

# The BILD Positive Behaviour Support International Research and Practice Conference 2014

## **Defining PBS and promoting evidence based practice**

8 - 9 May, Glasgow





# John Taylor

BILD PBS Conference 2014

Defining PBS and promoting evidence based practice

# Positive Supports in Forensic Settings for People with Intellectual and Developmental Disabilities

*The 2014 BILD International Positive Behaviour Support  
Research and Practice Conference  
7<sup>th</sup>-9<sup>th</sup> May 2014, Glasgow*

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# **Northumberland, Tyne & Wear NHS Foundation Trust: *Intellectual and Developmental Disabilities Services***

**Population served ~ 2 million**

- **In-patient Services – 4 hospital sites**
  - 135 secure beds for people with offending histories
  - 30 beds for people with mental health problems
  - 24 beds for people with ASD
  - 24 beds for children/adolescents with MH/behavioural problems
  - 12 beds for adolescents with offending histories
- **Outpatient Services**
  - Community LD services in 5 LA localities
  - Specialist behavioural intervention teams in 2 LA localities
  - Forensic outreach services in 3 LA localities
- **Range of teaching, training and research services**

# Prevalence of Offending and People with ID

- **Prevalence studies involving people with ID report large variations in rates of offending**
- **The evidence base is poor with regard to epidemiological studies - in particular there is dearth of well-controlled studies including non-disabled comparison groups (*Lindsay & Taylor, 2005*)**
- **It is not clear, therefore, whether people with ID are over- or under-represented in the offender population**
- **Similarly, it is unclear whether offending is more prevalent amongst people with ID than those in the general population (*Day, 1993; Holland et al., 2002; Simpson & Hogg, 2001*)**

# Crime and People with Intellectual Disabilities

- **Historically, crime and ID have been firmly linked (*Hirschi & Hindelang, 1977; Trent, 1994; Wilson & Hernstein, 1985*)**
- **“... there is no investigator who denies the fearful role of mental deficiency in the production of vice, crime and delinquency ... not all criminals are feeble-minded but all feeble-minded are at least potential criminals.” (*Terman, 1911*)**
- **There is robust evidence that there is a robust relationship between low IQ and offending**
- **However, the relationship is not simple or linear; particularly when considering individuals  $\leq 1.5$  standard deviations below the average IQ**

# MHA 1983 Detention of Offenders with ID

- Proportion of people in general population with IQ scores <70 is approx. 2.2% (assuming normal distribution)
- Census data shows that a disproportionate number of people with impaired intellectual functioning are being detained under MHA 1983 (as at 31<sup>st</sup> March 2012):
  - *More than three times the expected number (8.5%; or 1 in 12) overall*
  - *More than double the expected number (6.3%; or 1 in 17) in NHS hospitals*
  - *More than six times the expected number (15.2%; or 1 in 6) in independent hospitals*

Source: *The Information Centre (2012)*

## Impact on People with ID

- On 31<sup>st</sup> March 2010 there were 3,642 people with ID residing in inpatient services in England and Wales
- 48% were *detained under the MHA 1983*
- The *median length of stay* for men with ID was 5x greater (31 months) than that for male mental health inpatients (**5.8 months**); and 11x greater for women with ID vs mental health (31 months and **2.5 months** respectively)
  - 22% (**12%**) in hospital 2-5 years
  - 31% (**8%**) in hospital > 5 years
- Over a 3-month period; 28% of ID inpatients had been subject to one or more *physical assaults* compared with **11%** of inpatients in mental health services; *restraint* 30% (**12%**); *self-harm* 22% (**8%**); *accidents* 24% (**11%**)

Source: Care Quality Commission (April 2011)

# Detention under the Mental Health Act 1983

- In order to be detained under the MHA 1983 (as amended by the MHA 2007) one needs to be suffering from a “mental disorder”
- Mental disorder is defined for the purposes of the Act as “any disorder or disability of the mind”
- Learning disability is defined as “a state of arrested development of the mind which includes significant impairment of intelligence and social functioning”
- Hospital detention or SCT on the basis of learning disability must be qualified by either:
  - Abnormally aggressive behaviour, or:
  - Seriously irresponsible conduct

# **Northgate Hospital Forensic Services:**

## ***Male Patient Status and Offending Histories; N = 129***

**(Ref: Novaco & Taylor, 2004)**

- **94% (121) detained under the Mental Health Act 1983**
- **48% had co-morbid psychiatric conditions**
- **36% (46) had convictions for violent behaviour**
- **38% (49) had documented histories of violence**
- **47% (59) physically violent post-admission**
- **43% (55) had convictions for sexual aggression**
- **20% (26) had convictions for arson**
- **53% (68) had convictions for property related offences**
- **Just 13% (17) had no recorded convictions**

# Mental Health Problems and People with ID - *Vulnerability*

People with ID may be more likely to experience MH problems than the general population for a number of reasons (*Deb et al., 2001; Moss et al., 1998*). These include:

- predisposing biological factors
- limited psychological coping resources
- increased exposure to psycho-social stressors e.g.
  - unemployment/poverty √√
  - stigmatisation
  - social isolation
  - traumatising abuse experiences

# **Mental Health Problems and People with ID - *Prevalence***

**Prevalence studies of MH problems amongst people with ID report large variations in prevalence rates depending on:**

- **Study design and methodology (e.g. case note review vs. clinical evaluation, sampling)**
- **Location of the sample (e.g. in-patient vs. community vs. specialist service)**
- **The type of assessment instrument used to detect MH problems (e.g. screening assessment vs. full diagnostic assessment)**
- **The reliability and validity of the assessment instruments used to detect MH problems**
- **Whether or not 'challenging behaviour' is included as a MH problem**

## **Mental Health Problems and People with ID - Prevalence Rates using Screening Instruments**

Study	N	Prevalence %			
		Total	Affective/ Neurotic	Organic Disorder	Psychotic Disorder
<b>Taylor et al. (2004)</b>	<b>1,155</b>	<b>20.1*</b>	<b>14</b>	<b>3.9</b>	<b>10.2</b>
Iverson & Fox (1989)	165	36	(Random sample of service users)		
Reiss (1990)	205	39	(Random sample of service users)		
Roy et al. (1997)	127	33	(Consecutive sample from SSD register)		
Deb et al. (2001)	90	22.2	(Random sample of service users)		

**\*Note. 4.4% were above threshold for >1 diagnostic category.**

## **Mental Health Problems and People with ID - Prevalence Rates involving Clinical Assessments\***

<b>Study</b>	<b>N</b>	<b>Prevalence %</b>
<b>Cooper et al. (2007)</b>	<b>1,023</b>	<b>18</b>
<b>Cooper &amp; Bailey (2001)</b>	<b>207</b>	<b>22</b>
<b>Lund (1985)</b>	<b>302</b>	<b>17</b>
<b>Corbett (1979)</b>	<b>402</b>	<b>21</b>

**\*Note. Rates excluding behaviour problems calculated using data presented by Copper et al. (2007) in Table 6, p. 33**

# Barriers to People with ID Accessing Effective Psychological Therapies

- Despite the prevalence of MH problems in ID, there are a number of cultural, economic and attitudinal barriers to people with ID and MH problems accessing effective therapies (*Taylor & Knapp, 2013*). These include:
  - ✓ A general lack of interest in and concern for the needs of people seen as different
  - ✓ ‘Diagnostic overshadowing’ (*Reiss et al., 1982*)

# Challenging Behaviour and Mental Health Problems

- It is likely that there is a relationship and overlap between MH problems and challenging behaviour amongst people with ID that results in MH problems being unrecognised and untreated (*Emerson et al., 1999*)
- Possible confounding relationships include:
  - CB may be an atypical presentation of, or a secondary feature of some mental health problems among people with ID
  - MH problems may establish a motivational basis for the expression of CBs that are maintained by (operant) behavioural processes

## Correlations between Mental Health problems and Challenging Behaviour *(Taylor & Hatton, 2004)*

	PAS-ADD Checklist		
	Affective Disorder	Organic Disorder	Psychotic Disorder
CBS Aggression (N = 767)	.32**	.30**	.24**
CBS Total (N = 740)	.36**	.31**	.28**

Note. \*\*  $p < .000$ . All Correlations are Spearman Rho, two-tailed

# Barriers to People with ID Accessing Effective Psychological Therapies

- Despite the prevalence of MH problems in ID, there are a number of cultural, economic and attitudinal barriers to people with ID and MH problems accessing effective therapies (*Taylor & Knapp, 2013*). These include:
  - ✓ A general lack of interest in and concern for the needs of people seen as different
  - ✓ ‘Diagnostic overshadowing’ (*Reiss et al., 1982*)
  - ✓ The ‘Unoffered Chair’ (Bender, 1993)
    - therapists are reluctant to offer individual psychological therapy to people perceived as unattractive because of their disability – ‘*therapeutic disdain*’

# Against Psychotherapy With People Who Have Mental Retardation

Sturmey P. (February, 2005). Against Psychotherapy With People Who Have Mental Retardation. *Mental Retardation*, 43, 55-57.

*‘Hence, we are unable to make any conclusions as to the effectiveness, ineffectiveness, or harmful effects of psychotherapy based on scientific evidence.’ (p. 56)*

# Evidence-Based Practice in the New NHS

- All NHS treatment (including psychological therapies) should be evidence-based (*Department of Health (1999) Clinical Governance: Quality in the NHS*)
- NICE guidelines for depression, anxiety, panic, OCD, trauma, psychosis, etc.
- So, what is the evidence for the effectiveness of psychotherapy for people with ID and MH problems?
- There have been numerous recent reviews/commentaries/critiques (e.g. *Beail, 2003; Gustafson, 2009; Hatton, 2002; Prout & Browning, 2011; Prout & Nowak-Drabik, 2003; Sturmey, 2004; Willner, 2005*)

# Evidence for Psychotherapy for People with ID - 1

*Prout, H.T. & Nowak-Drabik, K.M. (2003). Psychotherapy for persons who have mental retardation. Am. J. on Mental Retardation*

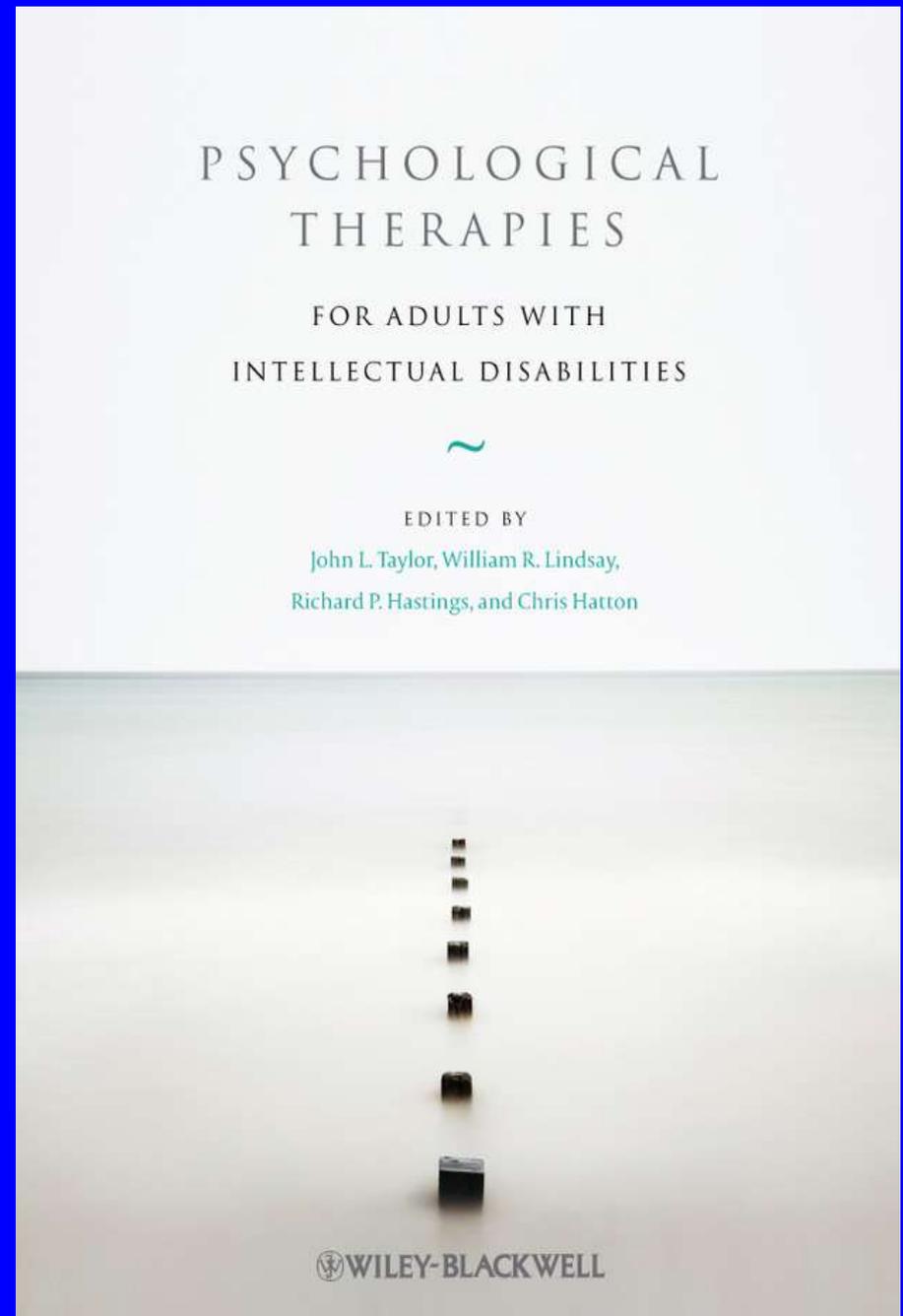
- Reviewed 92 studies published over a 30-year period
- Used a clear definition of psychotherapy
- Many studies lacked methodological rigour
- In terms of the therapeutic approaches, the studies reviewed included:
  - 33% behavioural psychotherapy
  - 15% analytic/dynamic
  - 13% cognitive-behavioural
  - 2% humanistic
  - 37% other
- Meta-analysis of treatment effectiveness – mean effect size of 1.01
- Results suggest that individual treatment, behaviourally orientated, and manual-guided provided the best outcomes

## **Evidence for Psychotherapy for People with ID - 2**

*Prout, HT & Browning, BK (2011). The effectiveness of psychotherapy for persons with intellectual disabilities. In RJ Fletcher (ed). Psychotherapy for individuals with disability (pp 265-287). Kingston, NY: NADD Press.*

- Reviewed psychological treatment studies involving people with ID published between 2006-2011
- Published studies present generally positive results supporting psychological therapy for people with ID
- Both individual and group interventions are beneficial
- Anger reduction interventions have the most evidence
- Doctoral dissertations completed betw. 1993-2009 provide further support for the effectiveness of psychological therapies for people with ID ('file draw' phenomenon)

- **Adapting CBT for People with ID**
  - *Assessment Issues*
  - *Focus of Intervention*
  - *Therapy Process & Delivery Adaptations*
- **Preparing ID Clients for CBT**
  - *Preparatory Phase*
  - *Cognitive Skills Training*
  - *Consent to Treatment*



# **The Treatment of Anger and Aggression**

# Prevalence of Aggression in People with ID

- Aggression is a common feature of populations of people with ID
- Studies across 3 continents using broadly similar interview and survey methodologies have yielded similar results  
(e.g. *Deb et al., 2001; Hill & Bruininks, 1984; Sigafos et al., 1994; Smith et al., 1996; Taylor et al., 2004*)
- Prevalence of aggression in hospital settings is significantly higher than in community settings, and even higher in secure hospital facilities

# Prevalence of Aggression in People with ID – Ref: Taylor & Novaco (2013)

<u>Study</u>	<u>Location</u>	<u>n</u>	Prevalence (%)		
			<u>Community</u>	<u>Institution</u>	<u>Forensic</u>
Taylor et al. (2008)	England	782	12	-	-
Tyrer et al. (2006)	England	3065	16	-	-
Hill & Bruininks (1984)	USA	2491	16	37	-
Harris (1993)	England	1362	11	38	-
Sigafoos et al. (1994)	Australia	2412	10	35	-
Smith et al. (1996)	England	2202	-	40	-
McMillan et al. (2004)	England	124	-	-	47
Taylor et al. (2004)	England	129	-	-	47

# Impact of Aggression in People with ID

- Aggression is the 1<sup>st</sup> reason for people with ID to be (re)admitted to institutional care (*Lakin et al., 1983*)
- Aggression is the 1<sup>st</sup> reason for people with ID to be prescribed antipsychotic medication (*Aman et al., 1987; Robertson et al., 2000*)
- Physical violence has a significant negative impact on the rehabilitation of offenders with ID (and thus further increased costs)
- Physical violence has significant costs for institutional and forensic ID services (*Jenkins et al., 1997; Kiely & Pankhurst, 1998*)
- Anger is strongly associated with violence in offenders with ID in secure settings (*Novaco & Taylor, 2004*)

## Anger as Assessed by Patient Self-Report and by Ward Staff with Patients (*Grouped According to Post-Admission Assault*) (Novaco & Taylor, 2004)

	Assault Behaviour		<i>t</i>	<i>p</i>
	No Assault	Assault		
<b>STAXI (<i>n</i> = 111)</b>				
Trait Anger	16.9	20.9	3.49	.001
Anger Expression	27.5	34.8	3.61	.000
<b>NAS (<i>n</i> = 113)</b>				
Cognitive	31.6	34.0	2.50	.014
Arousal	26.9	32.1	4.22	.000
Behavioural	27.8	33.0	4.64	.000
Total	86.2	99.0	4.39	.000
<b>WARS Anger Attributes (<i>n</i> = 127)</b>	6.0	9.8	3.25	.001

# Hierarchical Regression of Violence Risk and Anger Predictors of Patient Assaultiveness in Hospital

Predictors	<i>beta</i>	<i>t</i>	<i>R</i> <sup>2</sup>	<i>R</i> <sup>2</sup> Change	<i>F</i> change	<i>p</i>
<b>Step 1</b>						
Age	-.148	1.47				
WAIS-R (Full Scale)	-.214	2.12				
Violence Offence	.143	1.45				
			.081	.081	2.77 (3,95)	.046
<b>Step 2</b>						
NAS Total	.369	3.95				
			.211	.131	15.59 (1,94)	.000
<b>Step 3</b>						
Extraversion (EPQ)	.224	2.43				
			.258	.047	5.90 (1,93)	.017

*Note: The dependent measure is the number of assaults since hospital admission (square root transformed). At Step 3, STAXI Trait Anger and Anger Expression, and the EPQ-Lie scale were statistically excluded in the stepwise procedure. For the final model including the covariates, NAS Total, and EPQ-E,  $R = .508$ ,  $F(5,93) = 6.48$ ,  $p = .000$*

# Treatment of Aggression in People with ID

## Psychopharmacology

- The most common approach despite there being limited research support for it's effectiveness, e.g.
  - *Deb et al., 2007*
  - *Brylweski & Duggan, 1999*
  - *Tyrer et al., 2008*

## Behavioural Analytic Interventions

- A good deal of evidence for high frequency aggression with low functioning patients in highly structured environments using contingency management approaches, e.g.
  - *Taylor, 2002*
  - *Whitaker, 1993*
- Tend not to generalise well across settings, are not self-actualising and are not appropriate for low frequency, but high impact behaviour

# **Cognitive-Behavioural Treatment of Anger for People with ID – *Summary of Evidence***

- **Post-1985 36 studies have been published on the effectiveness of psychotherapeutic anger interventions for people with ID**  
*(see Taylor & Novaco, 2013 for review)*
- **There are 12 reports on small anger CBT outcome studies with ID clients that involved comparison groups**  
*(Benson et al., 1986; Hagiliassis et al., 2005; Lindsay et al., 2004; Rose et al., 2000, 2005, 2009; Taylor et al., 2002, 2004, 2005; Willner et al., 2002, 2005, 2013)*
- **There are also a number of reports in the literature of CBT for anger in offenders with ID**
  - *Allen et al., 2001*
  - *Burns et al., 2003*
  - *Lindsay et al., 2003, 2004*
  - *Taylor et al., 2002, 2004, 2005, 2009*
  - *Singh et al., 2008*

# Northgate Anger Treatment Project

## Stage 1

- diagnostic assessment of 129 detained ID men with offending histories to investigate the psychometric properties of several criterion measures of anger and aggression

## Stage 2

- development of an anger treatment protocol designed specifically for people with ID and histories of aggression and offending behaviour

## Stage 3

- evaluation of a cognitive-behavioural anger treatment by comparison of post-treatment measures in the treatment group with pre-treatment measures in the waiting list control group

## Anger Study Measures

- **Novaco Anger Scale (NAS; Novaco, 1994; 2003)**
  - 48-item measure of *anger disposition*
- **Provocation Inventory (PI; Novaco, 1994; 2003)**
  - 25-item measure of *anger reactivity*
- **Spielberger State-Trait Anger Expression Inventory (STAXI; Spielberger, 1991)**
  - 44-item measure of *anger disposition and anger control*
- **Ward Anger Rating Scale (WARS; Novaco, 1994)**
  - 25-item *staff/carer informant* measure

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# Anger Treatment for ID Offenders

- **Modification of Novaco's (1993) treatment protocol**
- **The treatment is based on the 'Stress Inoculation' paradigm**  
*(Meichenbaum, 1985)*
- **Emphasises collaboration, personal responsibility, self-control & the legitimacy of anger**
- **Utilises a range of assessment, educational & training materials adapted to help patients with LD engage in the treatment process**
- **Treatment is delivered individually over 18 sessions (x2 per week)**
  - **6 session preparatory phase (psycho-educational)**
  - **12 sessions of treatment 'proper' (cognitive re-structuring, arousal reduction & skills training)**

# Anger Treatment for ID Offenders

Key components of the treatment:

- *Analysis and formulation of individual patients particular anger problems*
- *Cognitive re-structuring*
- Stress inoculation to practice coping in imagination
- Self-monitoring of anger frequency, intensity and triggers
- Construction of a personal provocation hierarchy
- Arousal reduction techniques
- Training behavioural coping skills
- Development of personalised self-instructions to prompt coping

## **Patient Tim - Background Information**

- **Age 25 years**
- **Full Scale IQ = 72**
- **Psychiatric Diagnosis = Borderline Intelligence**
- **MHA Section = 37/41 Hospital Order with Restrictions**
- **Index Offence(s) = Indecent assaults against young children**
- **Rehabilitation Status = 'longer-stay' low secure (slow-track rehabilitation)**
- **Previous Psychological Interventions:**
  - 1) Positive response to a behavioral support programme to reduce interpersonal conflict**
  - 2) Completion of group-based sex offender treatment programme with mixed outcomes**

# PATIENT G.

## HOW ANGER WORKS

- Being accused of things I haven't done (UNFAIR)
- People saying things about people who are important to me (DISRESPECT)
- People going on & on about things (IRRITATION)

- I want to hit him (JUSTIFICATION)
- I should hit him ( " )
- He deserves it ( " )
- I'll get him later (RUMINATION)
- It goes round & round my head "

- I'm really, really pissed off (INTENSITY)
- Very strong feeling ( " )
- It stays in me for a long time (DURATION)

- Threaten to hit him (VERBAL AGGRESSION)
- Swear & shout ( " )
- Argue back
- grab him & threaten him (IMPULSIVE CONFRONTATION)
- Punch wall (INDIRECT EXPRESSION)

- Get into trouble
- Drop Grades
- Get privileges stopped
- Hurt self
- Feel Bad • Get more angry

**SITUATIONS**  
something or someone  
annoys or upsets you



**THOUGHTS**  
about the  
situation



**FEELINGS**  
about it  
i.e. ANGER



**REACTION**  
i.e. what you  
do about it



**CONSEQUENCES**  
i.e. what happens  
to you and others  
afterwards

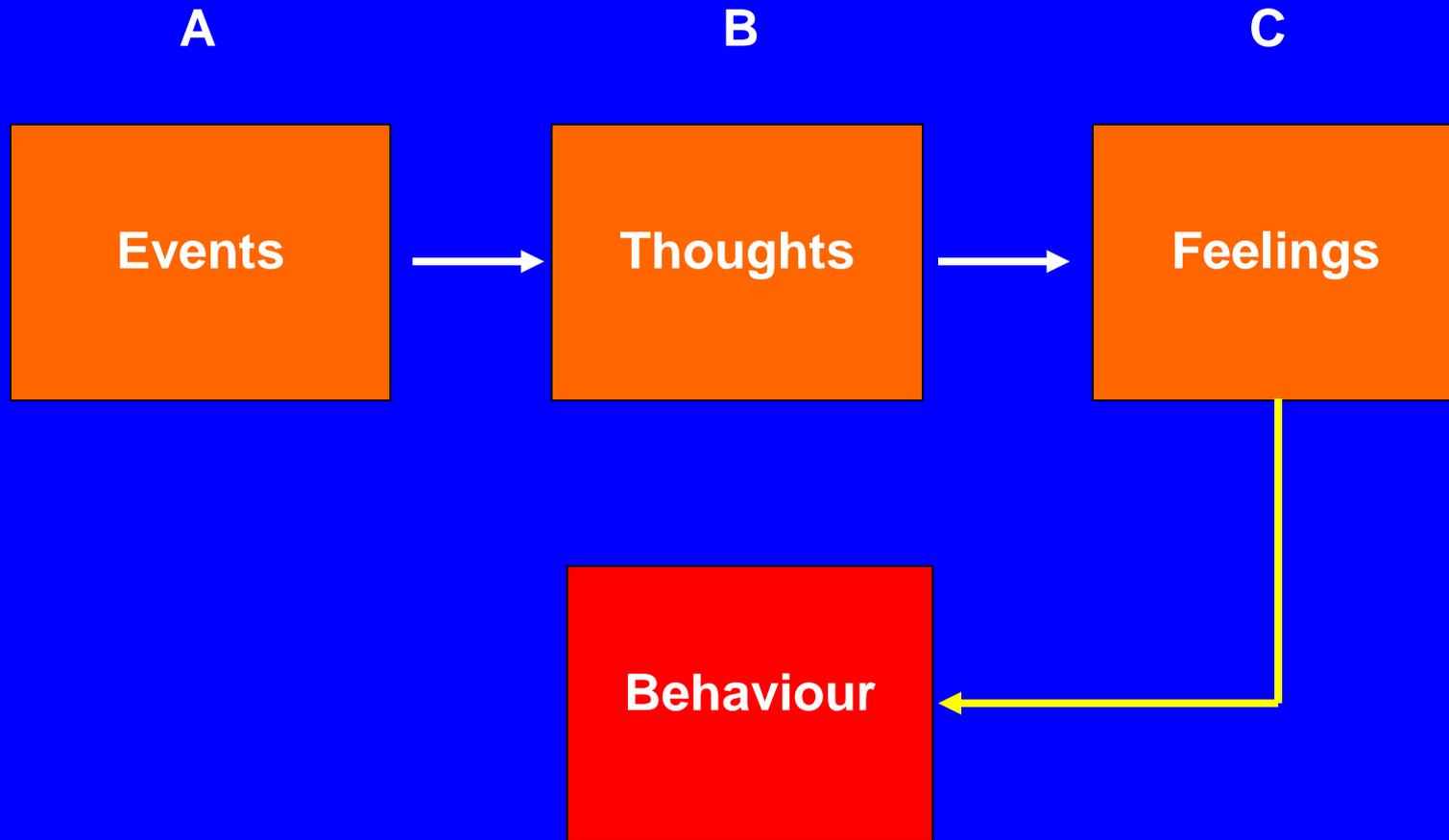


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# Cognitive-Behavioural Model of Emotion – *Simple Linear*



## THINKING DIFFERENTLY ABOUT ANGER SITUATIONS

Name: ...

Date: ...

	<b>Situation</b> Where? What? Who? 	<b>Thoughts</b> About the Situation 	<b>Emotional</b> <b>Feelings</b> 0 - 10 	<b>Physical</b> <b>Feelings</b> 0 - 10 	<b>Reaction</b> What did you Do/behave? 
A c t u a l	Confusion about what time Drama finished - came back to villa early when shouldn't have - Staff accused me of trying to enter patient ward it wasn't.	I did nothing wrong - why me - Its not fair - Its always me that gets into bother - no one else.	Furious 10/10	Tensed / shakill Arms & neck h-sp Sweating 6/10	Slouted at staff Angered back Threatened to complain

## THINKING DIFFERENTLY ABOUT ANGER SITUATIONS

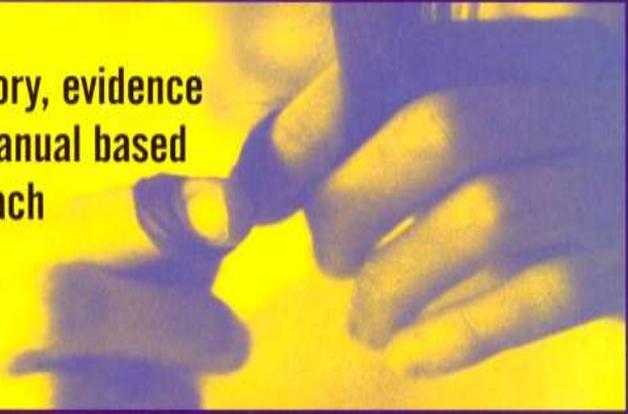
Name: ... [REDACTED]

Date: ... [REDACTED] ...

	Situation Where? What? Who?	Thoughts About the Situation	Emotional Feelings 0 - 10	Physical Feelings 0 - 10	Reaction What did you Do/behave?
					
A c t u a l	Confusion about what time Drama finished - came back to villa early when shouldnt have - Staff accused me of lying re another patient made it worse.	I did nothing wrong - wh- I'm - Its not fair - Its always me that gets into bother - no one else.	Furious 10/10	Tensed / Shakes Arms & Neck H-sp Sweating 6/10	Scouted at staff Angered back Threatened to complain
P o s s i b l e		This could happen to any patient - They think I'm trying to manipulate the situation - Staff are worried about where patients are (Security)	Less Angry 5/10	Less Tense / Shakes 2/10	Talk to staff calmly / Try to explain what's happened

# **Anger Treatment for People with Developmental Disabilities**

**A theory, evidence  
and manual based  
approach**



**John L. Taylor and Raymond W. Novaco**

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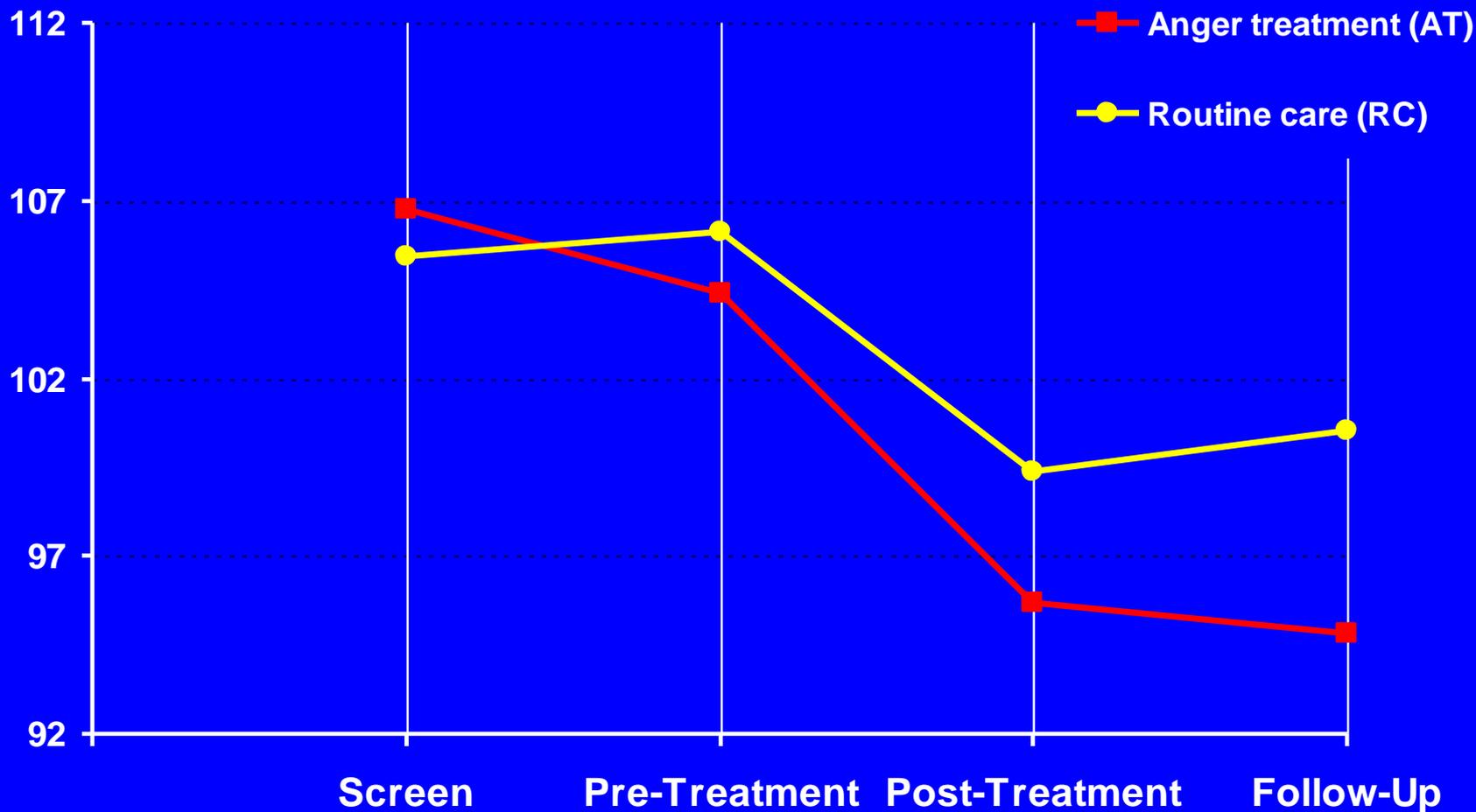
## **Three Linked Anger Treatment Outcome Studies - *Research Design & Analysis***

- **Wait-list controlled design (as considered unethical to withhold a potentially effective treatment from those who might benefit from it)**
- **Both groups continued to receive ‘treatment as usual’**
- **Patients meeting inclusion criteria allocated to the Anger Treatment (AT) group or Routine Care (RC) conditions**

# Mean Novaco Anger Scale (NAS) Total scores over Time

ANCOVA (WAIS-R IQ as covariate)  $F(1,33) = 4.74. p < .05, r = .35$

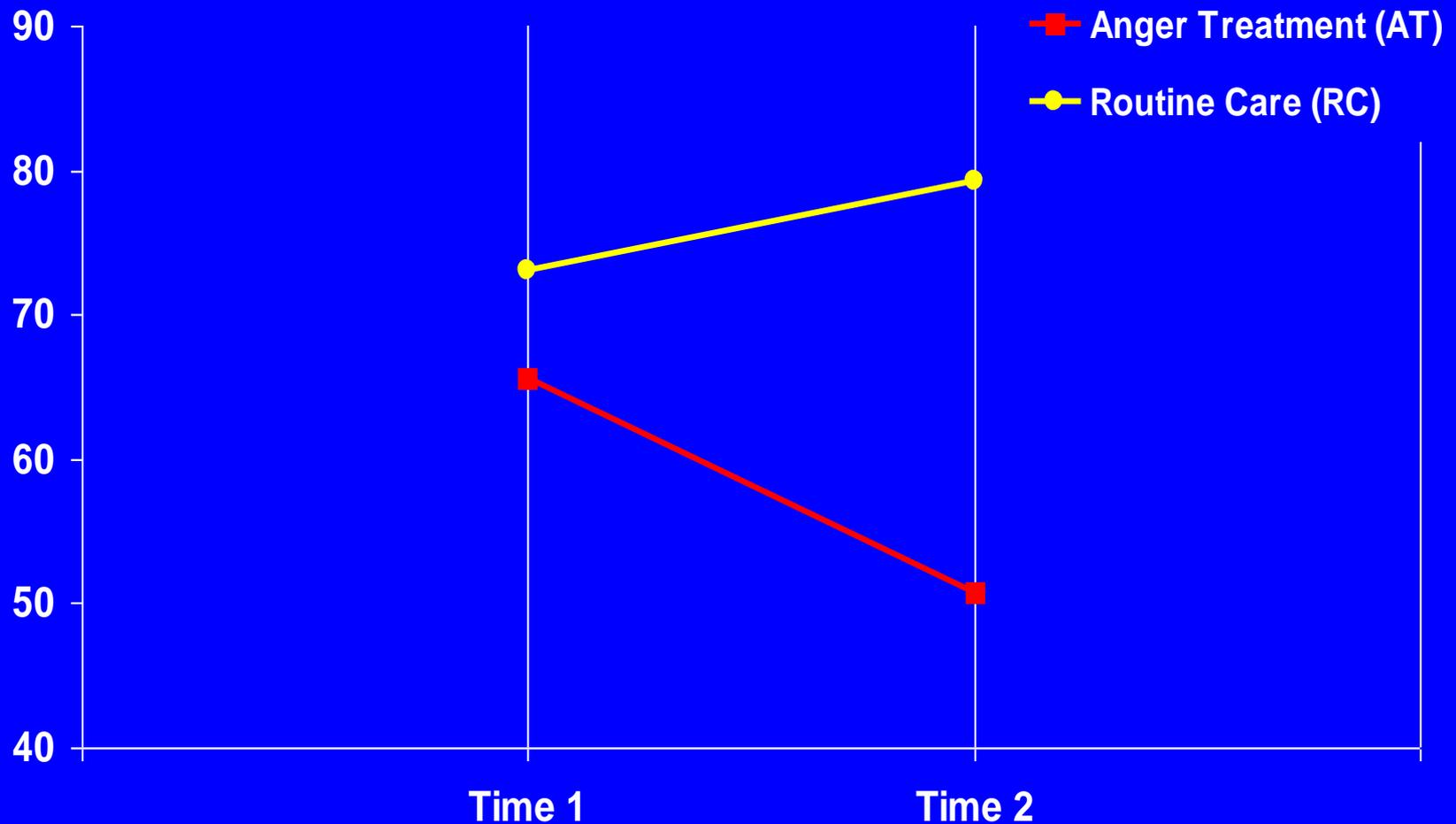
*Taylor et al. (2005). Brit. J. of Clinical Psychology, Vol. 44*



# Mean Provocation Inventory Total Scores over Time

ANOVA,  $F(1,17) = 13.56, p < .005, r = .66$

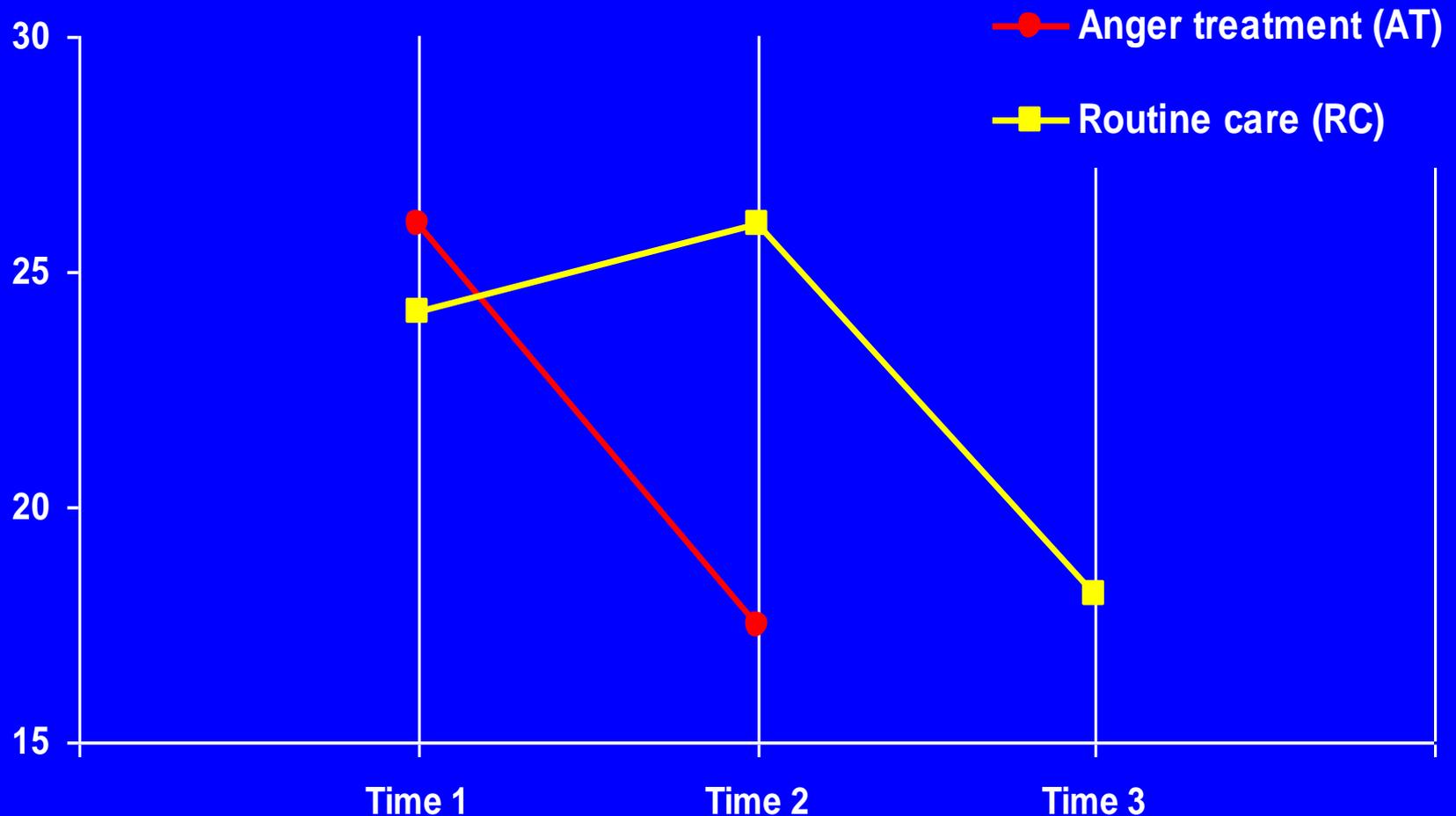
*Taylor et al. (2002). J. of Applied Research in Intell. Dis., Vol. 15*



# Mean IPT Anger Composite Scores over Time

ANCOVA (Time 1 score as covariate)  $F(1,14) = 11.20$ .  $p < .01$ ,  $r = .67$

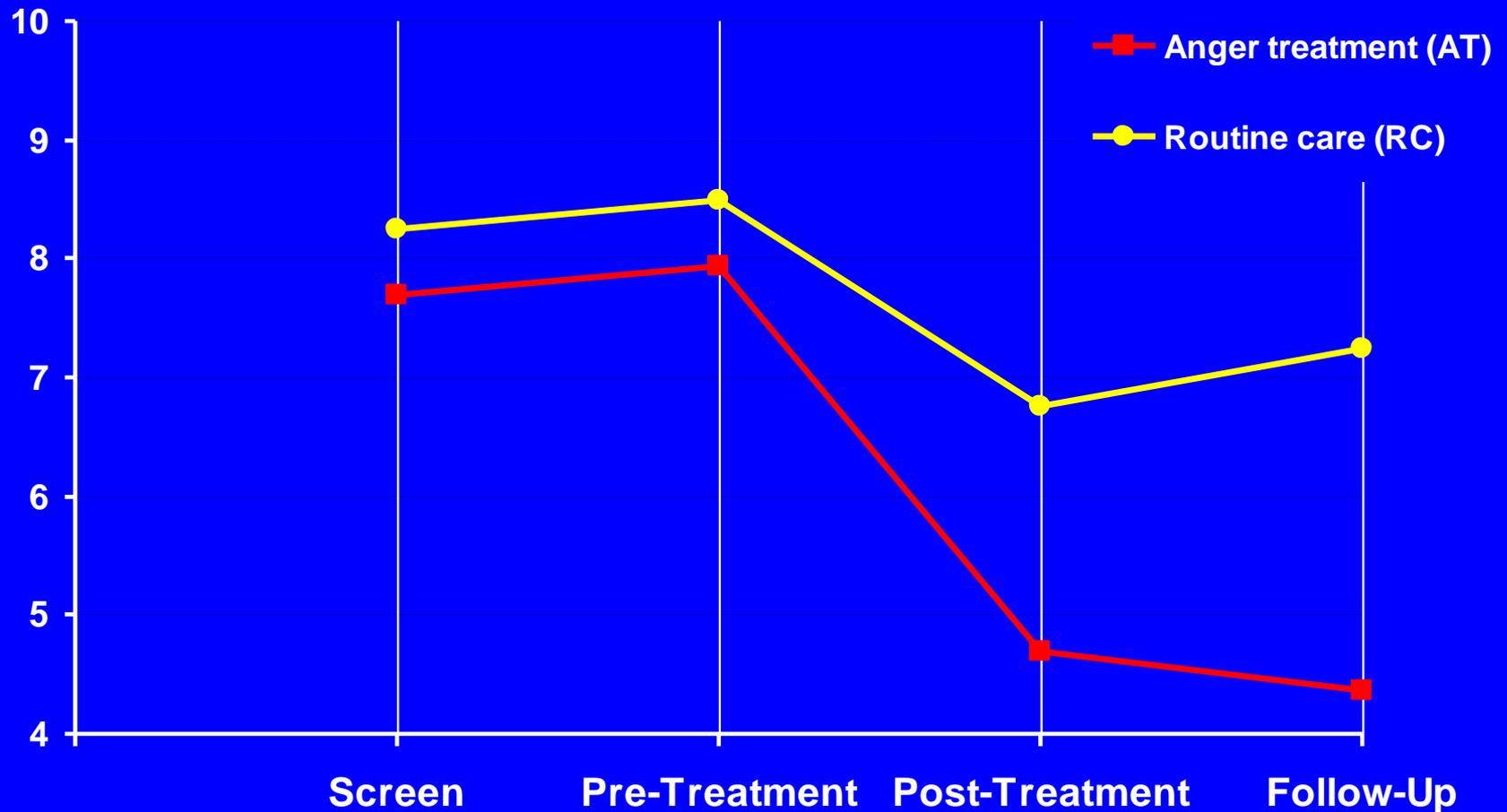
*Taylor et al. (2004). Clinical Psychol. & Psychotherapy, Vol. 11*



# Mean WARS Anger Index scores over Time

ANCOVA (WAIS-R IQ as covariate)  $F(1, 33) = 1.49, p < .23$

*Taylor et al. (2005). Brit. J. of Clinical Psychology, Vol. 44*



# **Impact of CBT Anger Treatment on Aggressive Behaviour and Violence**

- **There is limited evidence – small case studies and series and small group studies – that CBT anger treatment reduces aggressive behaviour/violence**

# **Study of the Impact of CBT Anger Treatment on Aggressive Behaviour and Violence – *aims and methods***

## **Study Aim:**

- **To evaluate the impact of CBT anger treatment on aggressive and violent behaviour by offenders with ID in a secure forensic hospital setting**
- **Incident data collected retrospectively over a 24-month period:**
  - **Time 1 – 7-12 months pre-treatment**
  - **Time 2 – 0-6 months pre-treatment**
  - **Time 3 – 0-6 months post-treatment**
  - **Time 4 – 7-12 months post-treatment**

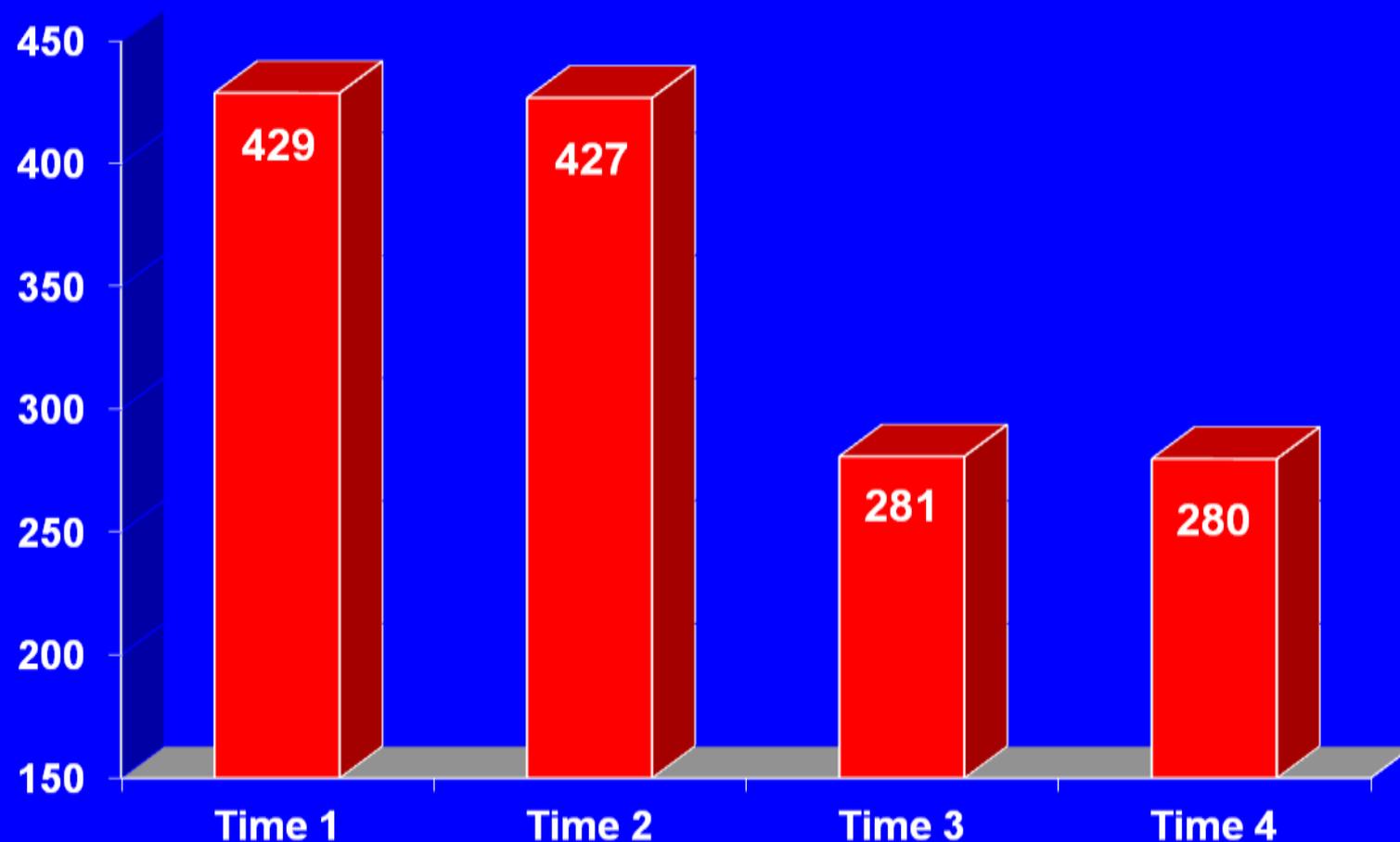
# Aggressive Behaviour Coding System

- **Data collected by assistant psychologists from hospital casenote incident records using a pro forma and operationally defined categories of behaviour:**
  - 1. Damage to property**
  - 2. Verbally abusive to someone**
  - 3. Verbally threatened to attack**
  - 4. Physically attacked a patient**
  - 5. Physically attacked a staff member**
- **Physically aggressive behaviour = hitting, punching, kicking, lashing out, etc. that was aimed at harming peers/staff members/others.**

## Total Aggressive Incidents: Over 24 Months: Pre- and Post-Treatment (N = 50)

**Pre-treatment = 856; Post-treatment = 561**

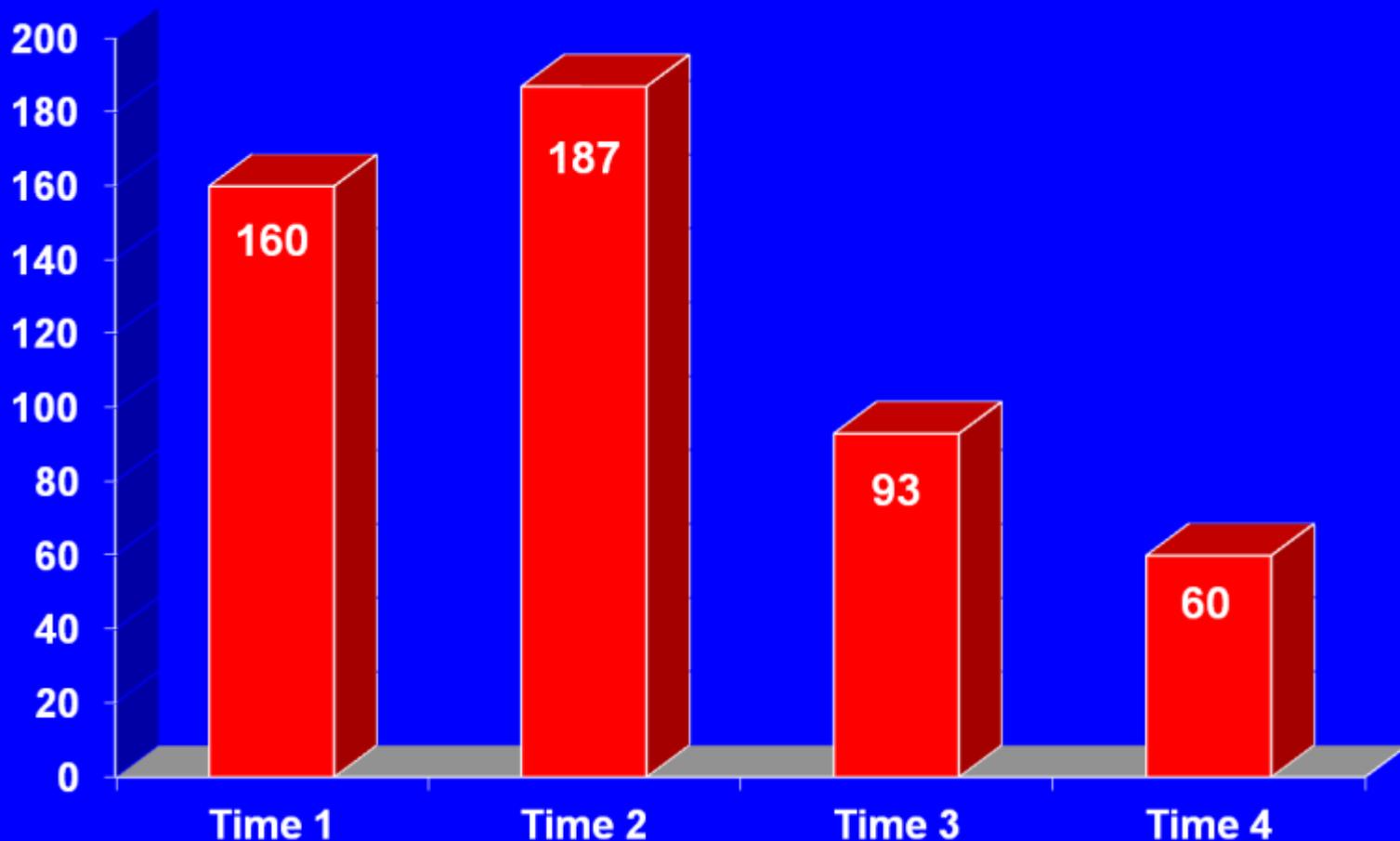
*ANOVA (log10): linear trend,  $F(1,49) = 12.38, p = .001, r = 0.45$*



# Total Physical Attacks Over 24 Months: *Pre- and Post-Treatment (N = 50)*

**Pre-treatment = 347; Post-treatment = 153**

*ANOVA (log10): linear trend,  $F(1,49) = 11.23, p = .002, r = 0.43$*



# Process Issues Related to Cognitive Behavioural Anger Treatment for People with ID

1. **What is the effect of IQ on treatment outcome?**  
*e.g. Rose et al, 2005; Willner et al., 2002*
2. **What are the issues in involving direct carers in anger treatment – effects on maintenance of outcomes?**  
*e.g. Rose et al., 2005*

## Pre - Post Treatment Change Scores, Grouped by Median Split on Verbal IQ Scores

*Taylor, Novaco & Johnson (2009) Adv. In Mental Health & LD*

	IQ Median Split		<i>t</i>	<i>p</i>
	IQ ≤ 69	IQ ≥ 70		
NAS Total ( <i>N</i> = 83)	5.8 (15.6)	9.3 (14.2)	1.06	.289
PI Total ( <i>N</i> = 82)	3.3 (15.1)	6.4 (14.3)	.94	.349
Trait Anger ( <i>N</i> = 83)	0.9 (6.6)	3.2 (7.2)	1.46	.148
Anger Expression ( <i>N</i> = 83)	4.5 (12.3)	6.8 (9.6)	1.13	.264
WARS Anger Index ( <i>N</i> = 56)	5.0 (5.0)	5.5 (5.6)	.37	.711

*Note:* Standard deviations are given in parentheses.

# Pre – 12-Month Follow-Up Treatment Change Scores, Grouped by Median Split on Verbal IQ Scores

*Taylor, Novaco & Johnson (2009) Adv. In Mental Health & LD*

	IQ Median Split		<i>t</i>	<i>p</i>
	IQ ≤ 69	IQ ≥ 70		
NAS Total ( <i>N</i> = 63)	14.9 (15.1)	12.2 (14.1)	.72	.475
PI Total ( <i>N</i> = 57)	7.9 (17.4)	6.4 (16.6)	.34	.738
Trait Anger ( <i>N</i> = 58)	4.9 (6.0)	3.7 (7.4)	.67	.564
Anger Expression ( <i>N</i> = 58)	9.0 (7.8)	6.2 (11.5)	1.09	.280
WARS Anger Index ( <i>N</i> = 48)	2.9 (6.5)	1.9 (4.2)	.63	.529

**Note:** Standard deviations are given in parentheses.

# Process Issues Related to Cognitive Behavioural Anger Treatment for People with ID

1. What is the effect of IQ on treatment outcome?  
*e.g. Rose et al, 2005; Willner et al., 2002*
2. What are the issues in involving direct carers in anger treatment – effects on maintenance of outcomes?  
*e.g. Rose et al., 2005*

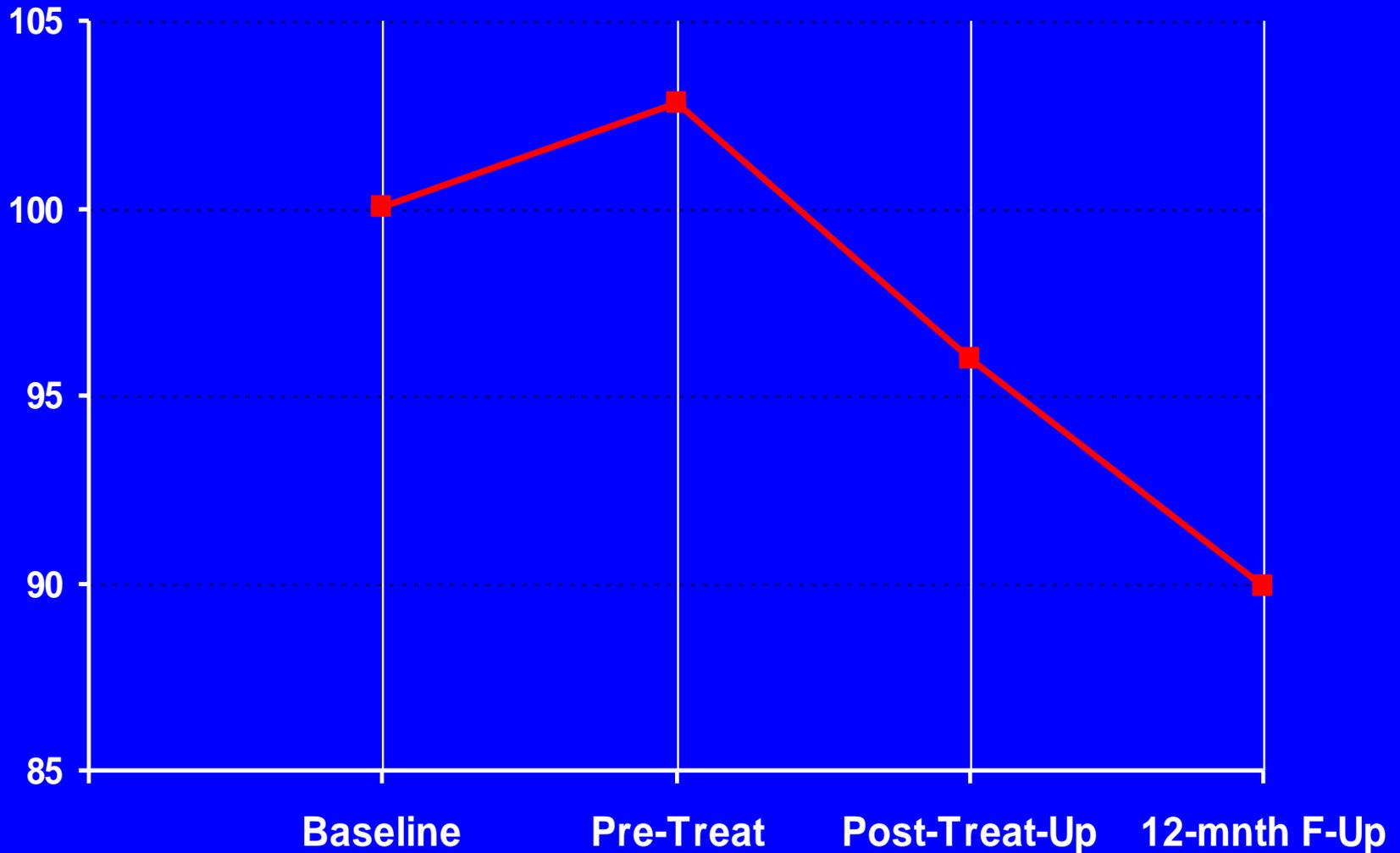
# **Anger Treatment Maintenance – *Audit***

***Taylor & Novaco, 2005***

- **70 patients completed treatment through the Northgate Anger Treatment Project**
- **At audit point, 47 of these treatment completers remained in hospital**
- **Audit showed that just under 25% (11) of these 47 patients were receiving anger treatment maintenance sessions -- although just one of this group was recorded as having declined this input**

## Mean Novaco Anger Scale (NAS) Total (N = 50)

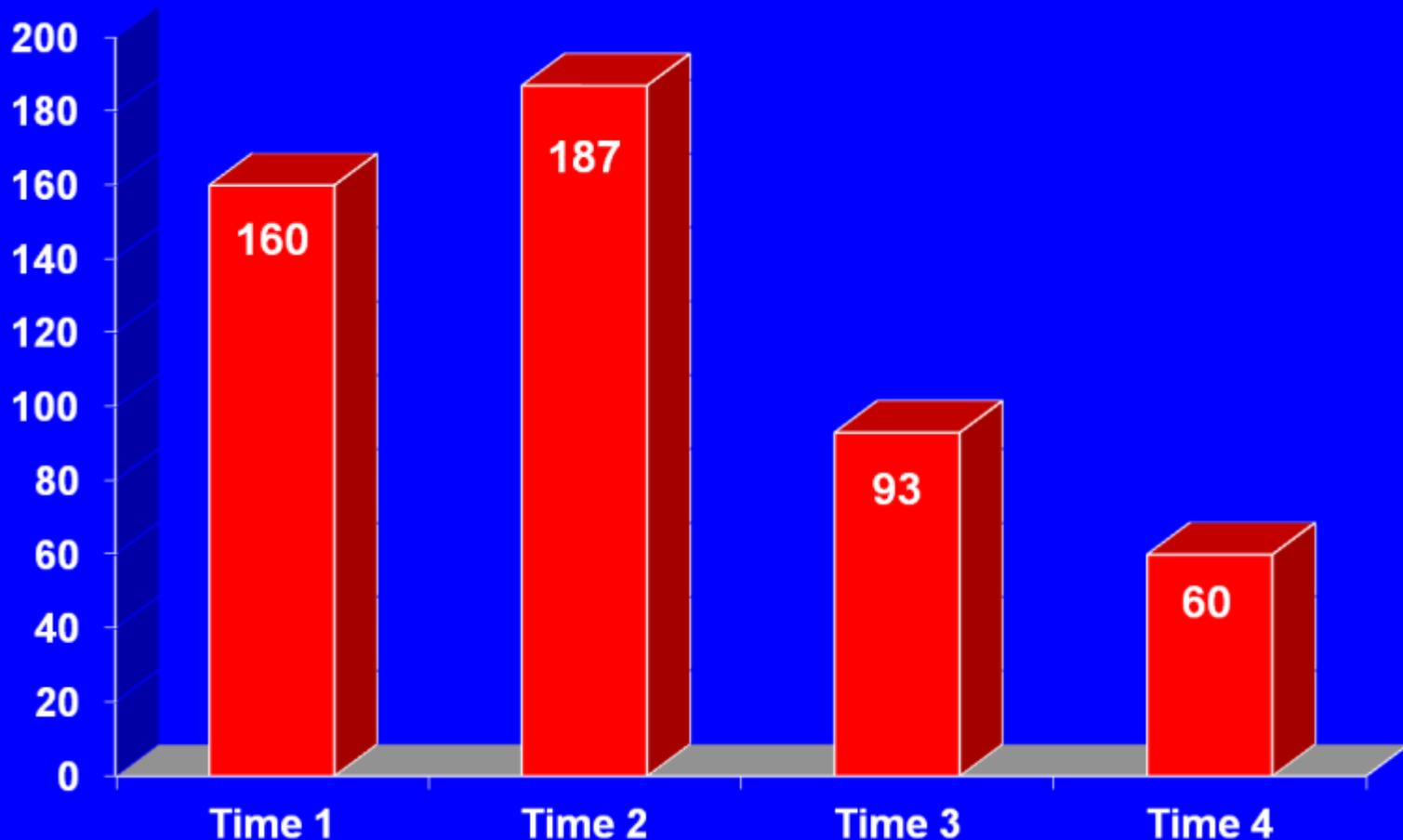
GLM Linear Contrasts  $F(1,49) = 19.02$ ,  $p < .000$ , ES  $r = \sqrt{F/(F+df \text{ error})} = .53$



# Total Physical Attacks Over 24 Months: *Pre- and Post-Treatment (N = 50)*

**Pre-treatment = 347; Post-treatment = 153**

*ANOVA (log10): linear trend,  $F(1,49) = 11.23, p = .002, r = 0.43$*



## Summary

- 1) **Disproportionate numbers of people with IDD are detained in hospital for disproportionately long periods**
- 2) **Mental health problems and aggression are the primary therapeutic targets for preventing admissions and shortening periods of hospital detention**
- 3) **Evidence is building that psychological therapies, particularly CBT, are effective in helping with these problems**
- 4) **There is some evidence that these approaches are effective over time and not wholly dependent on external support**
- 5) **More research and service development work is required to make these self-actualising therapies available to more people with IDD**

# Positive Behaviour Support

- **PBS is a set of evidence based strategies used to increase quality of life and decrease problem behaviour by teaching people new skills and making changes in their environments**
- **PBS combines:**
  - √ **Valued outcomes**
  - √ **Behavioural and biomedical science**
  - √ **Validated procedures, and**
  - √ **Systems of change to enhance QoL and reduce problem behaviours**

*(APBS, 2014)*

## **Contact Details**

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