

CoRPS Can a mindfulness based intervention change personality?

Center of Research on Psychology in Somatic diseases
Tilburg University
Ivan Nyklicek

CoRPS Mindfulness-Based Stress Reduction

- **MBSR** (Kabat-Zinn, 1990): group intervention to enhance **mindfulness** -> being attentive to and aware of what is taking place in the present in an open and nonjudgmental way
- *"the clear and single-minded awareness of what actually happens to us and in us at the successive moments of perception"* (Thera, 1972)
- It *"offers a bare display of what is taking place"* (Shear & Jevning, 1999)
- MBSR: 8 weekly group sessions + 6 hour retreat
- Evidence from RCTs: positive effects on mood, impact of pain, quality of life

TILBURG UNIVERSITY

CoRPS Mindfulness and personality

- No studies yet except:
- Uncontrolled study by Kabat-Zinn: change in Sense of Coherence
- However: basic personality characteristics?
- Anecdotal evidence of some participants being a "completely different person" -> personality?

TILBURG UNIVERSITY

CoRPS Type D (distressed) personality

- A combination of
 - Negative affectivity (Neuroticism: $r \approx .70$)
"I have a gloomy view of life"
"I often worry"
 - Social inhibition (Extraversion: $r \approx -.35$)
"I am a closed person"
"I prefer to keep other people at some distance"
- Assessed by a 14-item questionnaire, using a cut-off score
- Prevalence: between 15% (healthy) - 55% (distressed and hypertensives)
- 52% heritable

TILBURG UNIVERSITY

CoRPS Type D and health

- Mostly researched in cardiac patients:
- Increased vital exhaustion (Pedersen & Middel, 2001)
- Increased risk of anxiety and depression (Denollet et al., 1995)
- Decreased quality of life (Denollet et al., 2000; Pedersen, Holkamp, Caliskan, van Domburg, & Balk, 2006)
- 4 – 8 x increased mortality risk in cardiac patients (Denollet et al., 1996; Denollet & Pedersen, 2003).

→ Need for an intervention!

TILBURG UNIVERSITY

CoRPS Why mindfulness?

- Mindfulness decreases negative affect (state NA)
- Mindfulness results in acceptance of one's thoughts, feelings, and behaviors increasing feeling comfortable in social situations and relations (counteracting SI)
- Mindfulness is claimed to have fundamental effects rather than just state effects

→ **HYPOTHESES:**

- MBSR reduces both NA and SI of Type D personality
- MBSR reduces the proportion of Type D persons
- Type D may moderate the effect of MBSR on mood

TILBURG UNIVERSITY

Method: Participants and Design

- **Participants (N = 145)**
 - Recruited by ads in local newspapers
 - Self-reported symptoms of distress
 - Exclusion criteria: psychotic or suicidal tendencies
 - Randomized into
 - MBSR group
 - Waiting-list control group
- **Design**
 - RCT with pre-post design (and 1 year follow-up for a subgroup of 85 participants)

Method: Instruments

- **Instruments**
 - Type D Scale (DS-14; Denollet, 2005)
 - Perceived Stress Scale (PSS; Cohen et al., 1983)
 - Positive and Negative Affect Schedule (PANAS; Watson et al., 1988)
 - Mindful Attention Awareness Scale (MAAS; Brown & Ryan, 2003)
 - Kentucky Inventory of Mindfulness Skills (KIMS; Baer et al., 2006) subscales
 - Observe
 - Accept Without Judgment

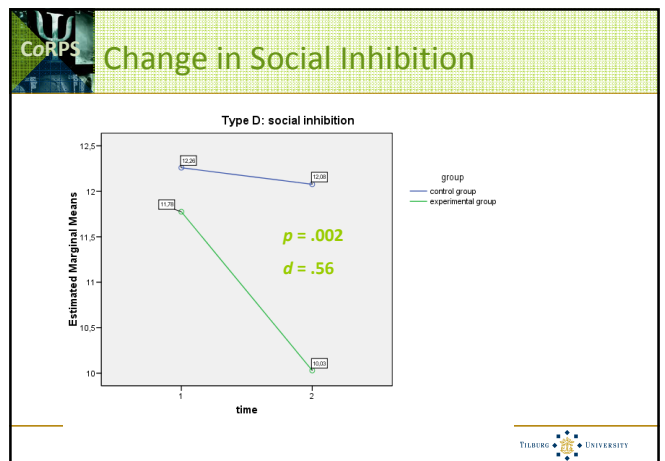
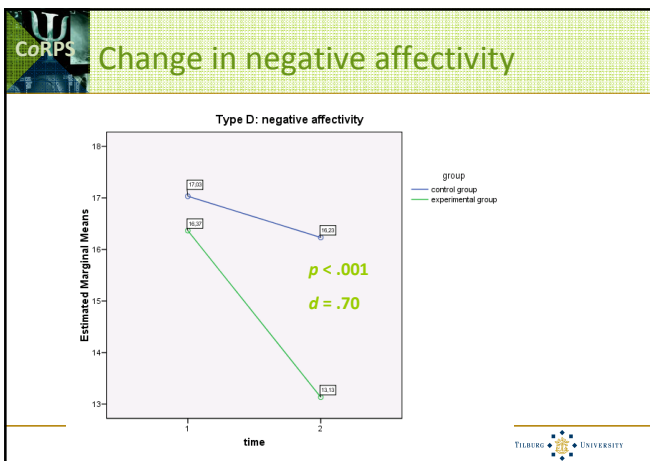
Sample Characteristics

	Control group (N = 72)	MBSR group (N = 73)	P
Age	46.94 ± 9.83	45.44 ± 10.85	> .10
Education (High)	45 (62.5%)	31 (42.5%)	0.023*
Sex (Male)	26 (36.1%)	19 (26.0%)	> .10
Psychotropic medication users	19 (26.4%)	15 (20.5%)	> .10
Type D personality	45 (62.5%)	39 (53.4%)	> .10

Sample Characteristics

	Control group		MBSR group		F	p	Cohen's d
	Time 1	Time 2	Time 1	Time 2			
Positive affect*	28.46	30.18	27.47	31.85	3.709	0.058	0.40
Negative affect*	25.75	24.72	24.26	18.84	9.792	0.002**	0.63
General Mindfulness	49.61	50.54	50.97	55.26	5.963	0.016*	0.40
Mindfulness Observing	44.08	44.01	44.71	47.74	7.009	0.009**	0.40
Mindfulness Accepting without judgment	30.27	31.38	30.96	34.81	6.222	0.014*	0.43

* Total N = 85



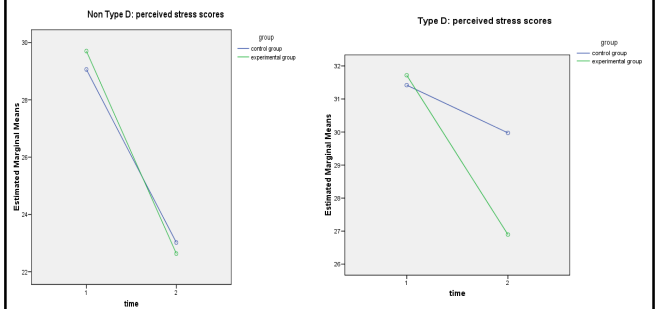


Type D classification

	MBSR group (n=73)			Control group (n=72)		
	Before	After	change	Before	After	change
Type D: N	39	33	-6	45	38	-7
%	52.8%	47.2%		62.5%	52.8%	



Type D moderates only PSS scores



Conclusion & Discussion

- MBSR reduces both facets of Type D personality
 - Negative affectivity (medium to large effect)
 - Social inhibition (medium effect)
- Reduction in *number* of Type D's not found
- Future research: cardiovascular effects?
- Type D does not moderate the effect of MBSR (except on PSS) -> equally suitable
- Does MBSR change personality?
 - Do questionnaires assess personality?
 - Influence of mood state
 -