WHAT CHANGES IN THE PERSONAL CONSTRUCT SYSTEM DURING PSYCHOTHERAPY?

A NATURALISTIC STUDY OF BRIEF ORIENTED CONSTRUCT THERAPY

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MULTI-CENTER DILEMMA PROJECT

RANDOMIZED CONTROL TRIALS: PROBLEMS

- It does **not reproduce the real context** of therapy.
- **Selective sample**, patients are not representative.
- Model of **fixed duration.**
- **Ethical dilemmas:** patients in a control group (or waiting list), manualized treatments
- **Lack of external validity.**
- **Poor success in predicting outcome** at the level of the individual case.
- Only a 11% of the studies are of good quality *(Mackay & cols., 2003).*
- **Lack of evidence** concerning many therapies.

THE EMPIRICALLY SUPPORTED TREATMENT APPROACH (EFFICACY RESEARCH)

- The evidence derived form efficacy trials is a **necessary and sufficient condition** to support policy and practice in the context of clinical routine?

- Recommendations of the guidelines are forced to rely on **consensus** when there is no available research evidence.

- **STATIC LISTS OF EMPIRICALLY SUPPORTED TREATMENTS. DANGER:** false warranty of efficacy to external entities / pressure to apply treatments.

PRACTICE BASED EVIDENCE: *"EFFECTIVENESS RESEARCH"*

- Naturalistic studies
- Starts with practitioners and **builds 'upwards'**
- **Higher sample** sizes
- High **generalisability**
- Used within services to **feed back results** to the service, clinicians and clients.
- Practice Research Networks (PRNs).

→ Looking for a greater synergy between research & practice to increase the robustness of the evidence.

DISADVANTATGES OF PRACTICE BASED EVIDENCE

- Greater threats to internal validity.
- Requires, and has benefited from, commitment from all therapists and administrative staff.

AIMS

- To assess changes in patients' construct systems and their relation with symptom improvement after cognitive-constructivist brief therapy in a primary care service.
- To assess the effectiveness of this therapy model in reducing symptomatic measures.

CONTEXT

- Psychotherapy provided in the Catalan public health system (primary care).
- Therapists: second and third-year students of the Master in Cognitive Social Therapy.
- Brief therapy format: a maximum of 16 one-hour sessions
- Training and supervision from a constructivist approach:
  - Personal construct therapy
  - Systemic therapy
  - Constructivist developmental approach: adult moral development approach, analysis of the type of complain, discourse analysis

  (a common epistemological base)

MATERIALS: ROUTINE EVALUATION

- Beck Depression Inventory *(BDI or BDI-II)* *(Sanz, J., Perdigón, AL., Vázquez, C., 2003)*
- Symptom Checklist-90-Revised *(SCL-90-R)*
- Global Assessment of Functioning Scale *(GAF)*
- Repertory Grid Technique

THE REPERTORY GRID TECHNIQUE ADMINISTRATION (I)

CONSTRUCTS		ELEMENTS												
		Self now	Mother	Father	Brother	Boyfriend	Friend 1	Friend 2	Non-grata	Friend 3	Cousin	Godmother	Friend 4	Ideal Self
1. *Pessimistic*	1. *Optimistic*	1	1	5	2	7	3	6	2	6	4	3	2	7
2. *Self-demanding*	2. *Takes it easy*	1	6	6	2	2	5	6	3	5	6	4	5	4
3. *Fearful*	3. *Enterprising*	7	2	6	2	4	5	6	5	2	3	4	5	5
4. *Lives to work*	4. *Works to live*	5	1	2	2	6	6	6	1	6	7	6	6	7
5. *Imposes his/her wishes*	5. *Tolerant with others*	6	2	1	1	4	3	6	1	7	3	4	2	7
6. *Teasing*	6. *Touchy*	2	7	1	6	4	3	4	6	3	3	5	6	3
7. *Appreciates others*	7. *Does not appreciate other*	2	6	6	6	1	5	4	7	4	2	2	5	1
8. *Aggressive*	8. *Calm*	6	4	2	2	7	4	6	2	6	6	6	3	7
9. *Concerned about others*	9. *Selfish*	2	2	6	7	2	3	5	7	3	3	2	2	2
10. *Avaricious*	10. *Generous*	6	1	1	1	7	5	5	1	6	3	3	6	7
11. *Sensitive*	11. *Materialistic, superficial*	1	5	7	7	1	4	5	7	1	4	3	4	1
12. *Cheeky*	12. *Respectful*	6	6	5	4	6	6	6	1	6	5	6	5	7
13. *Hypocritical*	13. *Sincere*	5	4	4	2	6	5	5	1	6	6	5	4	7
14. *Blackmailer*	14. *Non blackmailer*	3	2	2	1	5	6	6	1	6	6	6	3	7
15. *Appears stronger than is*	15. *Natural*	6	3	1	2	5	2	4	2	7	6	6	5	6
16. *Does not look after the friendship*	16. *Looks after the friendship*	6	3	3	3	6	2	1	2	4	4	6	4	7
17. *Non Accessible*	17. *Accessible*	5	2	2	1	4	2	4	1	6	3	5	2	7
18. *Introverted*	18. *Extroverted*	1	2	6	2	4	5	7	5	2	6	6	5	5
19. *Gets depressed easily*	19. *Does not get depressed easily*	1	2	6	3	6	3	7	6	1	3	3	3	6
20. *Tries to find the good in things*	20. *Sees only the negative*	6	6	4	6	1	5	2	7	6	3	3	5	1

1 very much so, 2 quite a lot, 3 a little, 4 middle point, 5 a little, 6 quite a lot, 7 very much so.

THE REPERTORY GRID TECHNIQUE MEASURES (II)

1. **Diferentiation:** It is computed using the **Percentage of Variance Accounted by the First Factor (PVAFF)** resulting from correspondence analysis (a factor analytic method).

2. **Self-Ideal Differentiation.** Product-moment correlation between elements «present self» and the «ideal self». High correlations associated to a high self-esteem *(Dada, 2008).*

3. **Presence/ absence of implicative dilemmas.**

4. **PID:** Reflects the number of implicative dilemmas in a grid, taking into account its size, a correction is applied for the PID.

$$PID = \frac{ID}{(n!/2[(n-2)!])} \times 100$$

ID: number of implicative dilemmas identified in a grid

n: number of constructs in a grid

5. **Polarization:** The percentage of extremity ratings ("1" and "7“). Indicative of cognitive rigidity and polarised construing. High degree of **polarisation** is linked to neurotic problems, severity of depressive symptoms

ELEMENTS

SIGNIFICANT PEOPLE IN THE PATIENT'S WORLD ARE SELECTED

- SELF
- MOTHER
- FATHER
- BROTHER
- SISTER
- PARTNER
- PREVIOUS PARTNER
- MALE FRIEND (two or three)
- FEMALE FRIEND (two or three)
- *PERSONA NON GRATA* ("someone whom you know but do not like")
- SELF-BEFORE-THE-CRISIS
- IDEAL-SELF

ELICITATION OF CONSTRUCTS USING DYADS OF ELEMENTS

More explicit contrast poles can be obtained using only two elements at a time.

- "Do you see these people as more similar or different?"
- "How are these two elements alike?"
- What characteristics do these two elements share?"
- "What would be the opposite of this characteristic?"
- "How are these two elements different?"
- The explanation of these differences by the respondent often yields a pair of opposites, each relating to an element of the dyad.

DYADIC CONSTRUCT ELICITATION (CONT'D)

This procedure is repeated for dyads of elements selected following these criteria:

- Assure that each element appears at least once in the dyads presented.
- Always include the SELF element in conjunction with the MOTHER, FATHER, SPOUSE, *PERSONA NON GRATA* and sibling elements.

When a construct is repeated, it is listened to but not jotted down nor is the opposite requested.

SELF-CONGRUENCY AND SELF-DISCREPANCY IN THE RGT

To study the construction of the self, the RGT includes these two elements:

- SELF NOW (How I see myself now?)
- IDEAL SELF (How I would like to be?)

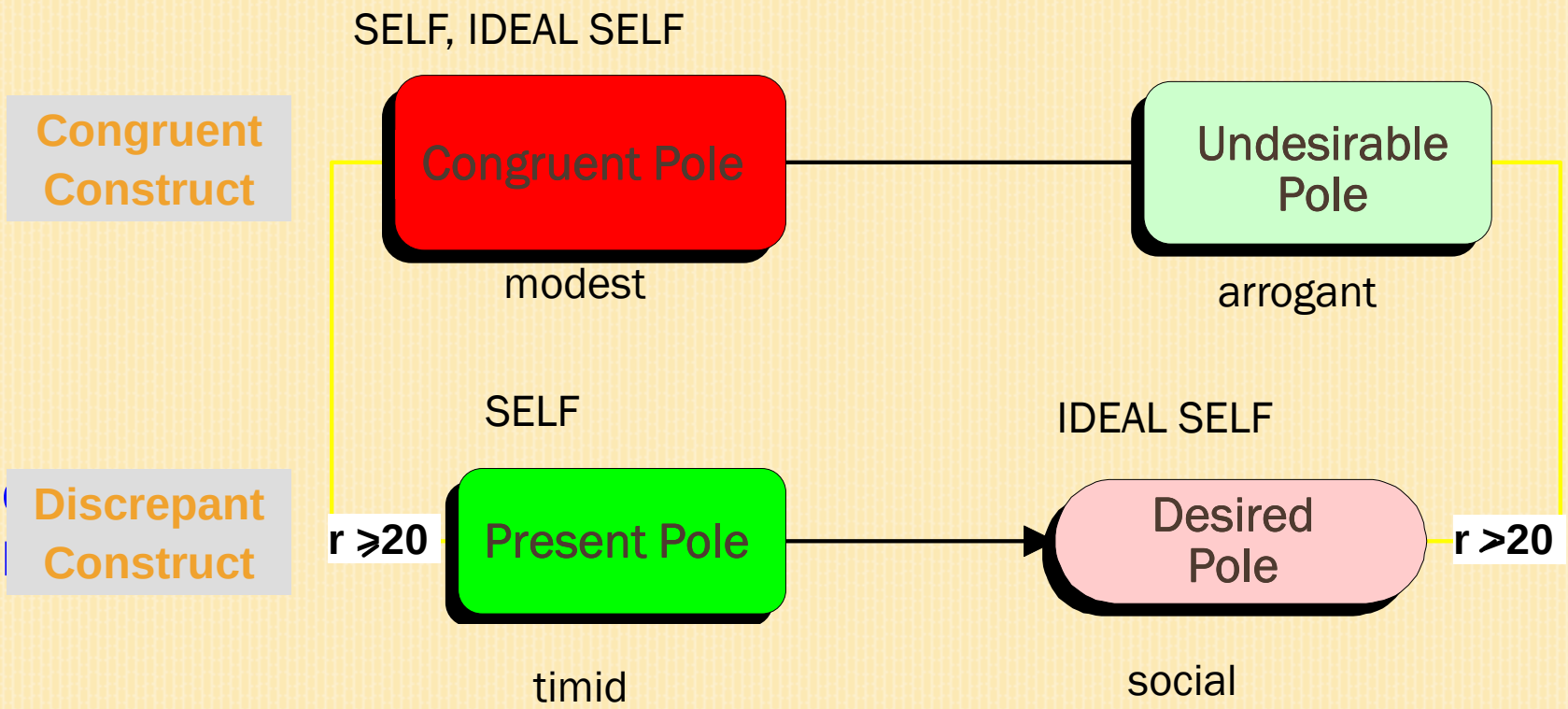
Constructs in which SN and IS are close are termed “congruent” and those in which they are set apart “discrepant”

DILEMMAS AS COGNITIVE CONFLICTS

- A type of cognitive structure
- Related to identity (core constructs), implicit or tacit, resistant to change
- A particular form of organization that links specific cognitive contents (e.g., “I wish to overcome my shyness”) to core values (e.g., “I am modest”) in a conflictive way (e.g., “If I become social I might also end up being arrogant” BUT “If I want to keep my modesty I have to remain timid”)

Feixas, G., Saúl, L. A. y Ávila-Espada, A. (2009). Viewing cognitive conflicts as dilemmas: implications for mental health. *Journal of Constructivist Psychology, 22*, 141-169.

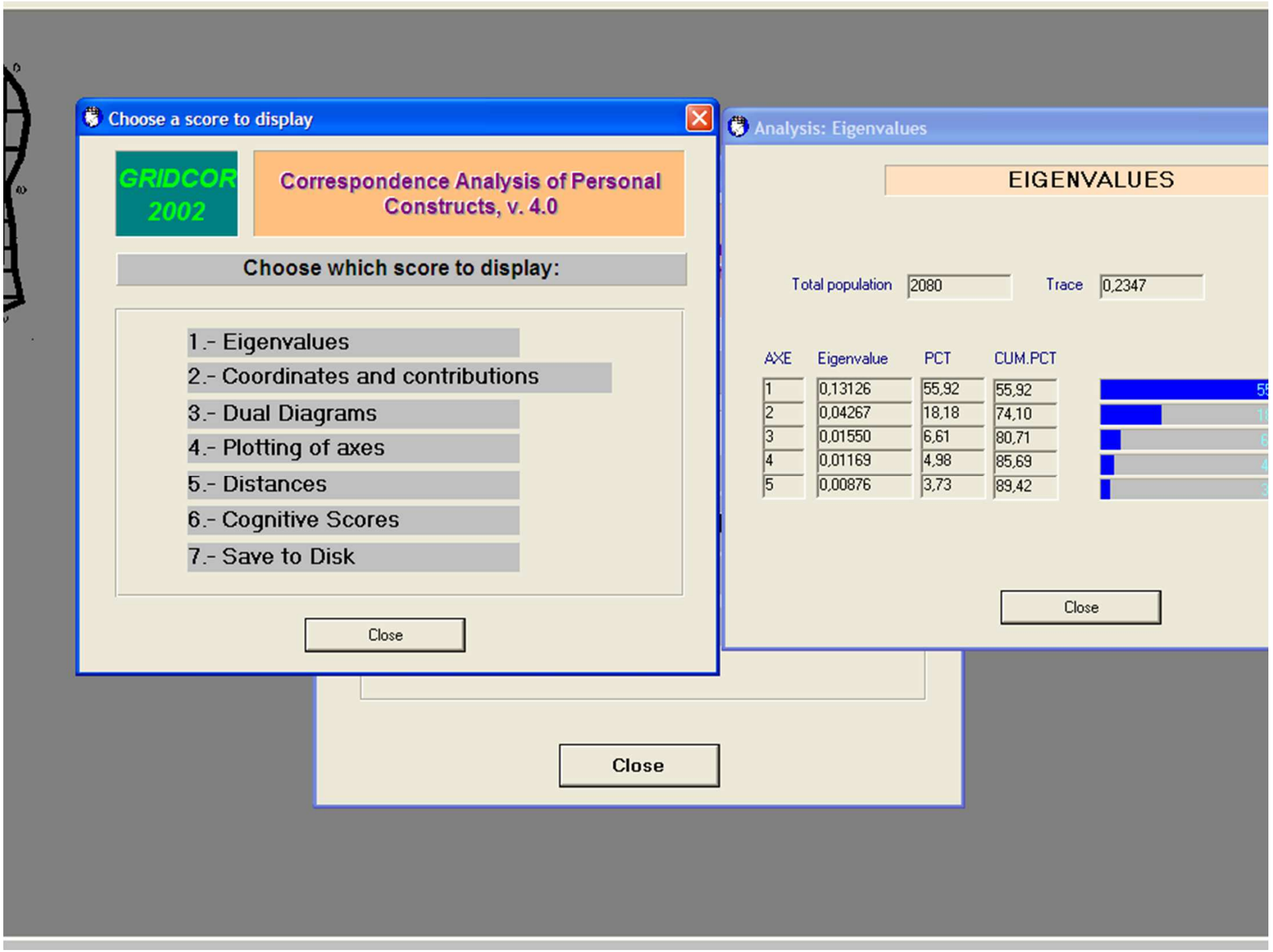
IMPLICATIVE DILEMMA



DIFFERENTIATION

- Number of functionally independent dimensions available to the subject during the process of interpersonal construction.

- Currently measured in the grid as the Percentage of Variance Explained by the First Factor (PVEFF) resulting from factor analysis of the grid data matrix.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GRIDCOR 2002
Correspondence Analysis of Personal Constructs, v. 4.0
Choose which score to display:
1.- Eigenvalues
2.- Coordinates and contributions
3.- Dual Diagrams
4.- Plotting of axes
5.- Distances
6.- Cognitive Scores
7.- Save to Disk
Close
Analysis: Eigenvalues
EIGENVALUES
Total population 2080
Trace 0,2347
AXE Eigenvalue PCT CUM.PCT
1 0,13126 55,92 55,92
2 0,04267 18,18 74,10
3 0,01550 6,61 80,71
4 0,01169 4,98 85,69
5 0,00876 3,73 89,42
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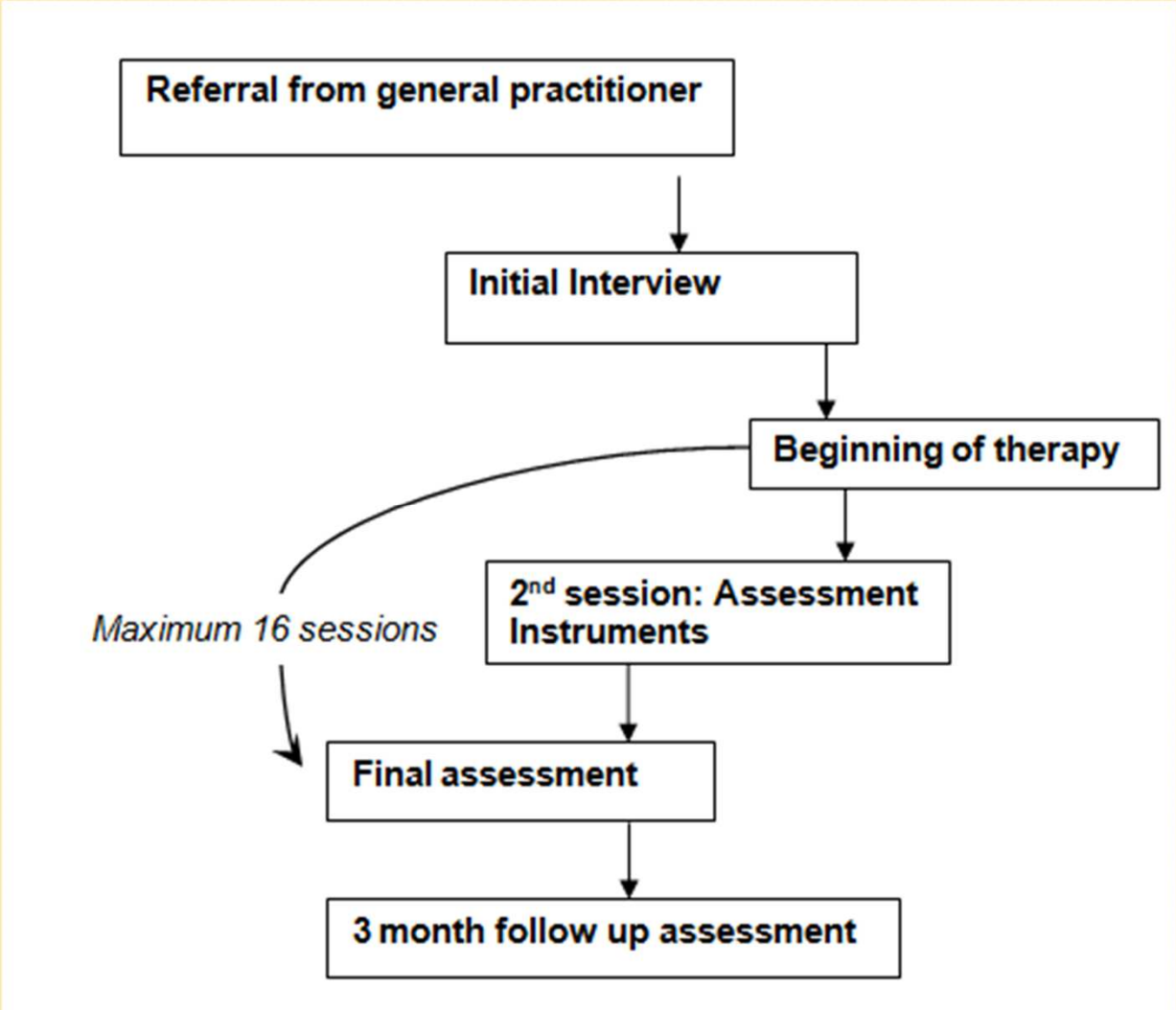
PROCEDURE: SERVICE MODEL



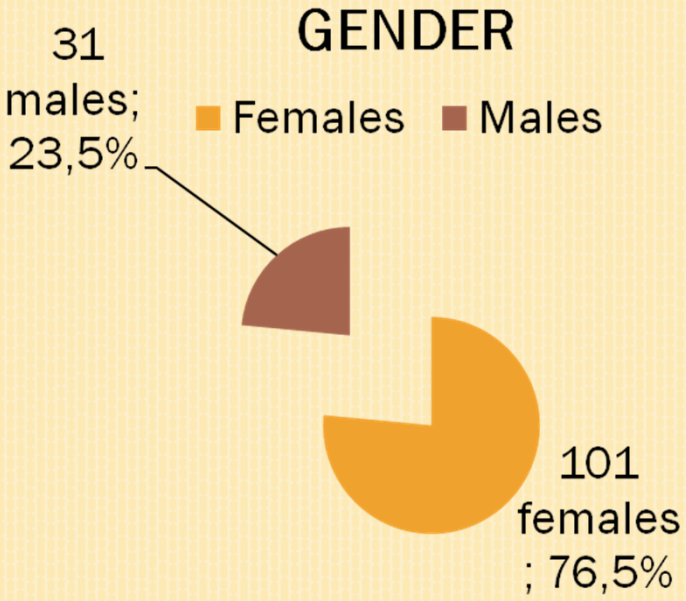
PROCEDURE: SERVICE MODEL

1. Referral from general practitioner
   - Diagnostic considerations,
   - medical conditions,
   - Risk and priority
   - Relevant comments about personal situation
   - Reason for referral

2. Initial Interview
   - Assessment of the appropriateness of psychotherapy (exclusion criteria)
   - Priority and reasons for requesting help.
   - Consultation causes
   - Previous therapies
   - Symptoms, emotions, motivation for therapy
   - Resources: cognitive, emotional, social network
   - Genogram

SAMPLE

- 132 patients diagnosed with non-severe mental disorders or adaptive problems.
- Exclusion criteria: Cluster A or B Personality disorders, drug abuse, psychotic symptoms, suicidal ideation.
- Period: 2002-2010.



- **Mean AGE:** 38,06 (SD 11,7)
  range: 18-72

AXIS I. CLINICAL DISORDERS: PRINCIPAL DIAGNOSIS

	Frequency	Percent
Anxiety Disorders	42	31,8
Mood disorders	36	27,3
Adjustment Disorders	22	16,7
Somatoform Disorders	6	4,5
Other Conditions That May Be a Focus of Clinical Attention	5	3,8
Sleep Disorders	3	2,3
Eating disorders	2	1,5
Impulse-Control Disorders	1	,8
Without diagnosis in Axis I	15	11,4
Total	132	100,0

AXIS I. CLINICAL DISORDERS: SECONDARY DIAGNOSIS

	Frequency	Percent
Anxiety Disorders	5	3,8
Mood disorders	5	3,8
Adjustment Disorders	2	1,5
Other Conditions That May Be a Focus of Clinical Attention	2	1,5
Without secondary diagnosis in Axis I	118	88,6
Total	132	100,0

AXIS II. PERSONALITY DISORDERS. PRINCIPAL DIAGNOSIS

	Frequency	Percent
Borderline Personality Disorder	5	3,8
Obsessive-Compulsive Personality Disorder	4	3,0
Narcissistic Personality Disorder	3	2,3
Personality Disorder Not Otherwise Specified	2	1,5
Avoidant Personality Disorder	1	,8
Antisocial Personality Disorder	1	,8
Mental Retardation	1	,8
Without diagnosis in Axis II	115	87,1
Total	132	100,0

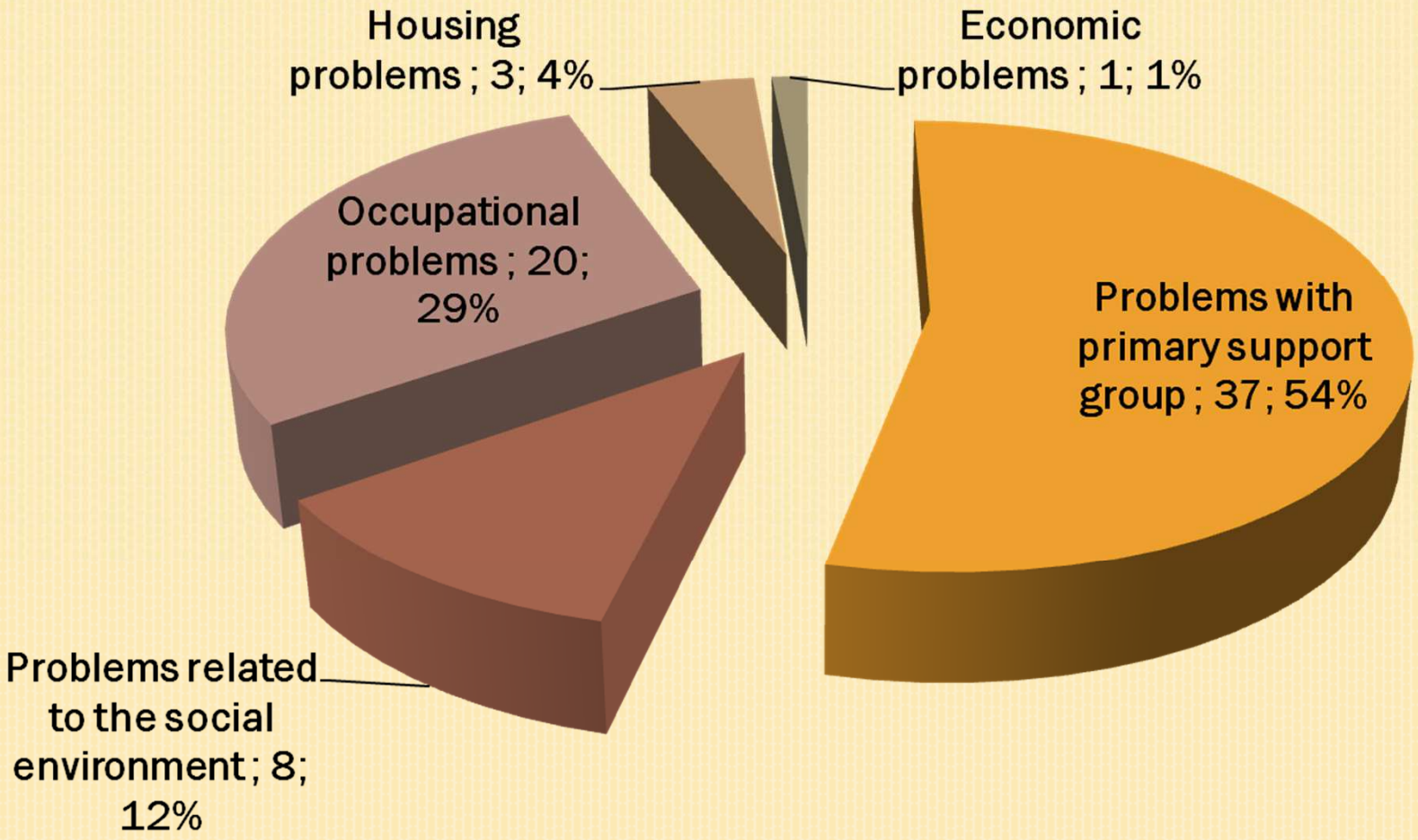
AXIS III: GENERAL MEDICAL CONDITIONS

- 22 patients have a medical condition on Axis 3 and two of them suffer from a secondary medical condition.

AXIS IV: PSYCHOSOCIAL AND ENVIRONMENTAL PROBLEMS

	Frequency	Percent
Problems with primary support group	37	28,0
Occupational problems	20	15,2
Problems related to the social environment	8	6,1
Housing problems	3	2,3
Economic problems	1	,8
Problems related to interaction with the legal system/crime	1	,8
Without diagnosis in Axis IV	62	47,0
Total	132	100,0

AXIS IV: PSYCHOSOCIAL AND ENVIRONMENTAL PROBLEMS



AXIS V: GLOBAL ASSESSMENT OF FUNCTIONING

- Global Assessment of Functioning Scale (GAF).

  Mean: 62,21 (SD: 7,2) N = 75

  range: 35-80

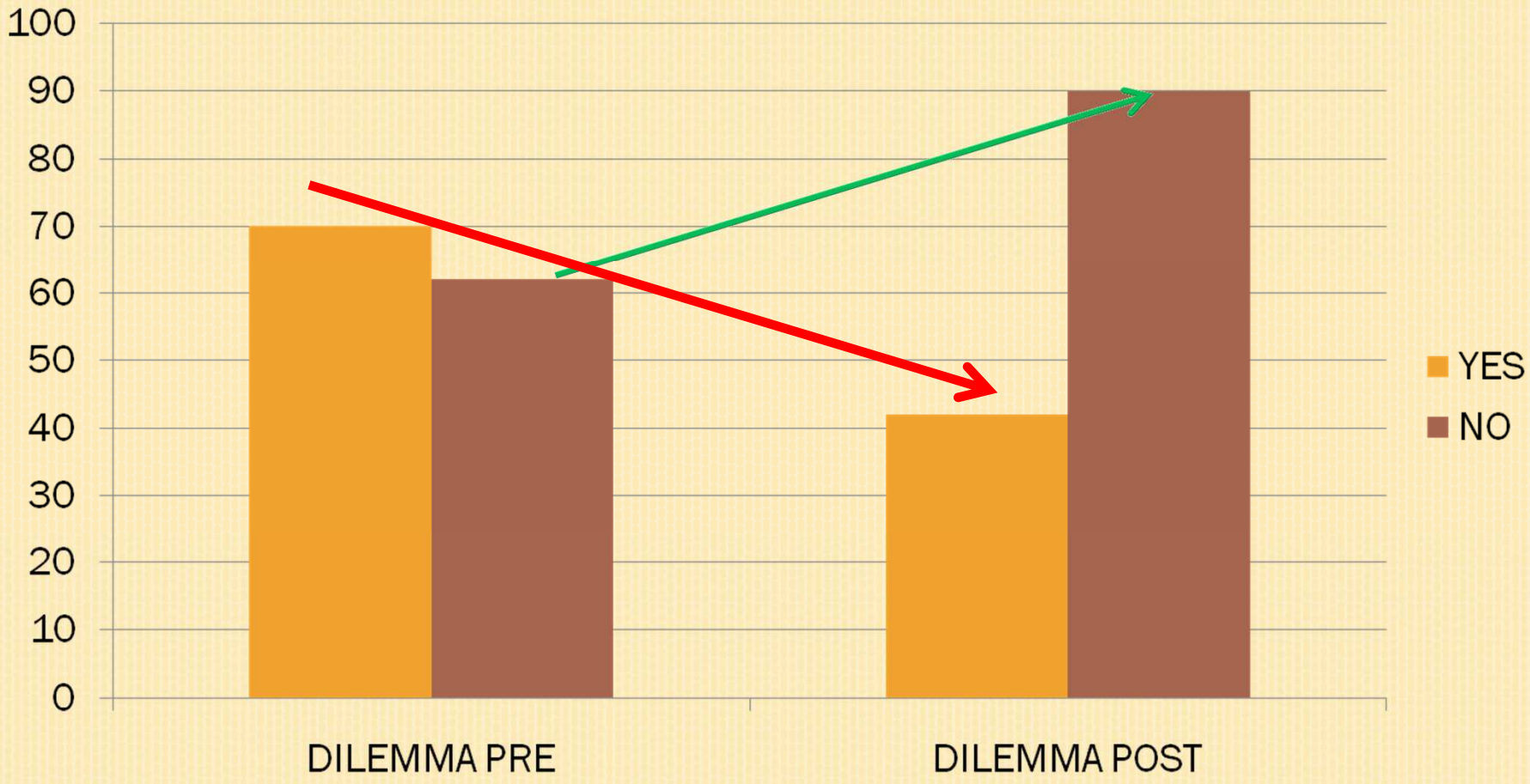
71-80	If symptoms are present, expectable reactions to psychosocial stressors
61-70	Some mild symptoms
51-60	Moderate symptoms
41-50	Severe symptoms
31-40	Some impairment in reality testing or communication

PRESENCE OF IMPLICATIVE DILEMMAS PRE AND POST THERAPY

			EXISTENCE OF DILEMMAS POST		Total
			NO	YES	
EXISTENCE OF DILEMMAS PRE	**NO**	Count	53	9	62
		% within Existence of dilemmas pre	**85,5%**	14,5%	100,0%
		% within Existence of dilemmas post	58,9%	21,4%	47,0%
		% of total	40,2%	**6,8%**	47,0%
	YES	Count	**37**	**33**	**70**
		% within Existence of dilemmas pre	**52,9%**	**47,1%**	100,0%
		% within Existence of dilemmas post	41,1%	78,6%	53,0%
		% of total	**28%**	**25%**	**53%**
Total		Count	90	42	132
		% within Existence of dilemmas pre	68,2%	31,8%	100,0%
		% within Existence of dilemmas post	100,0%	100,0%	100,0%
		% of total	68,2%	31,8%	100,0%

$\chi^2 = 16,13$ (df = 1; p = 0,0001)

DECREASE OF DILEMMAS AFTER THERAPY



EFFECT SIZE

	Mean	N	SD	t	p	ES
BDI pre	21,40	132	10,91	8,973	0	0,88
BDI post	11,92	132	10,76			
SCL GSI pre	1,32	132	0,62	9,8	0	0,91
SCL GSI post	0,76	132	0,61			
PVEFF1 pre	42,77	132	10,58	-3,088	0,002	0,21
PVEFF1 post	45,10	132	11,15			
Self-idealDistance pre	0,33	130	0,21	5,151	0	0,48
Self-idealDistance post	0,24	130	0,17			
Polarization pre	27,21	132	14,53	5,165	0	0,32
Polarization post	22,74	132	14,05			
PID 0,35 pre	1,27	130	2,09	-2,915*	0,004*	0,26
PID 0,35 post	0,80	130	1,78			

* Test of Wilcoxon signed ranks

Effect size:
0,2: small
0,5: moderated
0,8: big

DISCUSSION

- Cognitive measures (RGT) show a smaller degree of improvement as compared to symptom measures. Consistent with Metcalfe, C., Winter, D., Viney, L., (2007)
  - Interpretations:

    1. The **methodology used limits** the possibility of observing changes. RGT capture changes.
    2. Change first occurs at a behavioral level.
    3. More personal measures are too broad-gauged or insufficiently focused on the precise changes.
    4. Meaning based measures are more abstract and could include more error variance.

- Relevant change in RGT measures in:
  - The **presence or absence of dilemmas** / reinforced by the **PID.**
  - **Self-Ideal differentiation.**

- Presence of IDs is not an indicator of pathology, although it appears to play a relevant role in mental health.

DISCUSSION

- **We can only see those changes closely related to issues that were reflected in the pre-therapy grid.** New structures created across the therapy process were not captured in the post-therapy assessment.
- The post-therapy grid is some kind of retest. Test-retest reliability studies (Feixas et al, 1992) found a **tightening effect** which can be functioning also here.
- Second objective of the study: there is a **significant decline of symptomatology** (GSI and BDI), and a more moderated decrease for RGT measures.
- **Clients benefit from personal construct psychotherapy.** Supports the assertion of Metcalfe, Winter, and Viney (2007).

FUTURE LINES OF RESEARCH

- To analize repgrid variables as mediators of symptom change.
- To study symptomatic and cognitive predicting factors of therapeutic change.
- Developing the implications derived from the results to improve the cognitive-constructivist approach used.

Many thanks for your attention!!

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