

**PENAL REFORM INTERNATIONAL
PRISON MENTAL HEALTH – TRAINING WORKSHOP JUNE 2007**

Social problem-solving training

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Levels of meaning

- **General sense that can be used metaphorically to describe any therapeutic effort**
- **More focused sense to specify certain ‘actions’ by counsellors or therapists**
- **A specific approach, method or set of procedures within cognitive-behavioural therapy**

Cognitive psychology and problem solving

- **Mainly focused on processes involved in solving ‘impersonal’ problems**
 - **induction**
 - **deduction**
 - **sylogistic reasoning**
 - **analogical reasoning**
 - **creative thinking**

Some definitions

(D’Zurilla & Nezu, 2001)

Problem-solving:

the self-directed cognitive-behavioural process by which a person attempts to identify or discover effective or adaptive solutions for specific problems encountered in everyday living

Problem:

any life situation or task (present or anticipated) that demands a response for adaptive functioning, but for which no effective response is immediately apparent or available to the person, due to the presence of some obstacle(s)

Solution:

A situation-specific coping response or response pattern (cognitive and/or behavioural) which is the product or outcome of the problem-solving process when it is applied to a specific problematic situation

PST: Problem-solving training or therapy

- **Defined as:**
 - “an overt or cognitive process that makes available a variety of effective response alternatives for coping with a problem situation, or increases the likelihood of selecting the most effective response available” (D’Zurilla and Nezu, 1971, p.108)

ORIGINS: two main approaches

- Problem-solving and behaviour modification
(D'Zurilla and Goldfried, 1971)
- Interpersonal Cognitive Problem-Solving (ICPS)
(Spivack, Platt and Shure 1976)
- Approach specifies mediational stages in behaviour change towards effective problem solving
- Cognitive-developmental approach locating roots of problem-solving in socialisation experiences

D’Zurilla & Goldfried’s conceptualisation

- **Two key concepts:**
 - Problem orientation
 - Problem-solving ‘proper’
- **Four stages:**
 - Problem definition and formulation
 - Generation of alternative solutions
 - Decision making
 - Solution implementation and verification

Research on BRAINSTORMING

- **Originally developed by Osborn (1935)**
- **Basic rules:**
 - generate ideas in quantity
 - suspend judgement
 - cross-fertilise ideas
- **Studies showed producing more ideas led to producing better ideas**

Links to mental health

- **Proposal that absence of effective problem-solving was associated with interpersonal difficulties and other mental health problems**
- **May be due to:**
 - **inhibition of skill (a motivational issue)**
 - **deficit of skill (due to limited opportunity)**

Evidence

- **Agoraphobia**
- **Suicide**
- **Depression**
- **Eating disorders**
- **Psychosis**
- **Substance abuse**
- **Marital problems**

Assessment methods

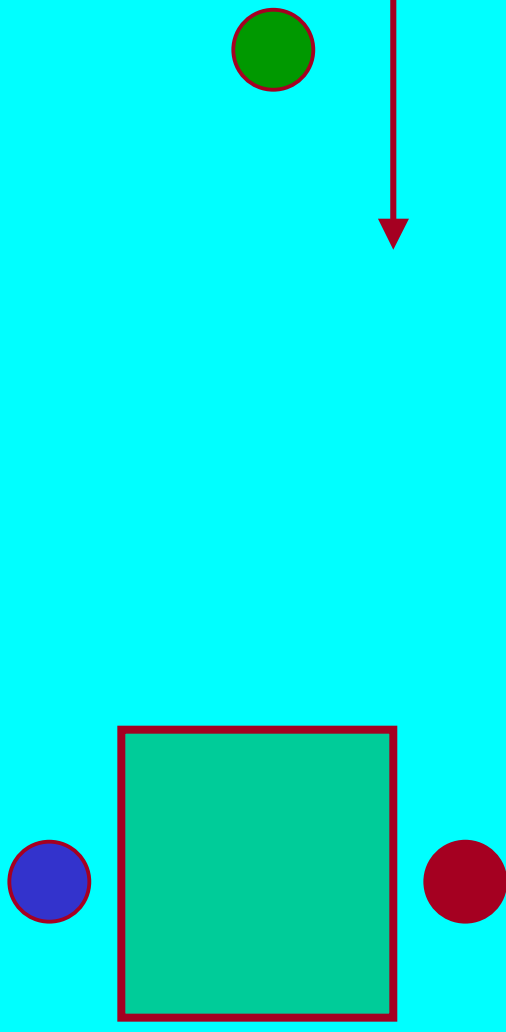
- **PROCESS** measures • **OUTCOME** measures
 - Social Problem-Solving Inventory (D’Zurilla, Nezu et al)
 - Problem Solving Inventory (Heppner)
 - Alternative Thinking test (Spivack, Platt, Shure)
 - Means-End Problem-Solving (Spivack et al)
 - Adolescent Problems Inventory (Freedman et al)

Directly access general cognitive and behavioural activities that facilitate solving problems

Assess performance, the quality of specific solutions

Assessment of perspective-taking

Situation used by Chandler (1973)



The ICPS approach

- **More elaborate analysis of problem-solving skills:**
 - **problem awareness and identification**
 - **generating alternative solutions**
 - **means-end thinking**
 - **consequential thinking**
 - **perspective taking**
 - **social cause-and-effect thinking**

Deficits in ICPS skills

- **Psychiatric patients (adolescent & adult) (Platt & Spivack, 1972)**
- **Suicidal psychiatric patients (Schotte & Clum, 1987)**
- **Adolescent heroin users (Platt, Scura & Hannon, 1973)**
- **Adult heroin users (Appel & Kaestner 1979)**
- **Adult prisoners (Higgins & Thies, 1981)**

Information-processing models

(Akhtar & Bradley, 1991; Crick & Dodge, 1994)

A sequence of events precedes behavioural response:

- **encoding environmental cues**
- **attribution of motives**
- **generation of alternative solutions**
- **pursuit of appropriate social goals**
- **skills for enactment of social behaviours**
- **egocentrism / limited perspective-taking**

Individuals vary in their level of or engagement in different phases of the above sequence and this should be assessed directly

Problem solving in young offenders

(Whitton & McGuire, 2001)

- **Structured interview (demographic, criminal history variables)**
- **Problem Checklist (Porteous)**
- **Adolescent Problems Inventory (modified) (API; Freedman et al)**
- **Adolescent Coping Scale (Frydenberg)**

Basic data

- **n = 38 (males 31, females 7)**
- **Average age: 15.58 yrs**
- **68% of main caregivers unemployed**
- **Previous convictions:**

– One:	4	(10.5%)
– Two:	19	(50.0%)
– Three:	9	(23.7%)
– Four:	4	(10.5%)
– Five:	2	(5.3%)
- **Representative of sampling frame of 1,404 young offenders on supervision in Greater Manchester in 1998**
- **Compared with sample of n = 43 non-offenders in school setting**

Findings

- No differences were found between offender and comparison group on numbers of problems reported
- However, offenders had lower disclosure levels and reported a higher frequency of serious problems ('Clinical Index')
- Young offenders reported higher rates of usage of 'non-productive coping' and lower rates of usage of 'problem-focused coping'
- On the IAP young offenders showed levels of problem-solving skills almost wholly at the lower end of the score range, significantly lower than a comparison group of US offenders (n=100)
- There was a significant correlation between level of criminality (previous convictions) and IAP scores ($r = -0.29, p = 0.04$)
- There was a significant negative correlation between 'Clinical Index' scores on the Problem Checklist and levels of skill on the IAP

Chandler's (1973) perspective-taking experiment

- Worked with a group of persistent young offenders
- Identified a sub-group high in 'egocentrism' or poor perspective-taking skills (using a specially designed task)
- Series of training sessions involving role-reversal exercises
- Attention-control and no-treatment comparison groups
- 18 month follow-up showed the group given perspective-taking sessions has 50% reduction in recidivism rate

The Wharton Tract programme: 1

(Platt, Perry & Metzger, 1980)

- **Based in a 45-bed, open-door prison ‘satellite’ unit in New Jersey**
- **Residents in transition from prison to community**
- **Adult male offenders with lengthy histories of criminal behaviour and heroin use**

The Wharton Tract programme: 2

(Platt, Perry & Metzger, 1980)

- **Guided group interaction:**
 - leader takes active role
 - emphasis on the group and its development
 - creation of supportive atmosphere
 - members seen as agents of change for others
 - focus on overt behaviour
 - learning communication and problem-solving skills

The Wharton Tract programme: 3

(Platt, Perry & Metzger, 1980)

- **Group programme focused on learning a range of social problem-solving skills:**
 - **recognising problems**
 - **generating alternative ideas**
 - **consequential thinking**
 - **means-end thinking**
 - **decision-making**
 - **perspective-taking**

The Wharton Tract programme: 4

(Platt, Perry & Metzger, 1980)

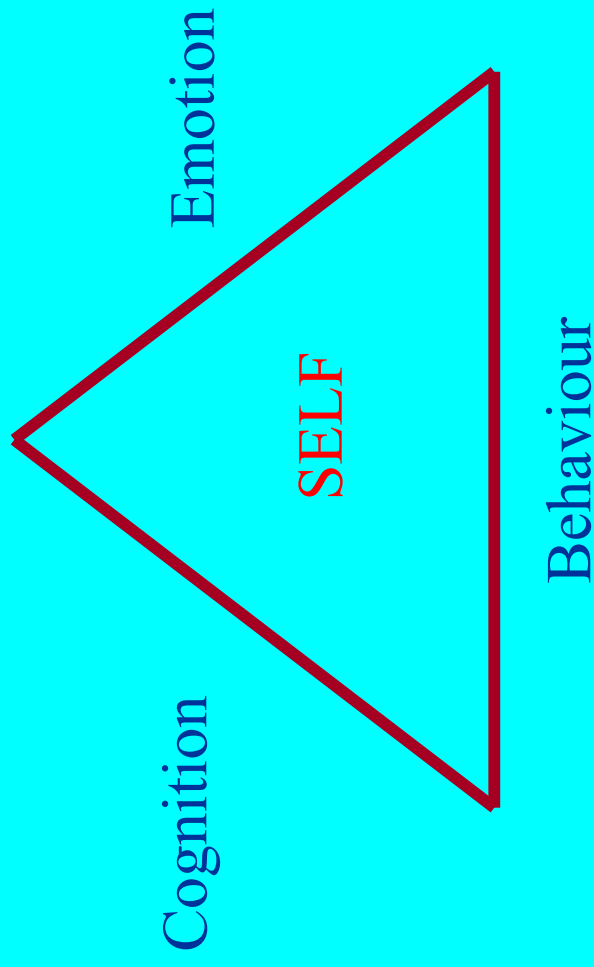
- **At the end of a two-year follow-up:**
 - Group participants were reported by parole officers as being significantly better adjusted
 - Group participants had a significantly lower re-arrest rate than controls (49% vs. 66%)
 - Group participants if re-convicted had a lower rate of re-commitment to institutions
 - If arrested this was after a longer arrest-free period (238 vs. 168 days)

The cognitive model of offender rehabilitation (Ross & Fabiano, 1985)

- **Major review of evidence concerning problem-solving and other skill deficits in persistent offenders**
- **Evidence not wholly consistent**
- **However, significant differences emerged suggesting need to focus attention on reducing impulsivity, cognitive rigidity and other variables shown to be ‘risk factors’ for criminal acts**
- **Led to the development of the *Reasoning and Rehabilitation* programme used by Correctional Services of Canada**

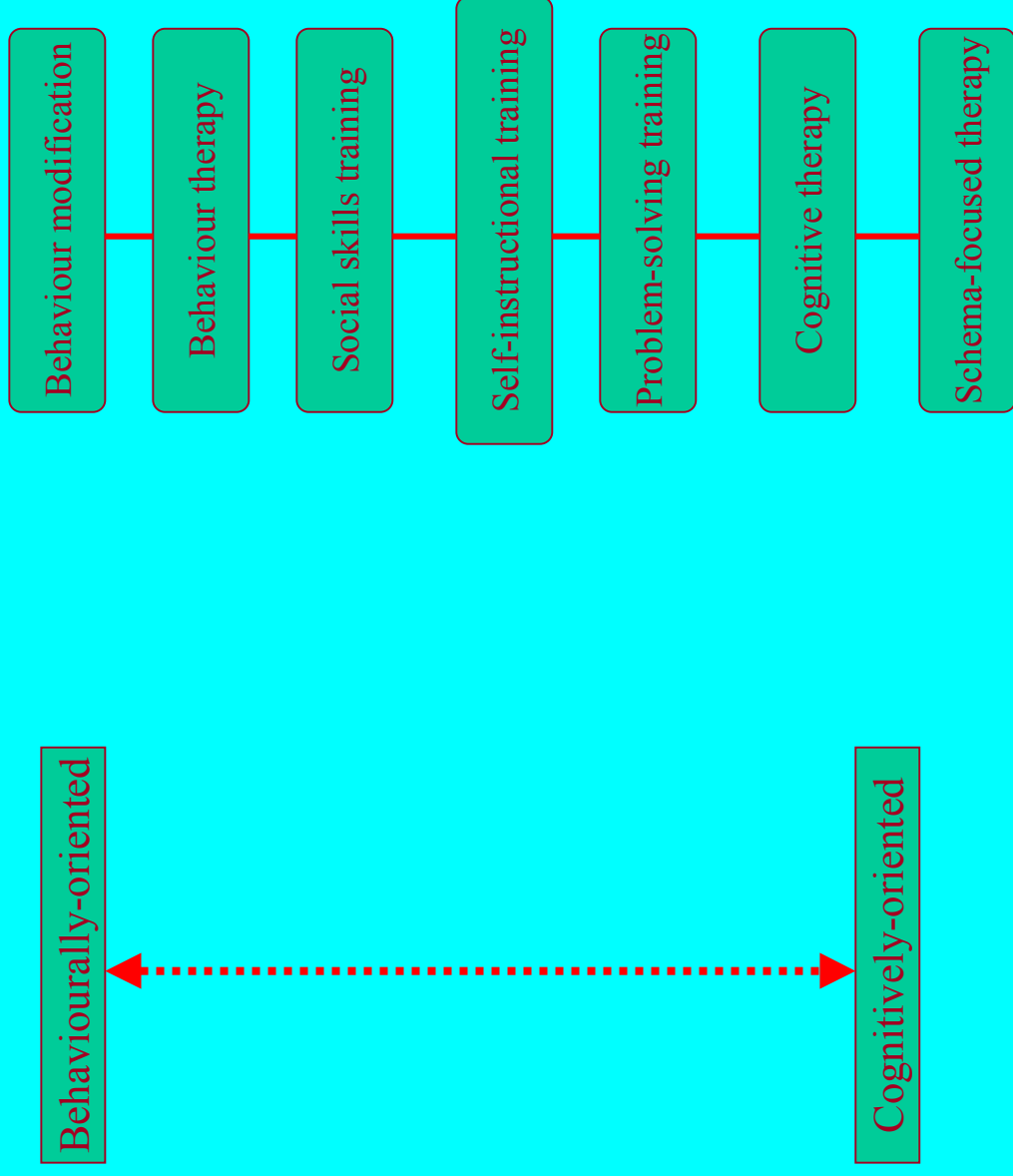
The CBT Triangle

Figure 1. Interdependence of thoughts, feelings and behaviour in cognitive-behavioural models



Cognitive-behavioural interventions

Figure 2. A continuum of theory and methods



Social problem-solving training

Figure 3. The problem-solving sequence

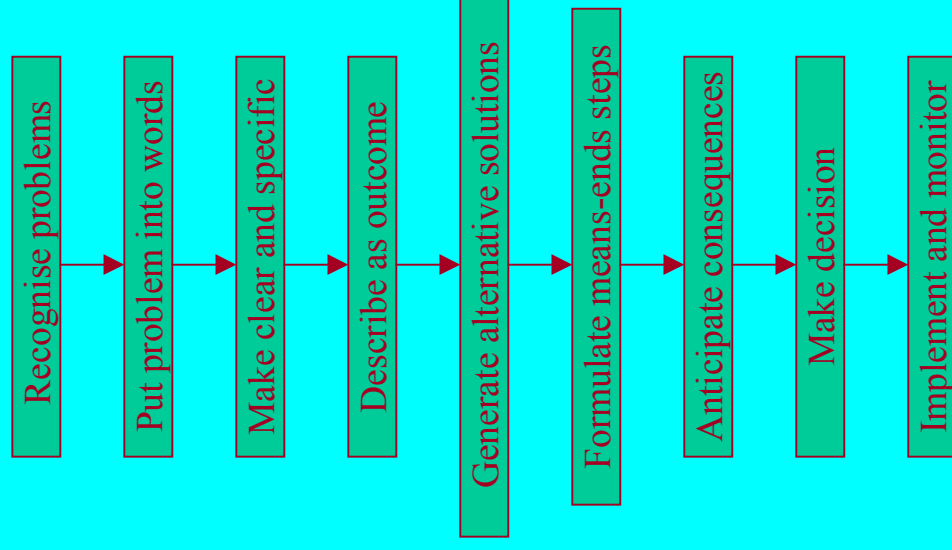
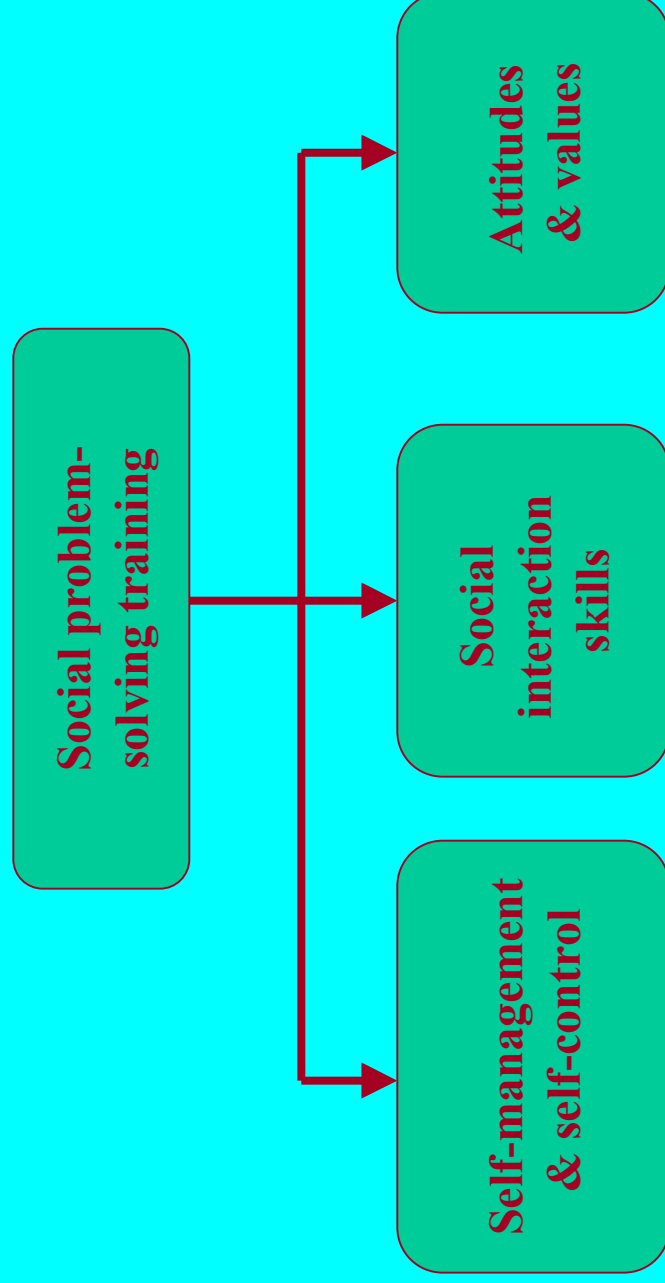


Figure 4. Programme structure

Programme elements and conceptual inter-linkages



Assessment measures in prisons

- *General Offender Index Questionnaire* (Blud & Woodhead, 1994)
- *Eysenck Impulsiveness Scale* (Eysenck & Eysenck, 1978)
- *Locus of Control* (Craig, Franklin & Andrews, 1984)
- *Gough Socialisation Scale* (Gough, 1960)
- *Hogan Empathy Scale* (Hogan, 1960)
- *Social Problem Solving Questionnaire* (Clark, 1994)
- *Consequences Questionnaire* (Clark, 1994)
- *Self-Esteem Inventory* (Thornton & Jones, 1994)

Table 1. Paired Sample Correlations and Significance Levels (prison)

Measure	r	n	p
Legal frequency	.460	378	<.001
Legal importance	.539	378	<.001
GOIQ control	.580	332	<.001
GOIQ harm	.649	332	<.001
GOIQ responsibility	.631	332	<.001
Locus of control	.449	396	<.001
Impulsivity	.592	293	<.001
Empathy	.385	389	<.001
Socialisation	.625	293	<.001
Low self esteem	.461	393	<.001
% Assertive	.306	405	<.001
% Aggressive	.807	405	<.001
% Passive	.648	405	<.001
Alternatives 1	.427	252	<.001
Alternatives 2	.451	251	<.001

Table 2. Pre-to-Post-test changes in measures

Measure	Pre-mean	Post-mean	n	t	p
Legal frequency	6.88	7.16	378	-3.33	.001
Legal importance	7.38	8.14	378	-7.70	.000
GOIQ control	11.73	11.77	332	-0.14	.888
GOIQ harm	11.25	9.35	332	7.70	.000
GOIQ responsibility	8.55	8.91	332	-2.10	.036
Locus of control	44.17	48.02	396	-9.54	.000
Impulsivity	12.84	10.01	293	10.09	.000
Empathy	16.93	17.52	389	-2.93	.004
Socialisation	20.19	21.87	293	-6.56	.000
Low self esteem	2.90	1.97	393	6.80	.000
% Assertive	51.57	55.95	405	-3.97	.000
% Aggressive	18.29	15.07	405	4.99	.000
% Passive	31.27	31.56	405	-0.41	.682
Alternatives 1	2.23	2.66	251	-1.52	.129
Alternatives 2	4.84	5.10	251	-1.91	.057

Figure 5. Impulsivity, n=127

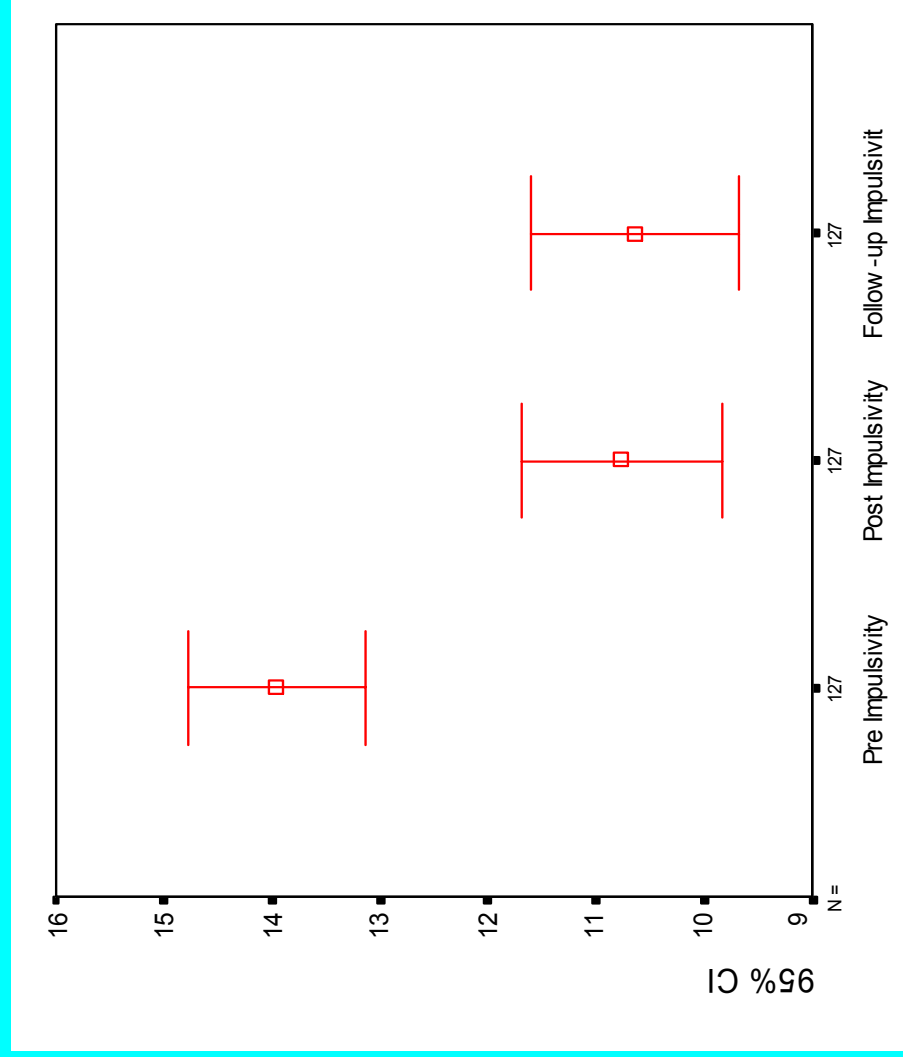


Figure 6. Locus of control, n=125

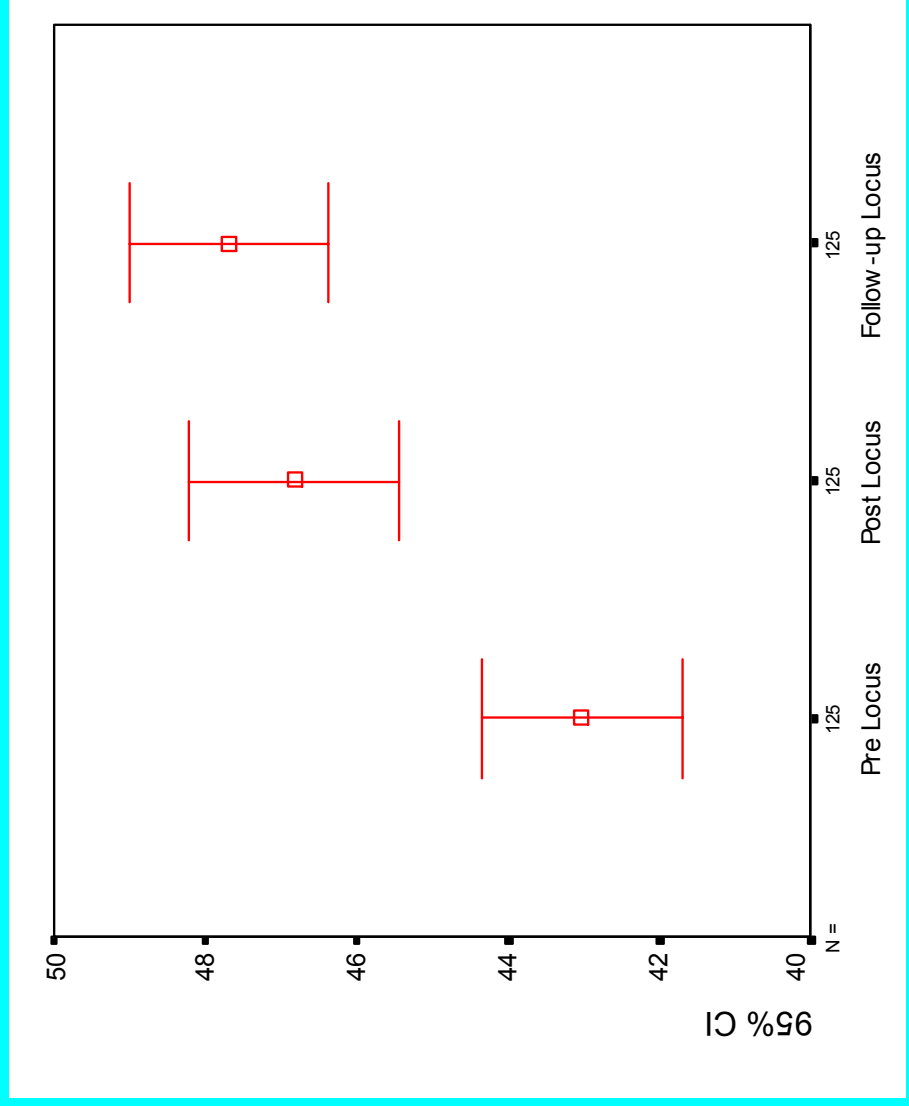


Figure 7. Socialisation, n=129

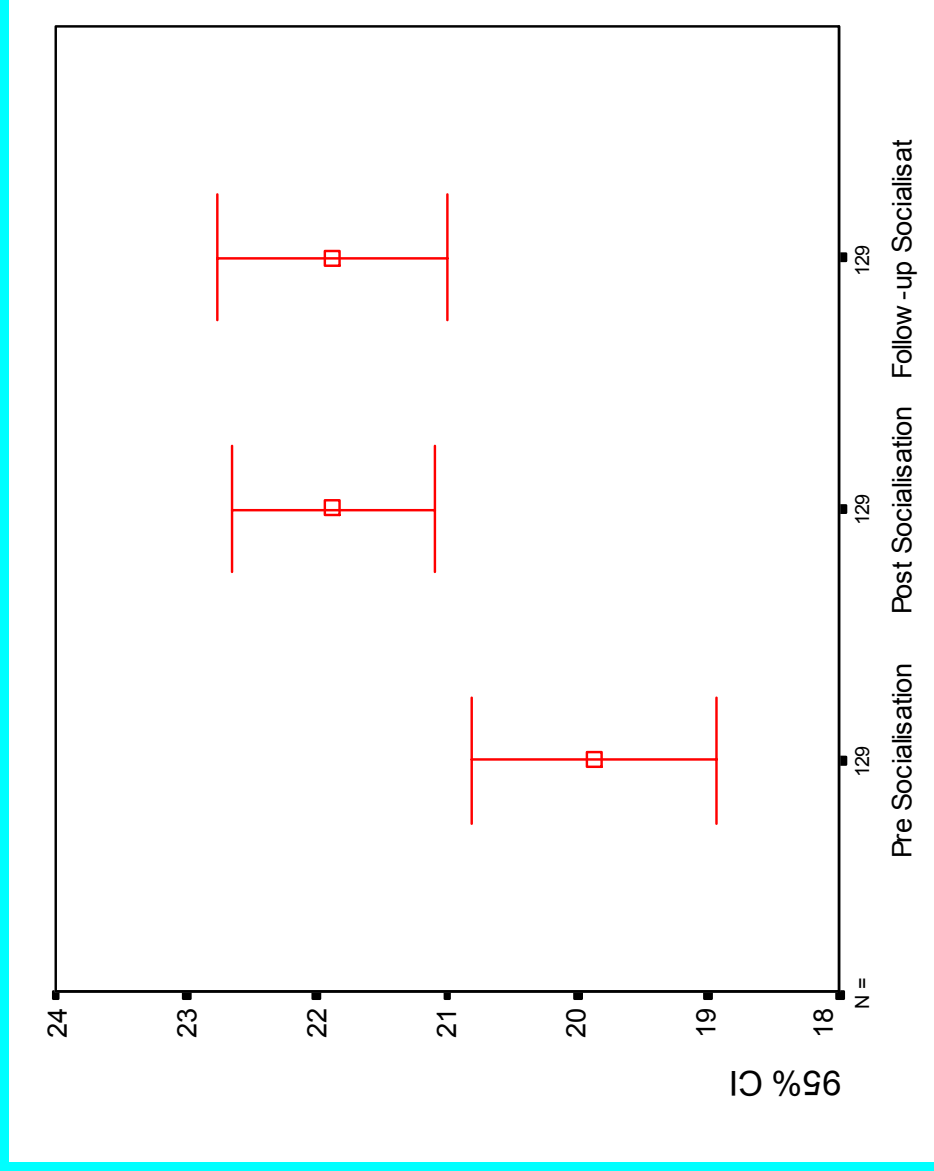


Figure 8. Low Self-Esteem, n=129

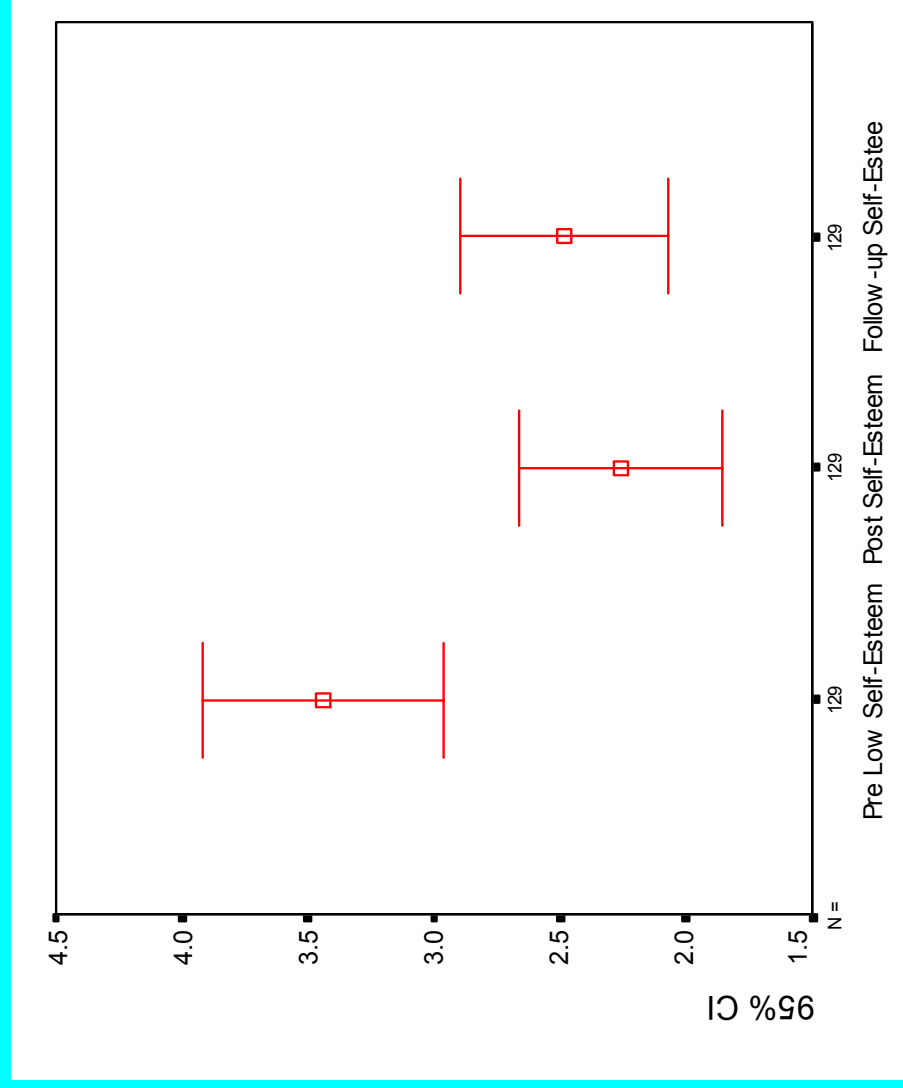


Figure 9. Empathy, n=128

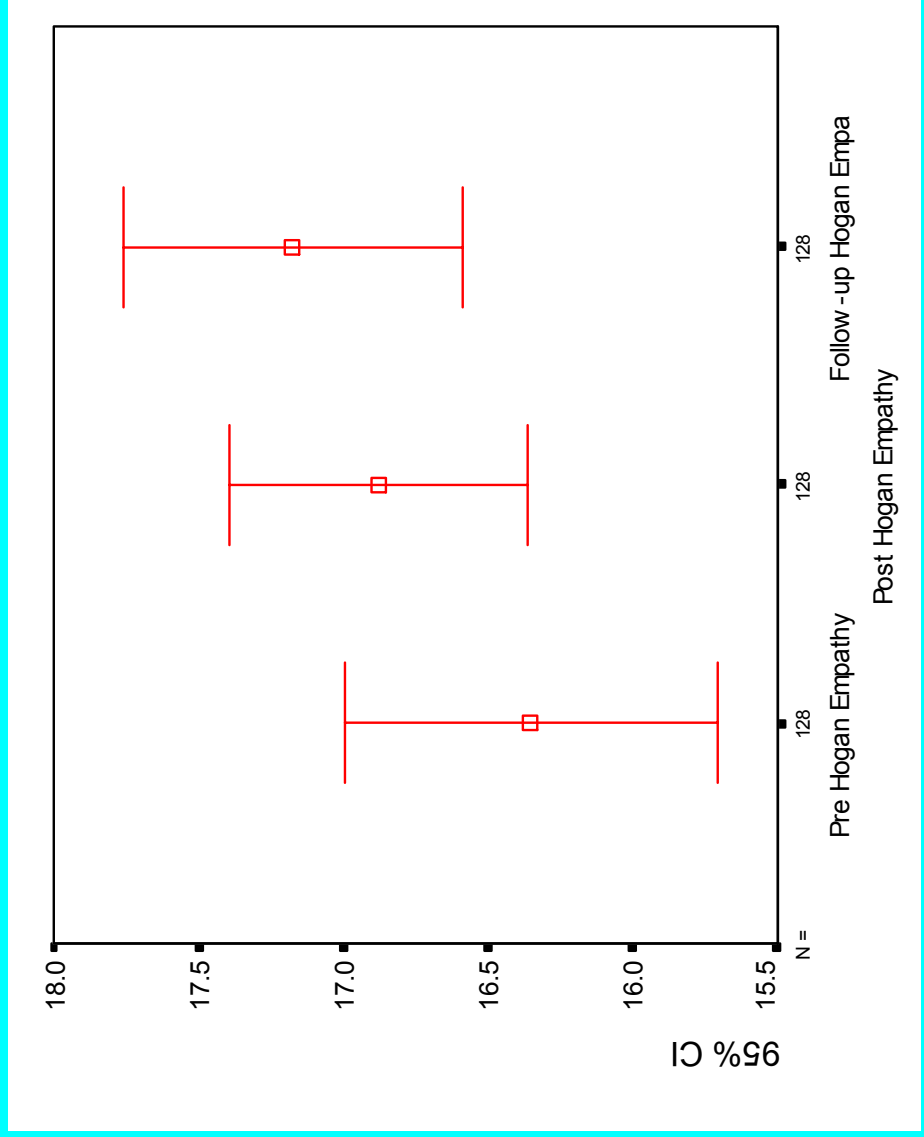


Figure 10. Passive solutions, n=127

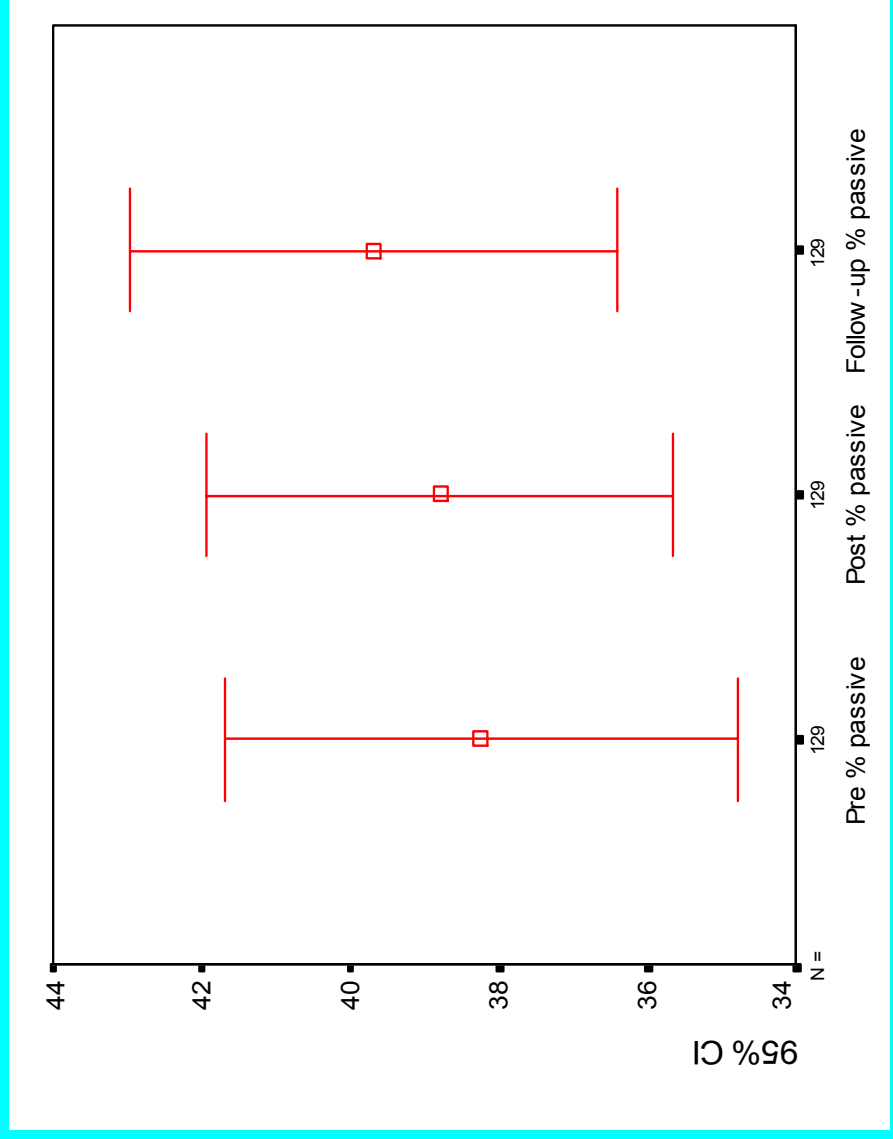


Figure 11. Aggressive solutions, n=129

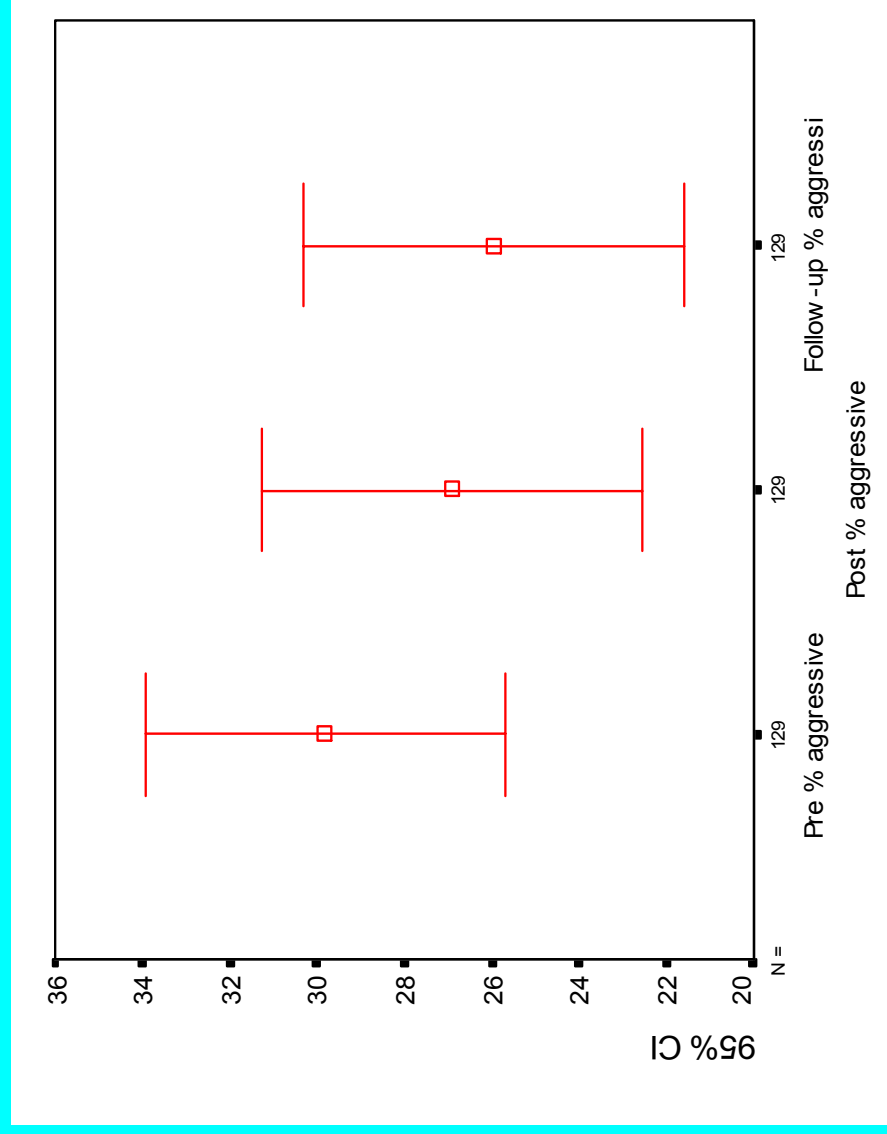


Figure 12. Assertive solutions, n=129

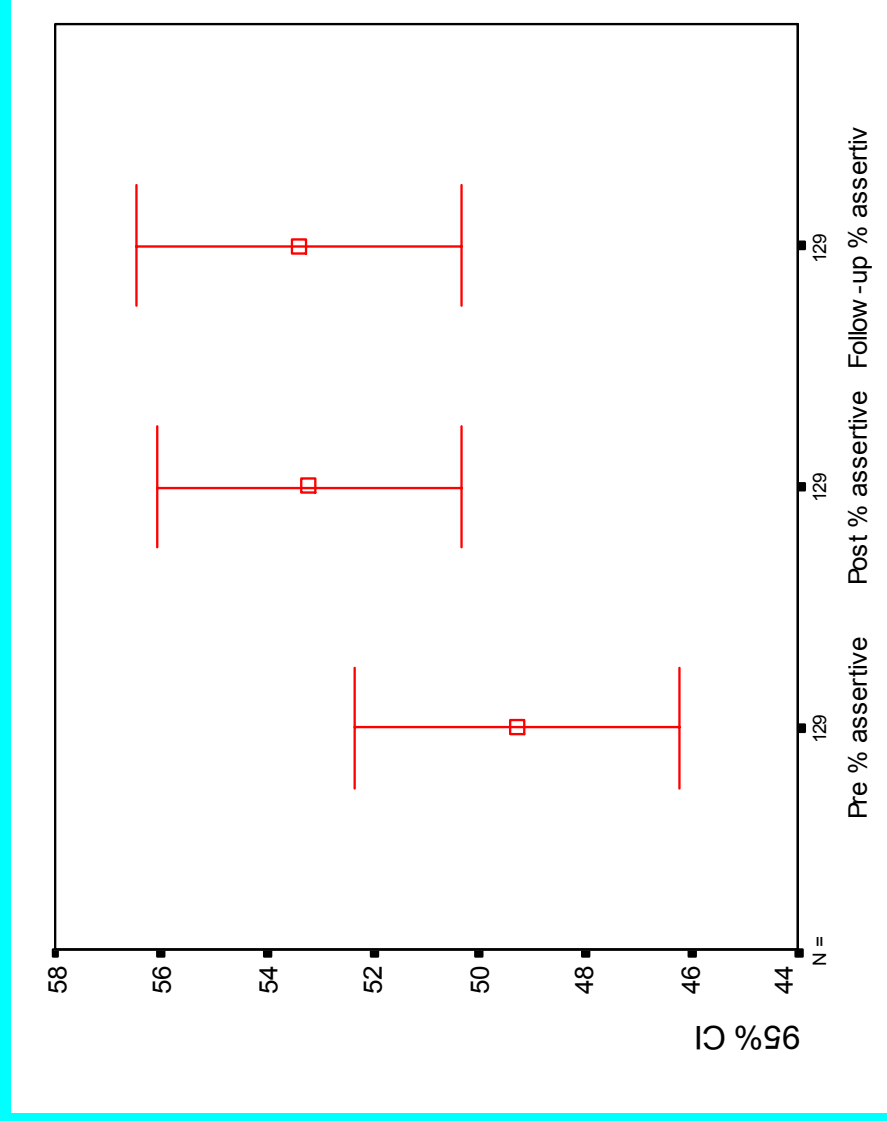


Figure 13. PICTS Total Score, n=52

Linear trend $F = 4.338, p = .016$

