

Psychosocial treatment of cannabis disorders

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- **Psychosocial treatment of cannabis disorders: a review of 13 studies.**
- **A short presentation of the treatment manual "A way out off fog"**
- **Improvement in cognitive and social competence in adolescent chronic cannabis users.**
- Results from a manual based treatment programme at Maria Youth Centre, Stockholm, Sweden.**

Psychosocial treatment of cannabis disorders: a review of 13 studies.

2006

Author	year	Country	experiment-controll	N	evidence
1. Dennis	2003	USA	short cog beh vs long cog beh	600	2
2. Babor	2003	USA	short cog beh vs long cog beh	450	2
3. Copeland	2001	Australia	short cog beh vs long cog beh	229	2
4. Budney	2000	USA	Voucher vs cog beh	60	2
5. Stephens*	2000	USA	RPT vs support	291	2
6. Lundqvist	1995	Sweden	cog edu vs Del treat	15	3
7. Azrin*	1994	USA	Soc skills vs couns	26	3
8. Stephens*	1994	USA	RPT vs support	212	3
9. Joanning*	1992	USA	Fam ther vs educat	134	3
10. Hengeler*	1991	USA	Fam ther vs couns	200	3
11. Lewis*	1990	USA	Fam ther vs ind ther	84	3
12. Szapocznik*	1988	Usa	Fam ther vs couns	108	3
13. Lundqvist	2005	Sweden	Program evaluation	50	3

In the studies 1-5 only a minority (20 -40 %) of the clients achieve a complete abstinent condition during the period of treatment. However, they display a significant reduction in cannabis use and cannabis related problems.

Interesting questions are:

How many sessions in how many months, and if there are follow-up sessions?

The treatment technique and the theoretical backgrounds?

Client characteristics?

Measures for treatment outcome?

Is reduction of use a positive outcome?

These programmes should incorporate:

- A built-in flexibility to offer care to patients of all ages. (evidence 2)
- A brief intervention, which has significantly larger reduction in substance related problems with the lowest severity clients, few sessions. (evidence 2)
- A more comprehensive intervention, which works better with high severity clients, with at least 14 sessions over a period of 4 months with follow-up sessions, more often at the beginning. (evidence 2)
- The subtle impairments in cognition within their agenda and work towards their resolution. (evidence 3)
- A focus on immediate abstinence and the possibility to have urine samples taken. (evidence 2)
- Sessions for family members and significant others. (evidence 3)
- The possibility of long-lasting cognitive deficits that affect both the performance of complex tasks and the ability to learn. (evidence 2)

continued

- A focus directly on use itself, and at the same time, help to improve the accompanying deficits in competence. (evidence 2)
- A help to critical examination of the drug-related episodic memory (memory for self-knowledge). (evidence 3)
- Strategies to enhance self-esteem that is not based on a drug-related episodic memory. (evidence 2)
- A set of adequate questions to enhance the recognition factor. The effectivity of the cue is dependent on the associative strength and encoding specificity. (evidence 3)

It is necessary, for those who are dysfunctional, (about 10 % of the those who have tested cannabis once) to develop appropriate treatment programs based on

- cognitive-behavioural technique or
- cognitive-educative technique or
- Motivational Interviewing technique or
- a combination of these.

A short presentation of the treatment manual "A way out off fog"

It is presented as a course in quitting

- Phase 1: a bio-medical focus lasting until the 12th day after smoking cessation.
- Phase 2: a psychological focus lasting until the 21st day after smoking cessation.
- Phase 3: a psychosocial focus during the rest of the program.
This phase has no time limits.

The treatment manual focus on

- The chronic influence on the cognitive functions.
- The impact of the enhanced subjective perception.
- The need of professional guidance in the relearning process.

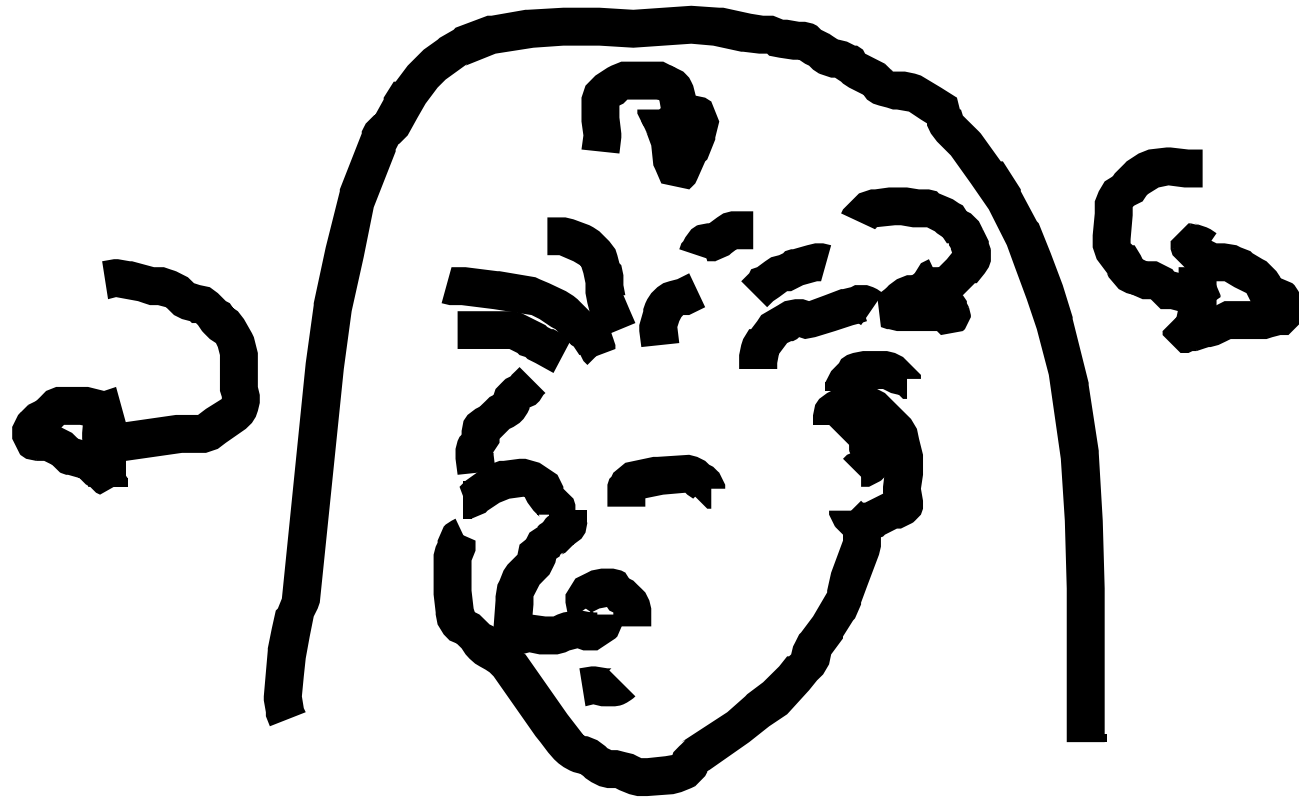
- Critical examination of the drug-related episodic memory.
- Promotion of the psychological maturation.
- Enhancing the social competence and orientation to life.

- The self-regulation use of cannabis.
- Depression and phobic reaction following cessation of cannabis.
- The need to be given proposals.

The therapist is requested to:

- have good knowledge of the acute and chronic effects of cannabis.
- use a concrete and simple language.
- transform abstract reasoning into drawings and metaphors.
- be a leading authority in describing the detoxification process.
- The therapist is the prefrontal substitute.

An illustration of the screened off condition

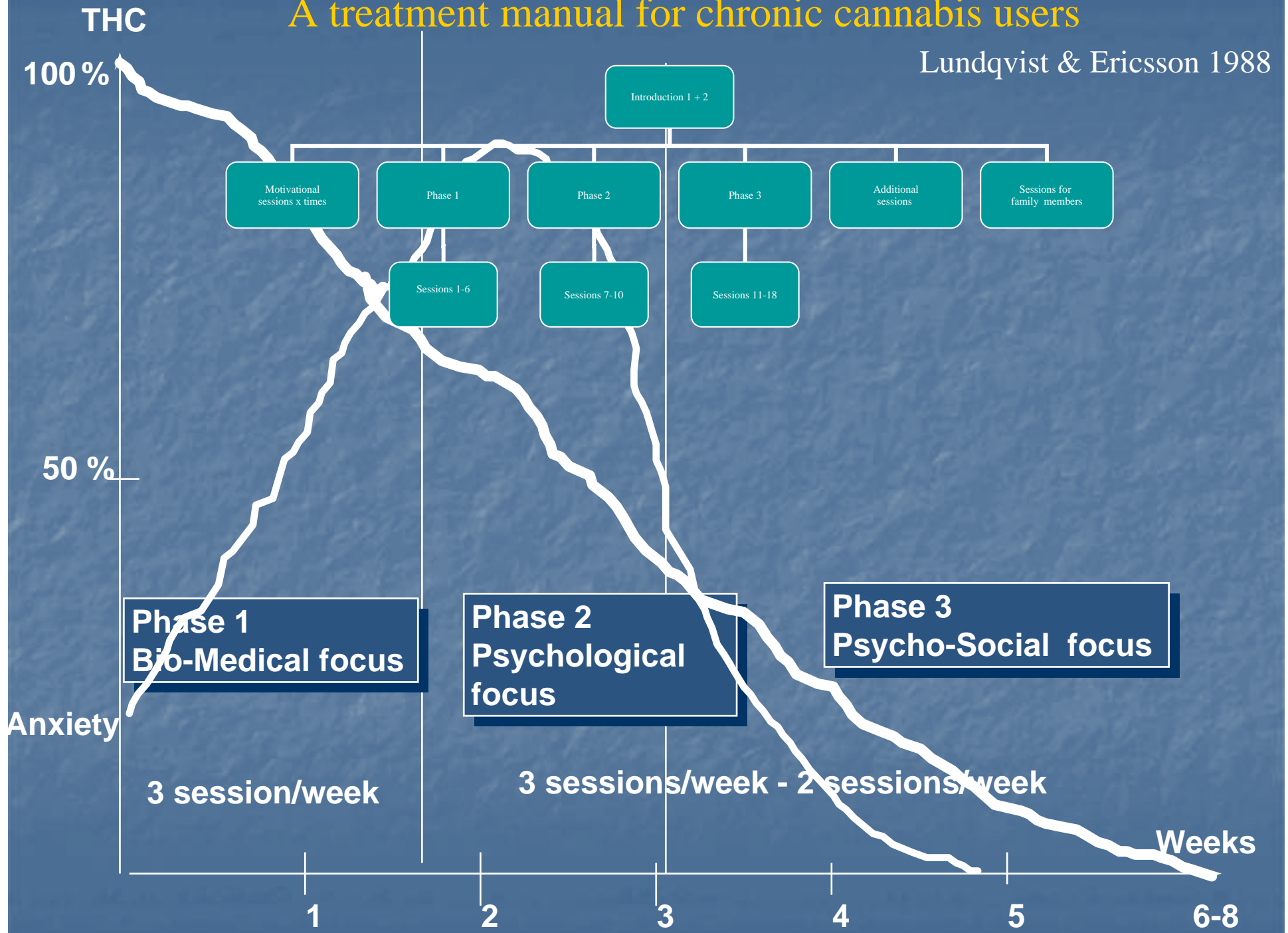


Each discussion should contain

- To make the client notice what is happening.
- To make the client compare with earlier experiences.
- to make the client reflect and consider the topics of the discussion.

A treatment manual for chronic cannabis users

Lundqvist & Ericsson 1988



The structure is used in

1. The original programme, designing a concept for each individual.
2. A manual based program with 18 sessions in six weeks focusing on 17-24 years old with a regular use more than six months
3. A manual based short program with six sessions in six weeks focusing on younger user or those who have used less than six months regularly .
4. For those who are experimenting, there is a three session course.
5. A guide to quitting Marijuana and hashish

It is a structured six-week treatment programme including sessions three times a week.

The main focus is on helping the cannabis users (17-24 year) to redirect cognitive patterns and to regain intellectual control.

After completion of the six-week programme, the patients are advised to take part in supportive sessions once a week for six weeks.

The 18 sessions manual.

Session 1

Illustration of THC elimination and anxiety reactions. Info about physical reaction. Information about cannabis. Test: SOC, SCL-90, BDI scale focusing on relations.

Session 2

Assessment feedback
Positive and negative attitudes to cannabis use
Why do you want to quit now?
What kind of help do you need?

Session 3

Acute effects of cannabis

Session 4

Chronic effect of cannabis

Session 5

Cognitive function and dysfunction

Session 6

Attitudes and patterns of use

Session 7

Drug lifeline

Session 8

Sociogram

Session 9

Lifeline

Session 10 (or when it is appropriate)

Session together with the parents

Session 11

Relaxation
Focus on emotions

Session 12

Continued focus on emotions
Guilt and shame

Session 13

Norms and values-behavior-abuse

Session 14

Juhariwindow or something more suitable

Session 15

The process of relapse

Session 16

Continued relapse prevention
Test: SOC, SCL-90, BDI scale focusing on relations.

Session 17

Assessment feedback
Look at the flipchart, repeat select the material to be used at the closing session.

Session 18 Closing session

Show the flipchart for the family and others.

Graduation and Diploma

**Improvement in cognitive and social competence
in adolescent chronic cannabis users.
- Results from a manual based treatment
programme at Maria Youth Centre, Stockholm,
Sweden.**

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Fifty adolescents (75 admissions) including 5 girls, with at least six months daily use, completed the programme between year 2000 and 2004.

- First time of use 14.2 (11-17)
- Years of use 3.6 (1-8)
- Regular use (>3 times a week) 2.5 (1-6)

- 15 subjects reported problems with alcohol

Assessments

The clients were assessed

- at admission,
- after six weeks and
- after one year after concluding the course.

We used a battery of questionnaires consisting of

- Sense of coherence (SOC),
- Symptomchecklist-90 (SCL-90),
- Beck's Depression Inventory (BDI) and
- CAGE, focusing on alcoholproblems
- Scales focusing on life situation and relationships.

Aaron Antonovsky, 1987

To get a good sense of coherence the individuals perceive that

- the stimuli deriving from ones internal and external environments in the course of living are structured, predictable, and explicable (**comprehensibility**);
 - the resources are available to one to meet the demands posed by these stimuli (**manageability**);
 - these demands are challenges, worthy of investment and engagement (**meaningfulness**).

Total 29 ← 142 152 → 203

1 Low 4 High 7

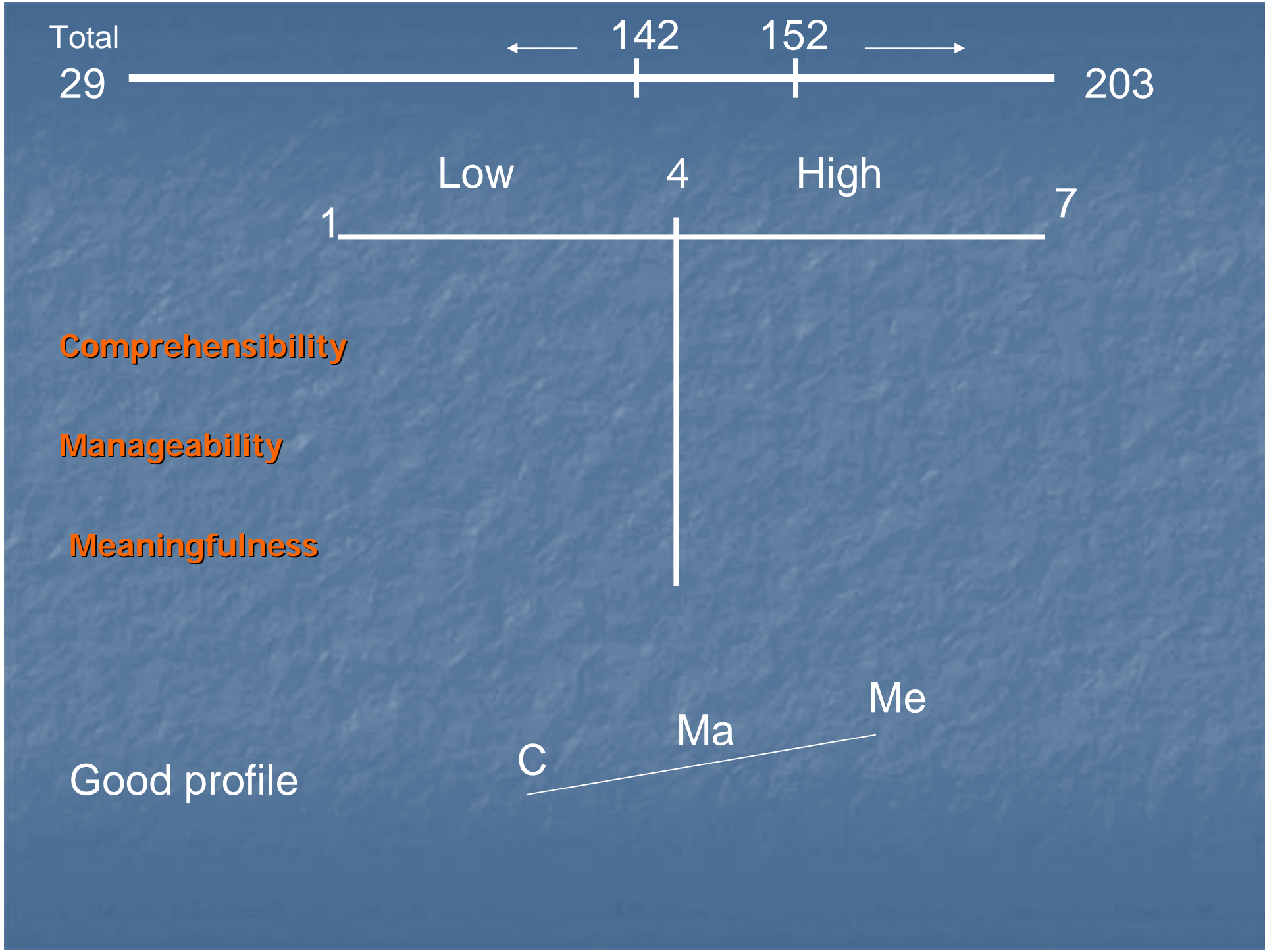
Comprehensibility

Manageability

Meaningfulness

Good profile

C Ma Me



Sense of Coherence

	Adm. (M, sd)	6-weeks. (M, sd)	t	df	sign ¹	N	1-year (M, sd)	t	df	sign	N
Comprehensibility	3,71 (0,71)	4,78 (0,71)	- 4,69	49	***	50	4,3 (0,8)	- 0,7	39	ns	40
Manageability	4,32 (0,87)	5,03 (0,77)	- 5,50	49	***	50	5,1 (1,0)	- 0,6	39	ns	40
Meaningfulness	4,26 (0,98)	5,06 (0,89)	- 5,86	49	***	50	5,3 (1,2)	- 1,6	39	ns	40
Total	118,04 (19,97)	137,84 (18,62)	- 5,95	49	***	50	141,2 (24,6)	- 1,1	39	ns	40

¹ *** p < .001; ** p < .01; * p < .05; ns= non significant

SCL-90 Key Features

- The SCL-90 test contains only 90 items and can be complete in just 12-15 minutes.
- The test measure 9 primary symptom dimensions and is designed to provide an overview of a patient's symptoms and their intensity at a specific point in time.
- The progress report graphically displays patient progress for up to 5 previous administrations.
- By providing an index of symptom severity, the assessment helps facilitate treatment decisions and identify patients before problems become acute.
- The Global Severity Index can be used as a summary of the test.
- More than 1,000 studies have been conducted demonstrating the reliability, validity, and utility of the instrument.

Symptom Scales

SOM - Somatization
O-C - Obsessive-Compulsive
I-S - Interpersonal Sensitivity
DEP - Depression
ANX - Anxiety
HOS - Hostility
PHOB - Phobic Anxiety
PAR - Paranoid Ideation
PSY - Psychoticism

Global Indices

- Global Severity Index (GSI): Designed to measure overall psychological distress.
- Positive Symptom Distress Index (PSDI): Designed to measure the intensity of symptoms.
- Positive Symptom Total (PST): Reports number of self-reported symptoms.

SCL-90, standardized T-value; significance tested by mean (paired t-test)

	Adm. (M, sd)	6-weeks. (M, sd)	t	df	Sign ¹	N	1-year. (M, sd)	t	N
Somatization	65,5 (15,5)	53,6 (9,1)	5,59	49	***	50	53,7 (14,3)	0,6	41
Obsessive-kompulsive	66,5 (13,5)	55,1 (10,1)	6,55	49	***	50	52,9 (12,5)	1,0	41
Interpersonal sensitivity	62,1 (16,0)	51,7 (8,9)	5,70	49	***	50	52,0 (12,8)	0,3	41
Depression	62,3 (13,0)	52,2 (8,7)	5,96	49	***	50	52,6 (14,1)	- 0,1	41
Anxiety	66,8 (14,6)	53,6 (9,1)	7,31	49	***	50	54,4 (12,8)	- 0,2	41
Hostility	66,7 (15,3)	53,5 (10,6)	6,54	49	***	50	54,0 (12,9)	0,3	41
Phobic anxiety	66,2 (21,6)	55,0 (13,5)	5,14	49	***	50	52,8 (11,9)	1,3	41
Paranoid ideation	67,2 (15,5)	53,8 (9,6)	7,56	49	***	50	55,2 (13,3)	0,1	41
Psychoticism	62,5 (14,5)	54,1 (8,6)	4,87	49	***	50	53,2 (11,3)	0,6	41
Global Sever. Iind (GSI)	68,0 (14,7)	54,1 (8,5)	7,89	49	***	50	53,7 (12,0)	0,6	41
Pos. Sympt. Distr Ind(PSDI)	61,2 (10,7)	50,6 (7,6)	7,95	49	***	50	54,5 (14,0)	- 1,7	41
Total Pos Sympt (PST)	65,5 (10,8)	56,4 (10,2)	6,48	49	***	50	54,7 (12,2)	1,3	41

ns

¹ *** p < .001; ** p < .01; * p < .05; ns= non significant

SCL 90 Symptom Checklist



Clients with a GSI score below 50 increased from 8 to 29 per cent.

	Adm(M, sd)	6-weeks(M, sd)	t	df	sign ¹	N	1-year(M, sd)	t	sign ¹	N
Somatic affective	5,6 (3,2)	2,7 (1,6)	5,4	29	***	30	2,2 (2,2)	0,4	ns	24
Cognitive affective	8,3 (5,2)	4,1 (4,3)	4,8	29	***	30	5,0 (6,1)	- 0,4	ns	24
Amount	9,8 (4,3)	5,1 (3,2)	6,8	29	***	30	5,1 (4,6)	0,3	ns	24
Total	13,9 (7,3)	6,4 (4,9)	6,2	29	***	30	7,3 (7,9)	- 0,2	ns	24

< 14 no depression

¹ *** p < .001; ** p < .01; * p < .05; ns= non significant

Who did better?

- Those, who had a higher sense of coherence at admission.
- Those, with fewer symptoms according to SCL-90 at admission.
- Those, who lived together with both parents.
- Those, who applied on their own initiative.



Who did worse?

- Those, who had an early onset of abuse, polydrug use and alcohol problems.
- Those, who had higher points on anxiety and depression at the 6-weeks assessment.
- Those, who had a low estimation on the relationship to the mother.

After six weeks of abstinence and treatment they display a significant improvement to normal values in sense of coherence and this improvement remained stable at the one year follow-up.

The result of SOC indicate that young chronic cannabis users seeking treatment at admission are characterised as:

- having a mean that is considerably lower than normal.
- experiencing inner or outer stimuli as not comprehensible in a rational way, but rather that the information is unorganized and incoherent.
- convinced that they are able to manage the problems and stimuli they receive.
- having an emotional and cognitive motivation, with the feeling that
- there are some things in life worth some interest, commitment or devotion.

These results are concordant with the findings in a similar study focusing on old chronic cannabis users by Lundqvist (1995a).

The significant improvement in SCL-90 values between admission and the six-week assessment indicate emotional distress that may be caused by the impact of the cannabinoids on human emotion and cognition. This improvement remained stable at the one year follow-up.

In our clients, the symptoms of depression disappeared after six weeks of abstinence indicating that the cannabinoids creates depression like symptoms. Improvement was seen at six-week assessment, and it remained stable at the one year follow-up.

At the one year follow-up,

- two-thirds were cannabis free (68%);
- 35 per cent had had no relapses and
- 33 per cent had had one brief relapse,
- 57 per cent were free from all problematic use, including alcohol.

Clients with initial problematic alcohol use were less successful.

Remaining symptoms of anxiety and depression were signs that indicate that extended support is needed.

Finally, improvements could be seen in their overall life situation.