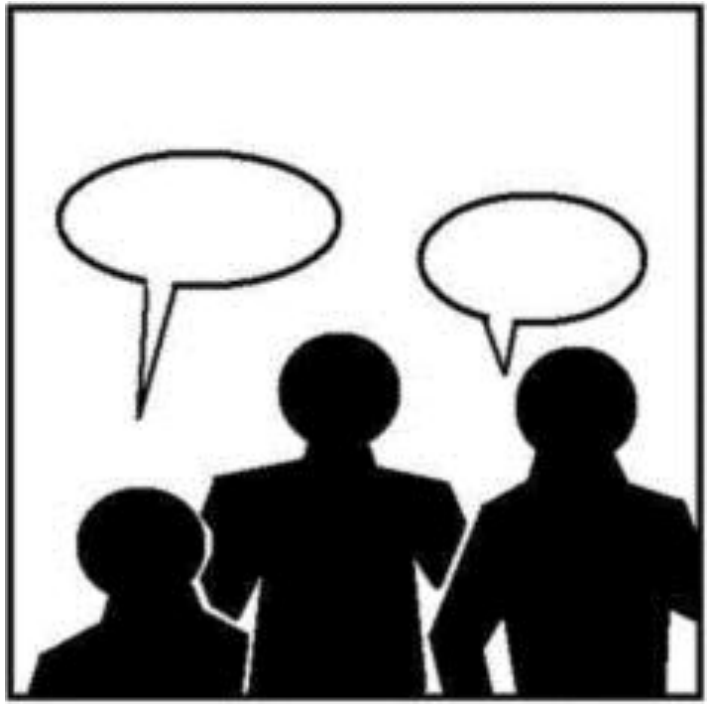
5. Results & Discussion

Summary

- Experienced influence, desired influence and control rejection are empirically distinguishable and
- show different correlational patterns concerning work-related self-efficacy, identification with job/work as well as the subjective assessed work-related qualification demands/responsibility
- The experimental paradigm seems to be suitable for the causation of the intended phenomena (reactance and helplessness)
- Experienced proximal influence predicts reactance while desired medium/distal influence protects against helplessness in the face of the rejection of influence opportunities
- The single preferences for certain organizational agents go along with different behaviors which mainly can be seen as indicators for reactance/helplessness

Thank you for your attention!

Discussion time



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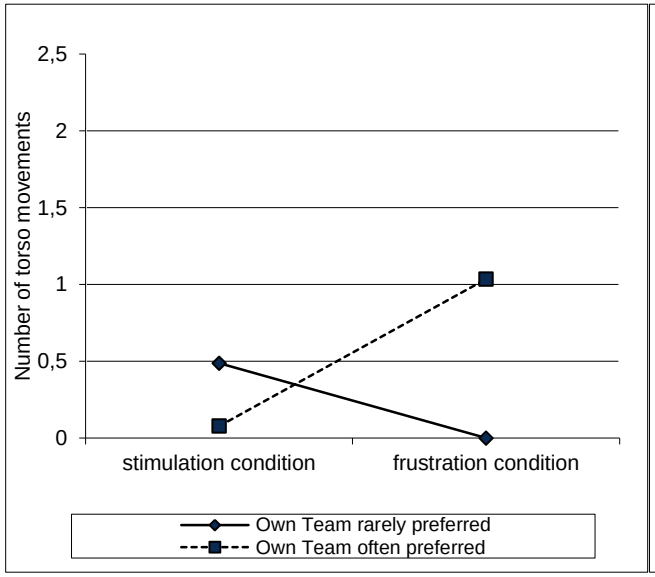
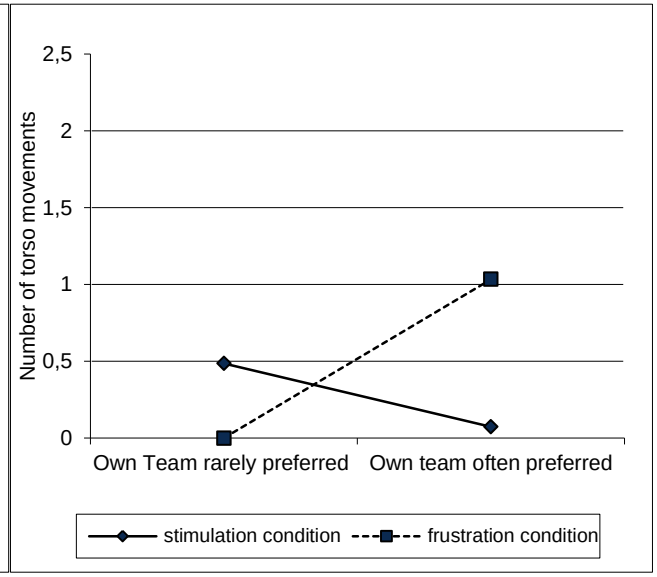
Backup-Pages

5. Results

Significant interaction effect between treatment and the number of decision domains in which the own work group/team is wanted to have most influence for the number of torso movements



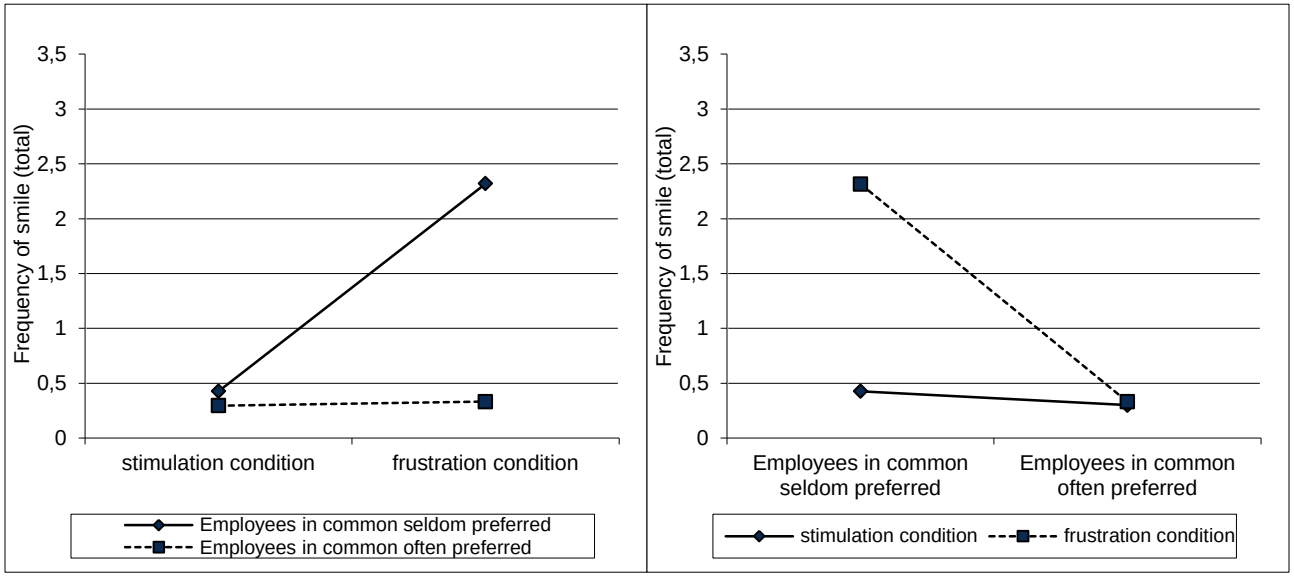


rarely	b = -0,28; $t(36)$ = 2,15; p < .05	Stim.	b = -0,18; $t(36)$ = 3,25; p < .01
often	b = 0,48; $t(36)$ = 3,62; p < .01	Frust.	b = 0,48; $t(36)$ = 2,91; p < .01

- Model (step 2): R^2 = .39, R^2korr = .30, $F(5,34)$ = 4.40 (p < .001)
- product term: ΔR^2 = .27 (p < .001); β = .56 (p < .001)

5. Results

Significant interaction effect between treatment and the number of decision domains in which the employees in common are wanted to have most influence for the rate of smiling

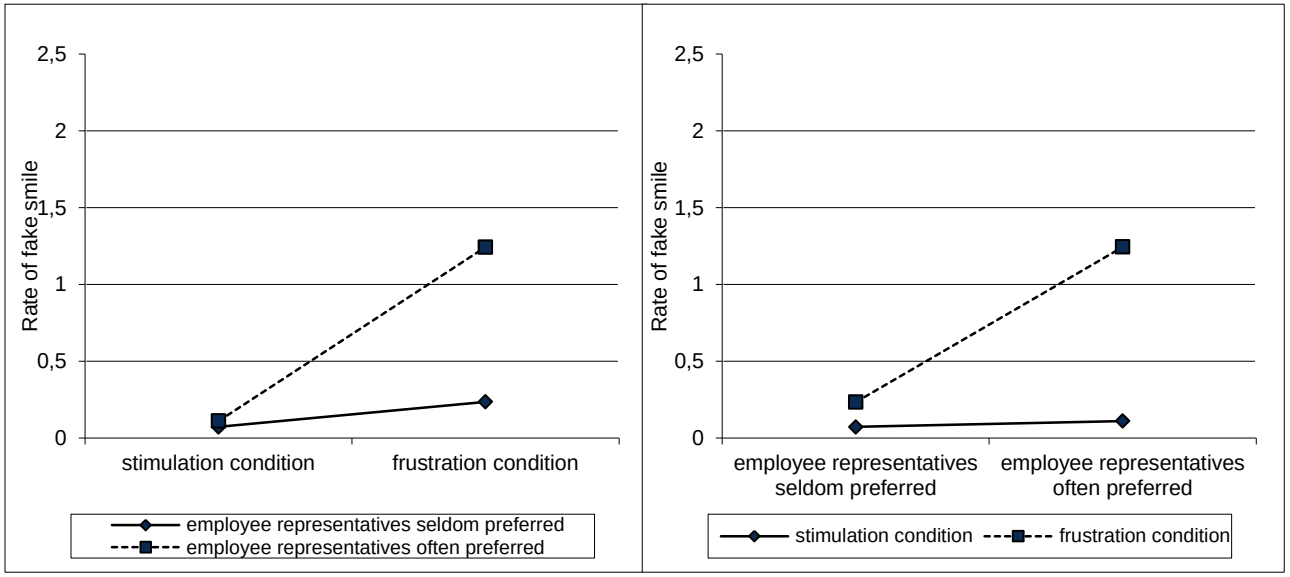


rarely	b = 0,95; $t(36)$ = 3,31; p < .01	Stim.	b = -0,05; $t(36)$ = 0,23; n. s.
often	b = 0,02; $t(36)$ = 0,06; n. s.	Frust.	b = -0,71; $t(36)$ = 3,13; p < .01

- Model (step 2): R^2 = .32, R^2korr = .22, $F(5,34)$ = 3.16 (p < .05)
- product term: ΔR^2 = .10 (p < .05); β = -.33 (p < .05)

5. Results

Significant interaction effect between treatment and the number of decision domains in which the employee representatives are wanted to have most influence for the rate of fake smiling

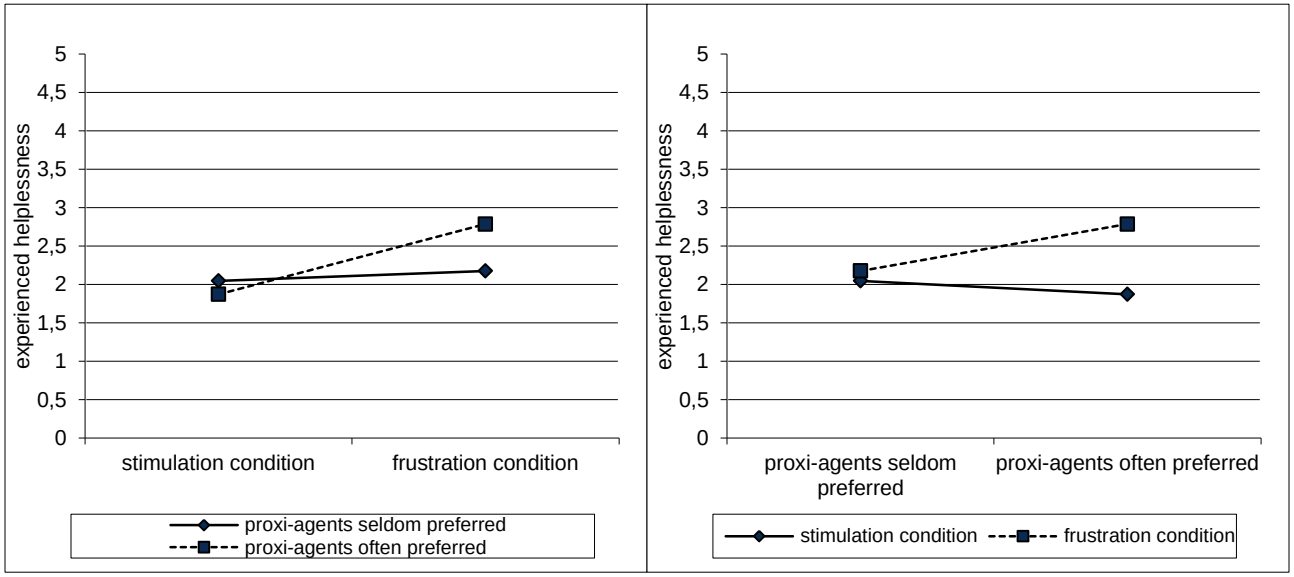


rarely	b = 0,08; $t(36)$ = 0,54; n. s.	Stim.	b = 0,02; $t(36)$ = 0,10; n. s.
often	b = 0,57; $t(36)$ = 3,47; $p < .01$	Frust.	b = 0,57; $t(36)$ = 3,71; $p < .01$

- Model (step 2): R^2 = .41, R^2korr = .33, $F(5,34)$ = 4.75 ($p < .01$)
- product term: ΔR^2 = .07 (p = .05); β = .29(p = .05)

5. Results

Significant interaction effect between treatment and the number of decision domains in which a proxi-agent is wanted to have most influence for the experienced helplessness

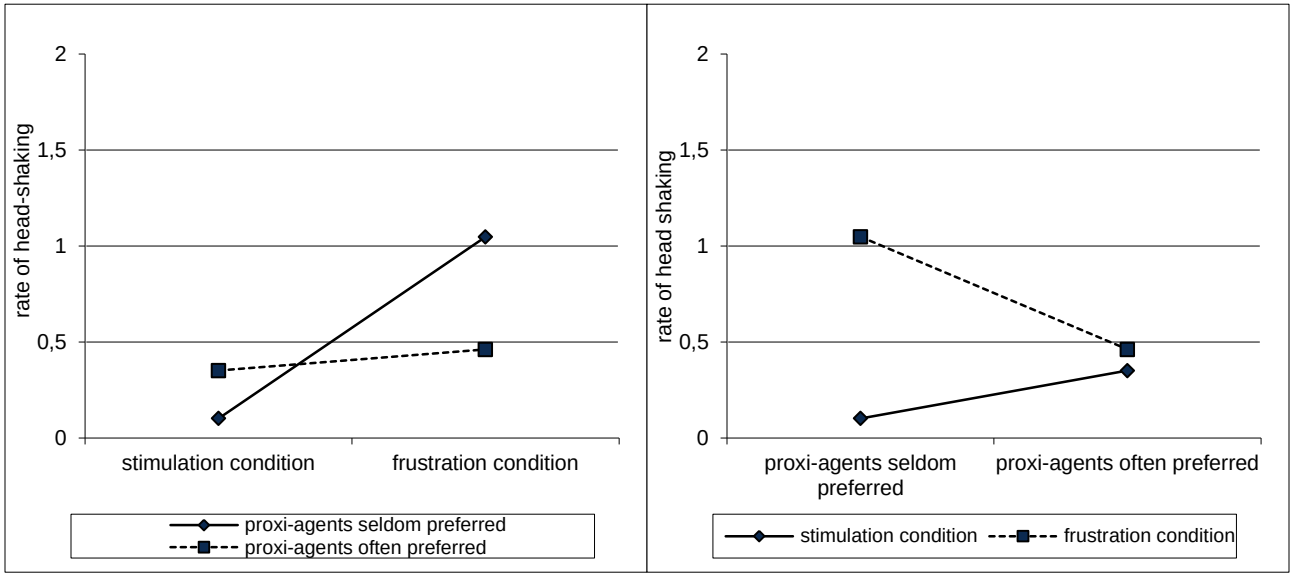


rarely	b = 0,07; $t(36)$ = 0,51; n. s.	Stim.	b = -0,06; $t(36)$ = 0,79; n. s.
often	b = 0,46; $t(36)$ = 3,59; $p < .01$	Frust.	b = 0,21; $t(36)$ = 2,13; $p < .05$

- Model (step 2): $R^2 = .30$, $R^2korr = .20$, $F(5,34) = 2.79$ ($p < .05$)
- product term: $\Delta R^2 = .09$ ($p < .05$); $\beta = .32$ ($p < .05$)

5. Results

Significant interaction effect between treatment and the number of decision domains in which a proxi-agent is wanted to have most influence for the rate of head shaking



rarely	b = 0,47; t(36) = 3,50; p < .01	Stim.	b = 0,08; t(36) = 1,04; n. s.
often	b = 0,06; t(36) = 0,41; n. s.	Frust.	b = -0,21; t(36) = 1,95; n. s.

- Model (step 2): R^2 = .35, R^2korr = .26, F(5,34) = 3.71 (p < .01)
- product term: ΔR^2 = .09 (p < .05); β = -.32 (p < .05)