Third-Generation Approaches to Behavior Therapy

Chair: Jarrod S. Turner (Murdoch University)

Clinical Evaluation of Behavioral Activation Treatment of Anxiety (BATA) in Three Older Adults (Applied Behavior Analysis) JARROD S. TURNER David J. Leach (Murdoch University)

Abstract: This paper describes three single-case experimental evaluations of behavioral activation treatment of anxiety (BATA) applied with a 51-year-old male, a 62-year-old female, and a 53-year-old female, each of whom met DSM-IV criteria for generalised anxiety disorder (GAD). Each case was a clinical replication of an initial trial of BATA reported in Turner and Leach (2009). Treatment was delivered in twelve weekly 60-minute individual sessions and evaluated using an A-B-C phase change with repeated measurement design. Decreased scores in self-reported anxiety were obtained in each case and the improvements were maintained during a 3-month no treatment maintenance phase. Compared to baseline, each participant also recorded increases in activity levels in some key life areas during the treatment phase. These preliminary findings suggest that increased activation in functionally positive areas is associated with reported decreases in anxiety and that BATA could be an effective stand-alone treatment for GAD in adults.

Clinical Evaluation of Behavioral Activation Treatment of Anxiety (BATA) in 3 Older Adults

Dr Jarrod Turner

Associate Professor David Leach

School of Psychology, Murdoch University

Western Australia

Turner, J.S., & Leach, D.J. (2010). Experimental evaluation of behavioral activation treatment of anxiety (BATA) in three older adults. *International Journal of Behavioral Consultation and Therapy, 6 (4),* 373-394.

Turner, J.S., & Leach, D.J. (2009). Brief behavioral activation treatment of chronic anxiety in an older adult. *Behaviour Change, 26 (3),* 214-222.

Definition

Behavioral activation (BA) therapy includes techniques to specifically increase the level of client engagement in meaningful activities
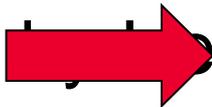
The aim is for the client to contact naturally occurring sources of reinforcement for overt behaviors that may have anti-depressant or anxiolytic functions

Principles

BA is based on the principles of operant conditioning

Concurrent schedules of reinforcement maintain a person's levels of clinically relevant behaviors (healthy and non-healthy)

Illustrated by Herrnstein's Matching Law equation:

$$\frac{T_1}{T_1 + T_2} = \frac{r_1}{r_1 + r_2}$$

Empirical Evidence

Jacobson et al. (1996). Large scale RCT: 'Beckian' CBT vs BA/AT vs BA alone. No outcome differences post treatment & 6 month follow-up.

Gortner et al. (1998). No outcome differences at 2 year follow-up.

Dimidjian et al., (2006). Replication: CBT vs BA vs ADM. No outcome differences post treatment & 6 month follow-up.

BA more effective than CBT with the 'high severity' group

The Current Model (BATA)

Discrete responses are placed within broad functional classes of behaviours (avoidance and approach)

Increased contact with (+) for approach behaviors and decreased contact with (-) for avoidance behaviors weakens the contextual support for anxiety

Increased likelihood of extinction of learned (classically conditioned) fears (i.e., accordant with two-process (factor) models)

The Present Study

Single-case within-subject experimental (A/B/C) design:

'A' phase was baseline (self-monitoring (SM) & standardised self-report): 16 to 35 days

'B' was treatment: 12 x 1hr weekly individual BA sessions (84 days)

'C' was no-treatment maintenance/follow-up (no SM): 84 days

Total of 7 clinical replications (3 in today's paper)

Measures

Beck Anxiety Inventory (BAI)

Depression, Anxiety, Stress Scales (DASS)

Self-monitored Anxiety Ratings

Self-monitored Activity Recording

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Daily Anxiety Rating Scale   Week starting:_____

Using the anxiety scale below, please rate your average level of anxiety during each of these time periods (A). Also, in the space provided make a note of where you were, who you were with, and what you were doing (Setting).

Anxiety Scale (%)

No Anxiety	Moderate anxiety	Extreme anxiety
0.........................25.........................50.........................75.........................100		

	Waking to 9am		9am to 12pm		12pm to 3pm		3pm to 6pm		6pm to 9pm		9pm to bedtime	
	A	Setting	A	Setting	A	Setting	A	Setting	A	Setting	A	Setting
M												
T												
W												
T												
F												
S												
S												

Behaviour Self-Monitoring Diary

Day:_____   Date:_____

Time you got out of bed:_____Time you put on your pedometer:_____Time you removed pedometer_____Distance (kms)_____

Activities	From waking up to 12.00 midday				From 12.00 midday to 6.00pm				From 6.00pm to bedtime			
	At home		Out of home		At home		Out of home		At home		Out of home	
	Alone	With others	Alone	With others	Alone	With others	Alone	With others	Alone	With others	Alone	With others
Self (or other) care.												
Housework & errands.												
Paid or unpaid work.												
Interests, hobbies, and recreation.												

Treatment

- (Functional Contextual) Psycho-education, e.g., 3-term contingency / ABC analysis

- Self monitoring

- Goal setting (short, medium, long)

- Activity scheduling

- Task analysis

- Activity reviews

- Avoidance blocking

- Behavioral problem solving

Case 1   Frank

51 Year old male

Artist (painter), lecturer, PHD candidate

Lengthy psychotherapy history

DSM-IV criteria –

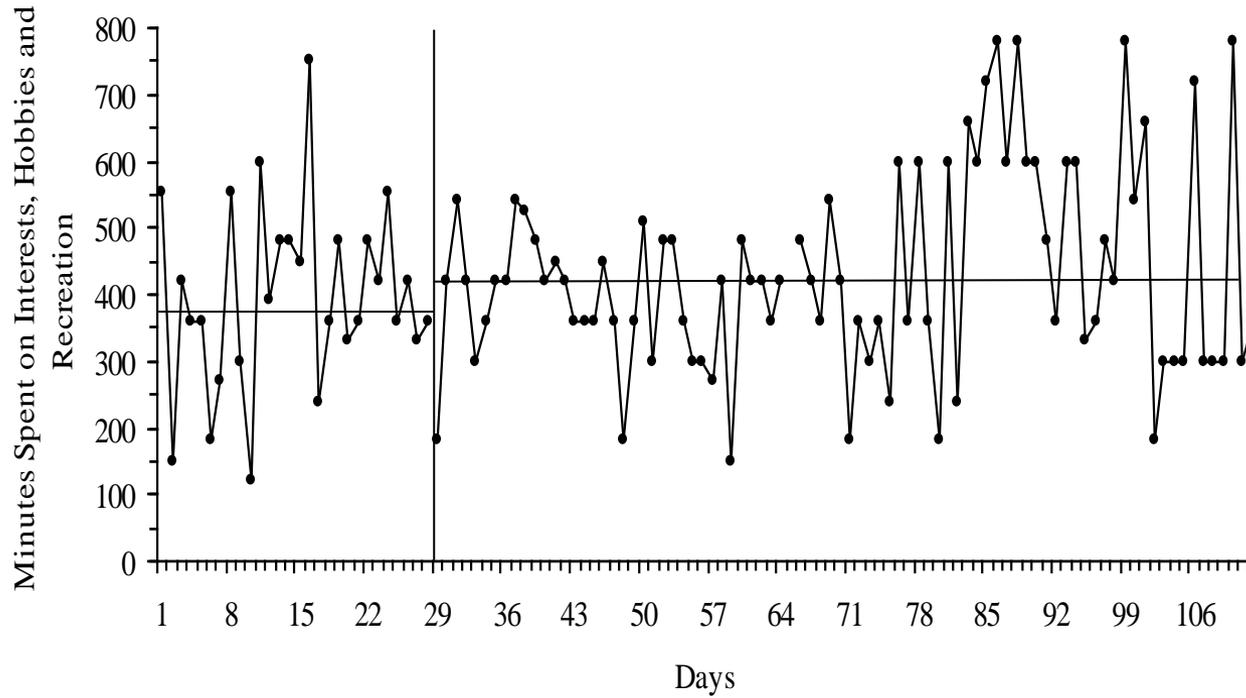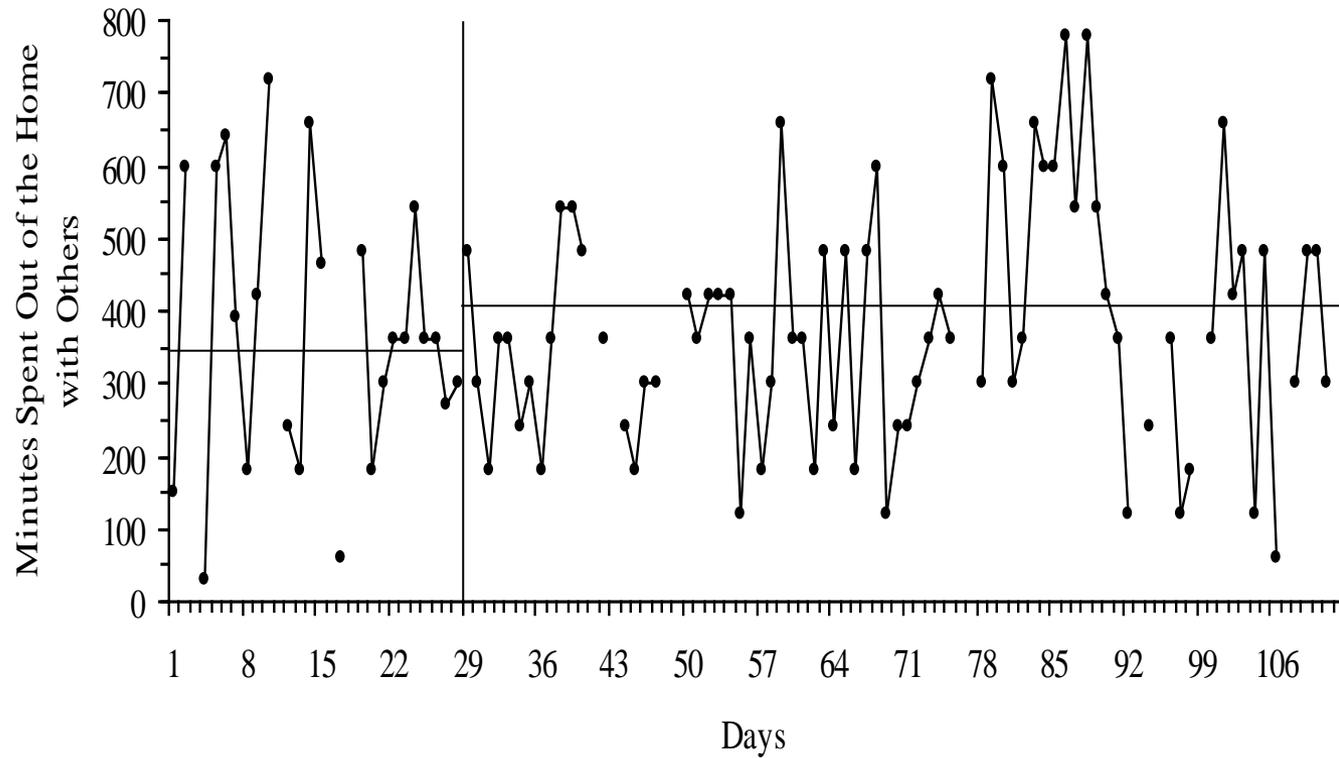Social Anxiety Disorder (Generalised)

Genralised Anxiety Disorder
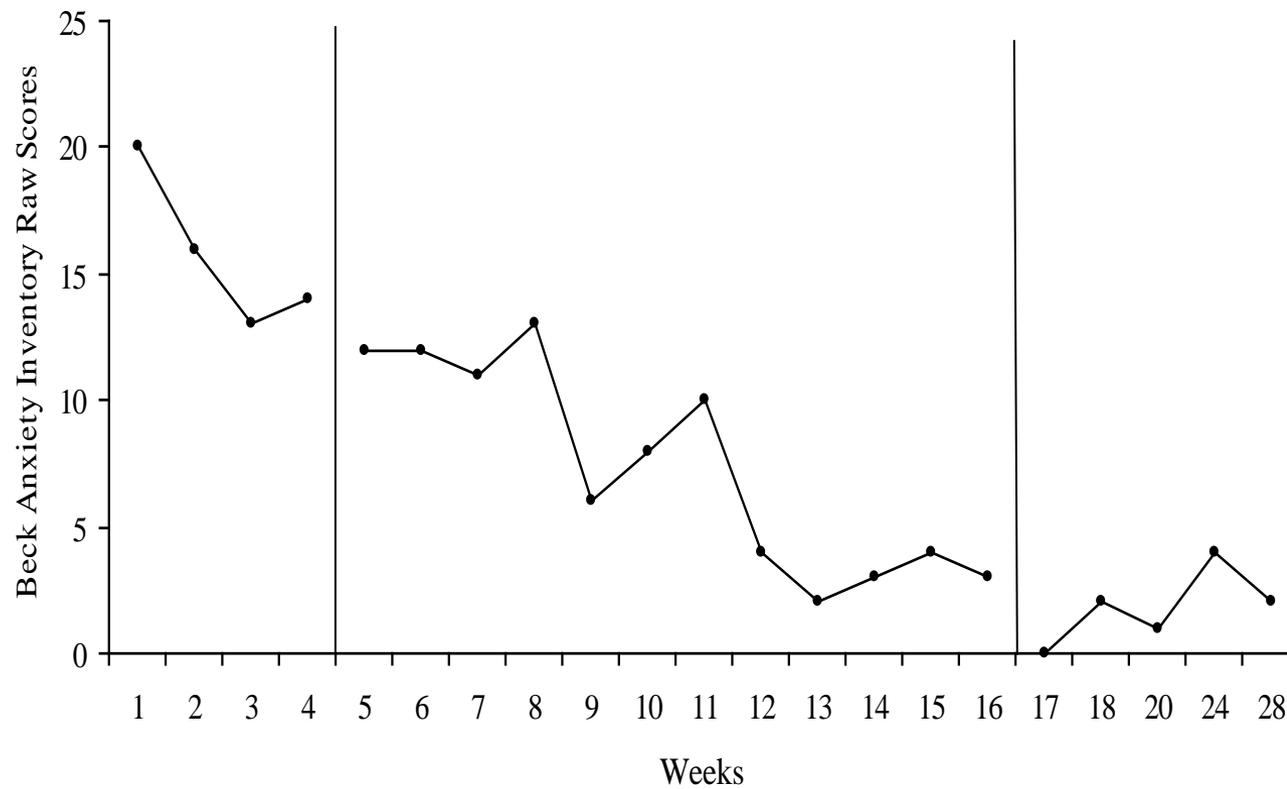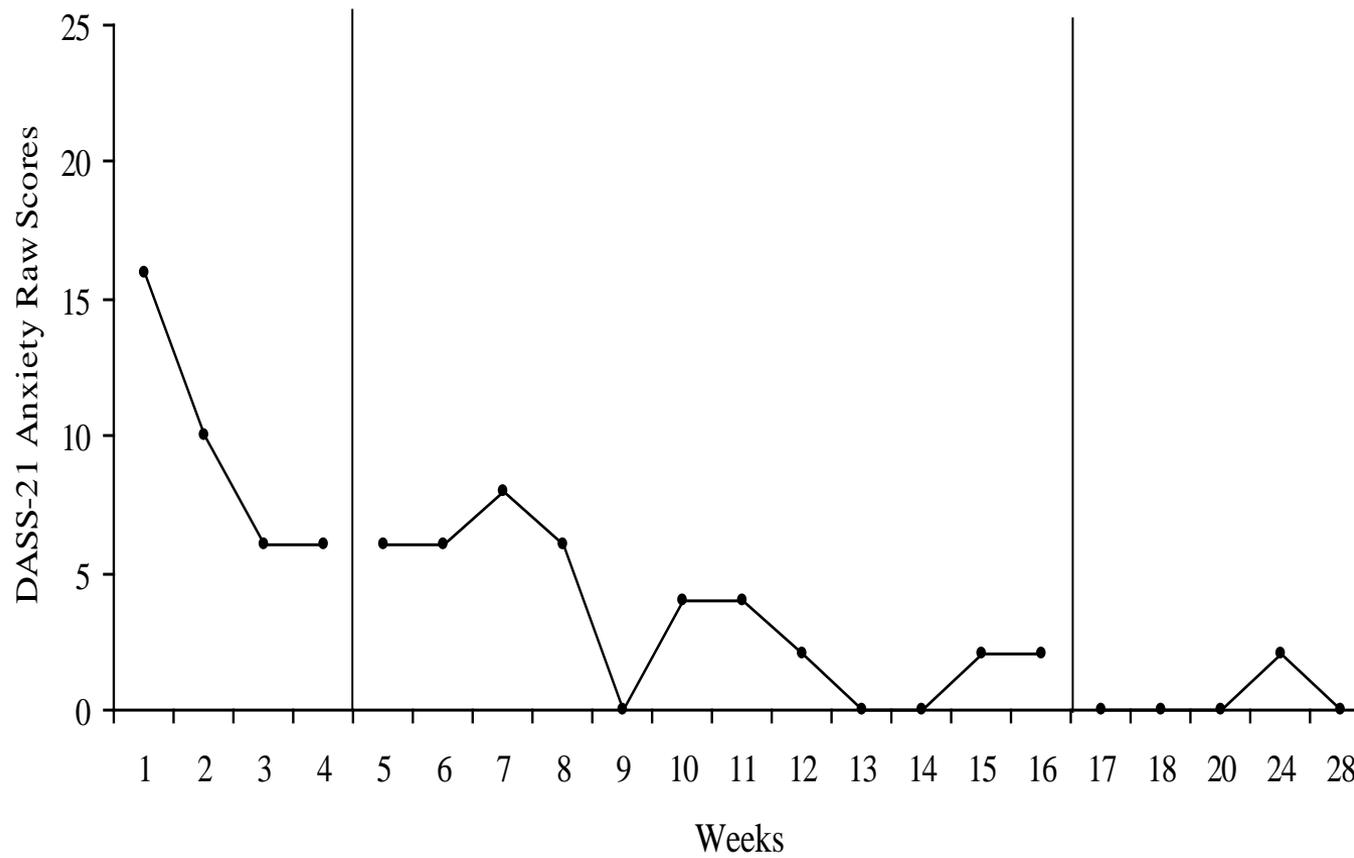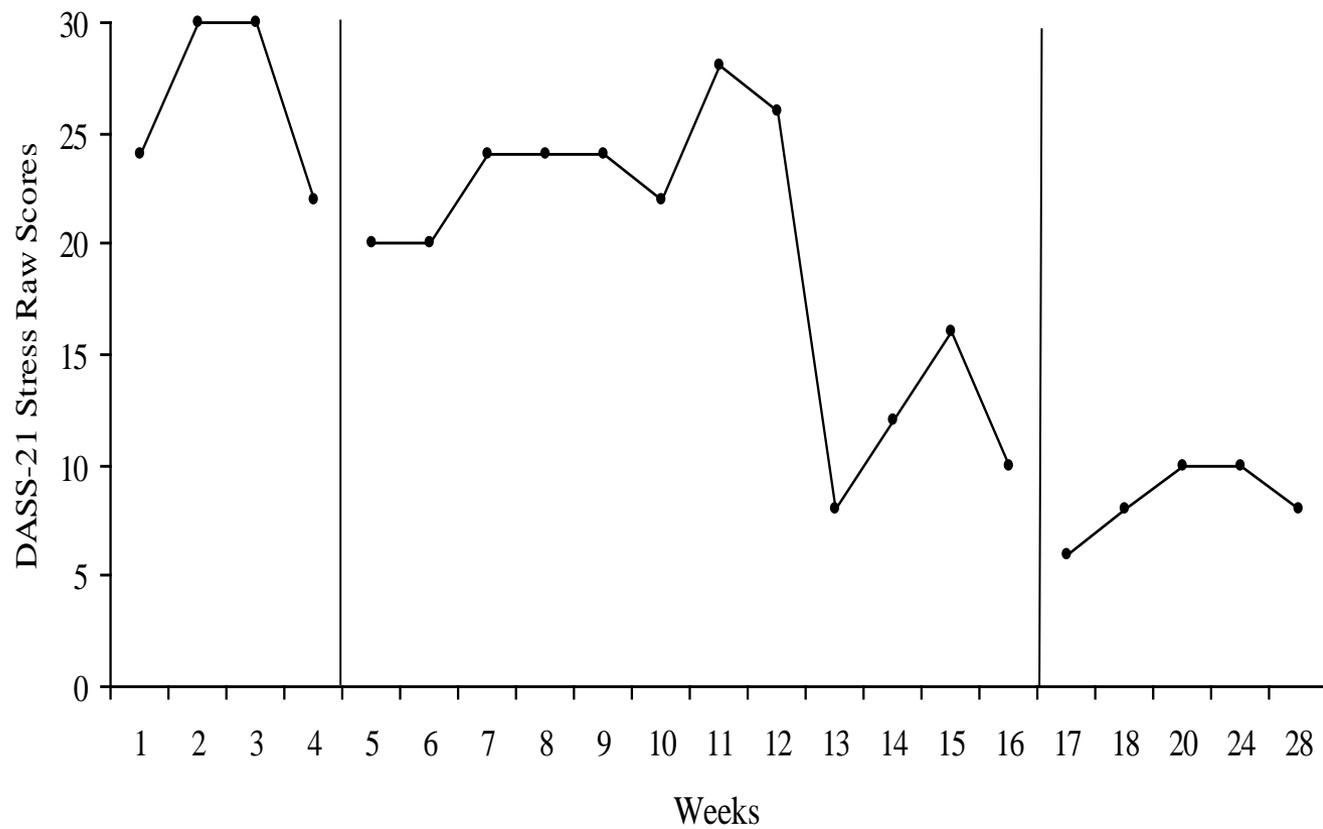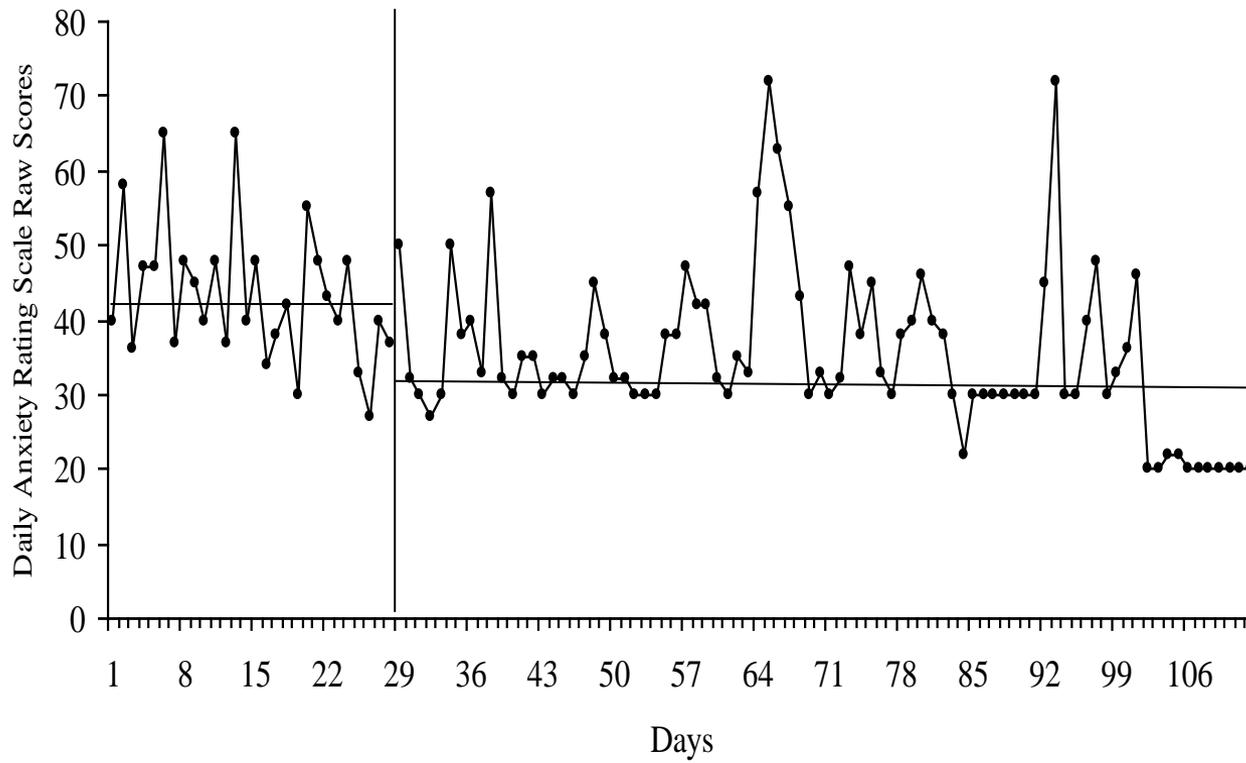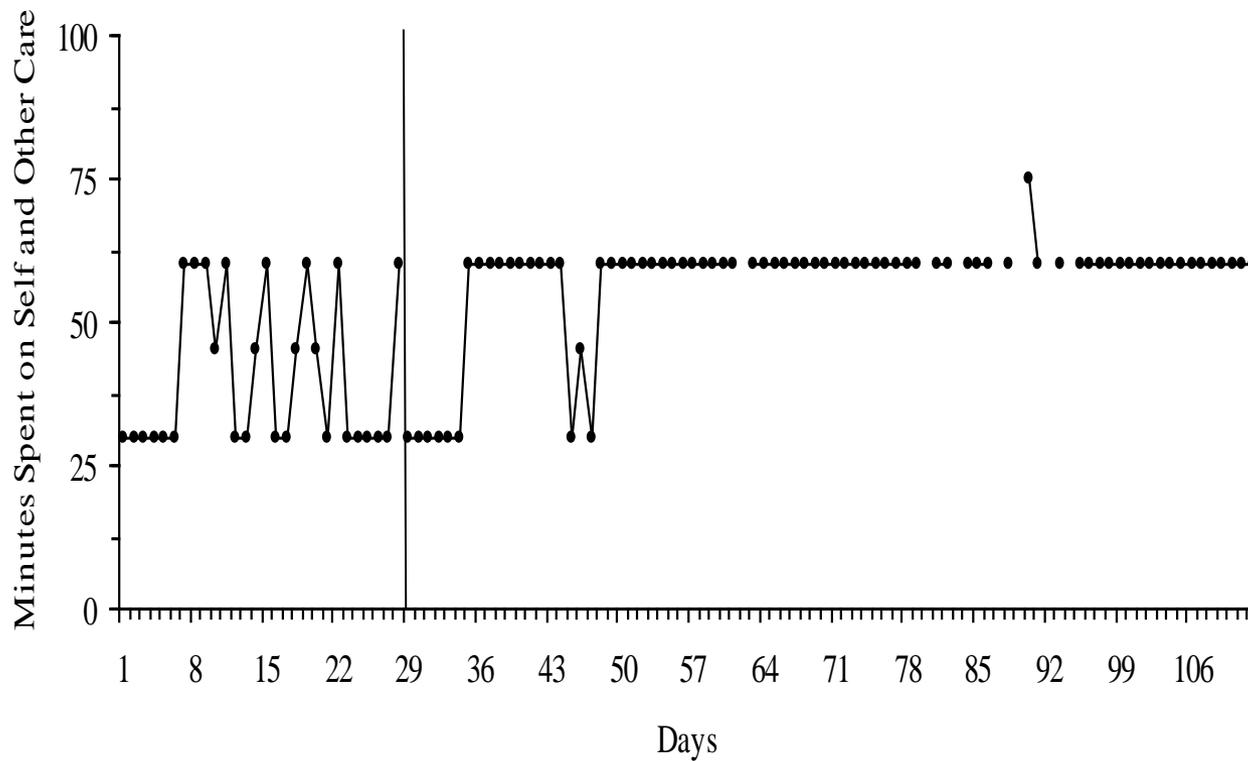
Case 2   Mary

62 Year old female

Part time conservation worker

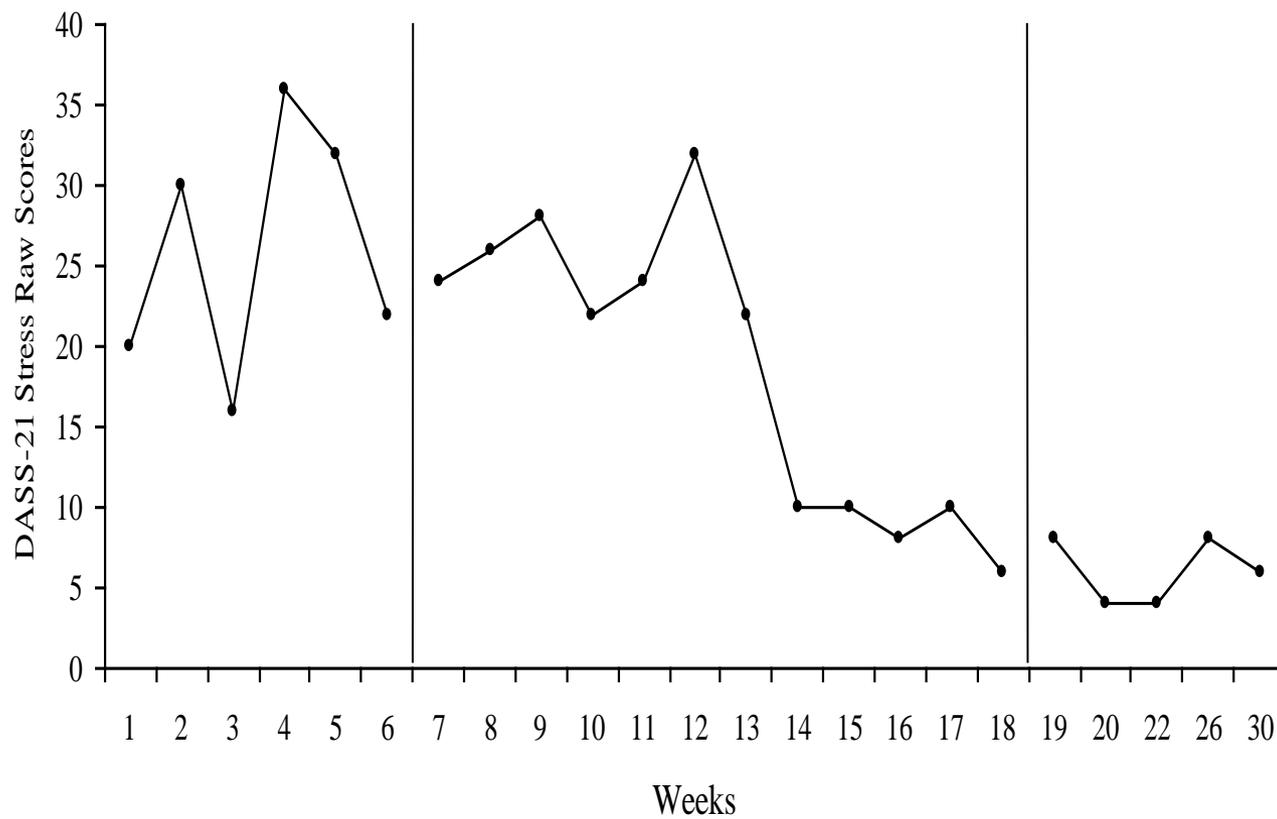No psychotherapy history

Recent migration to Australia from the UK

DSM-IV criteria –

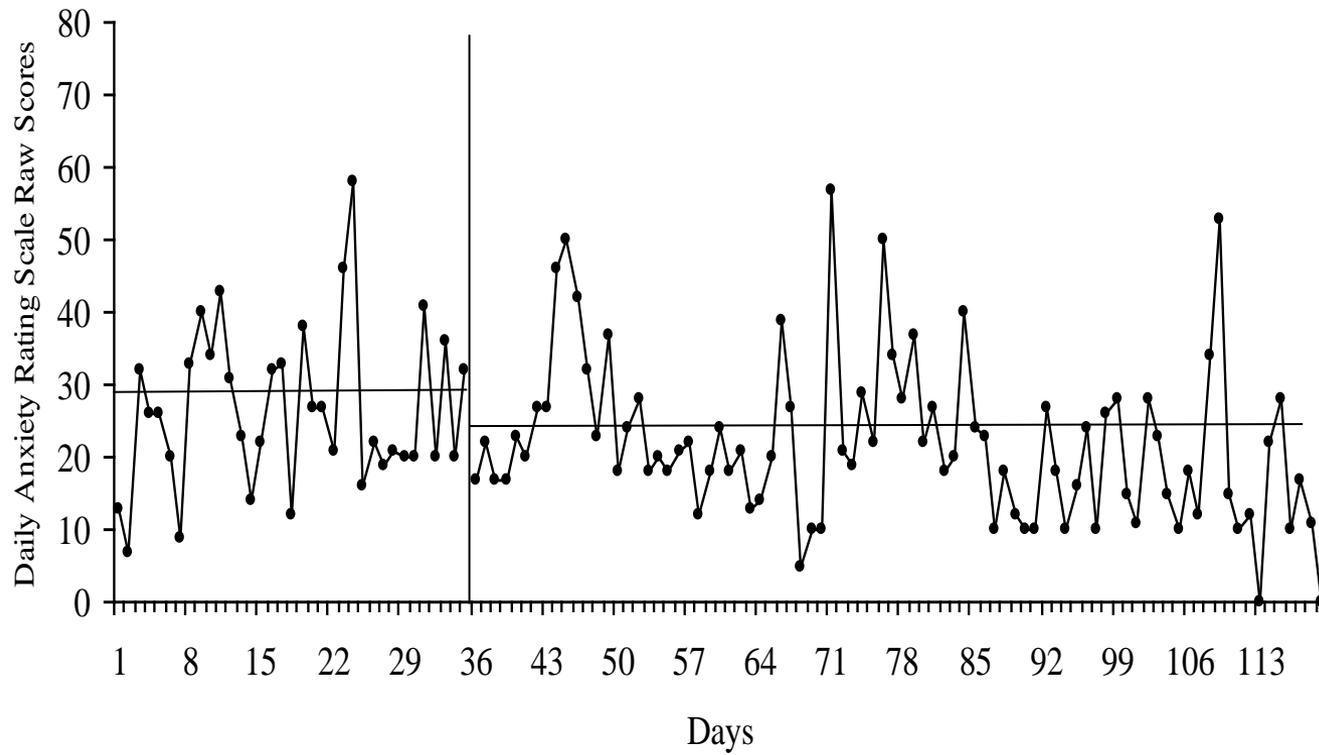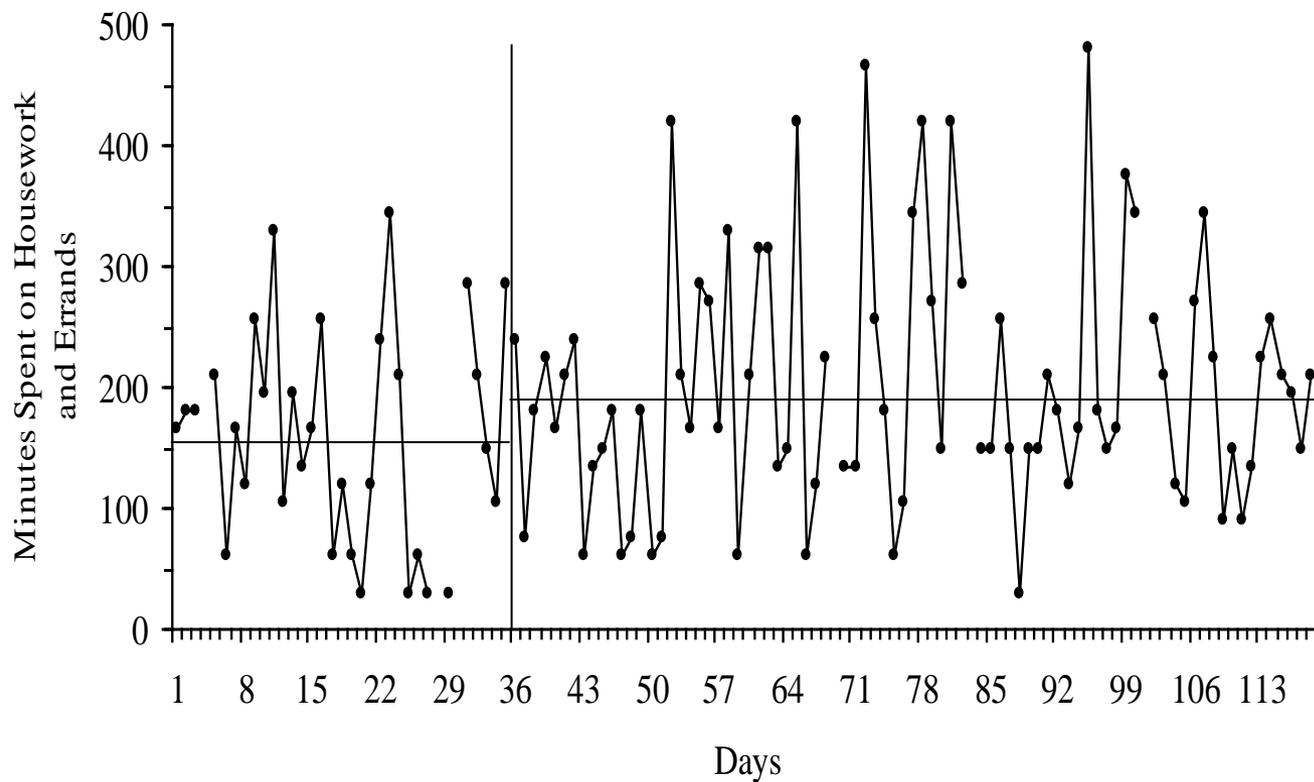Specific Phobia (Situational)
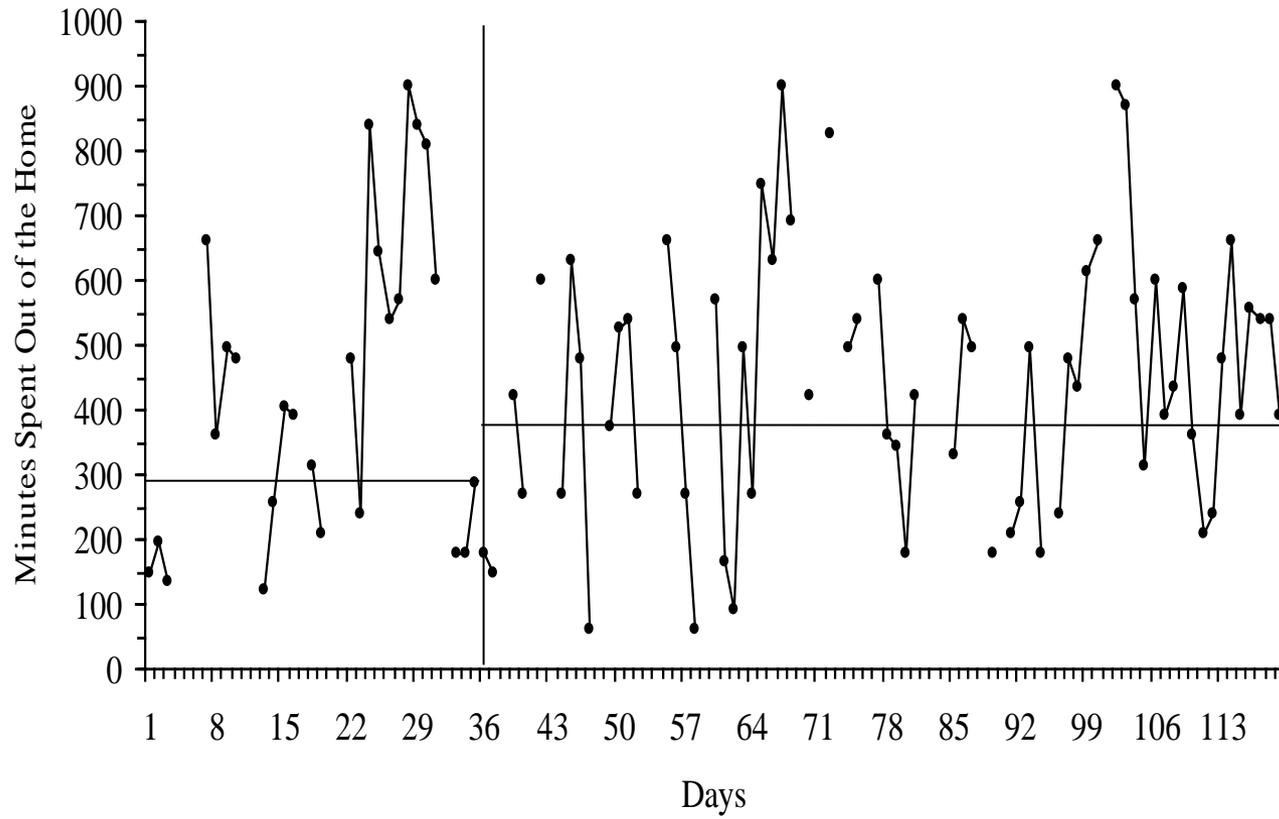
Genralised Anxiety Disorder
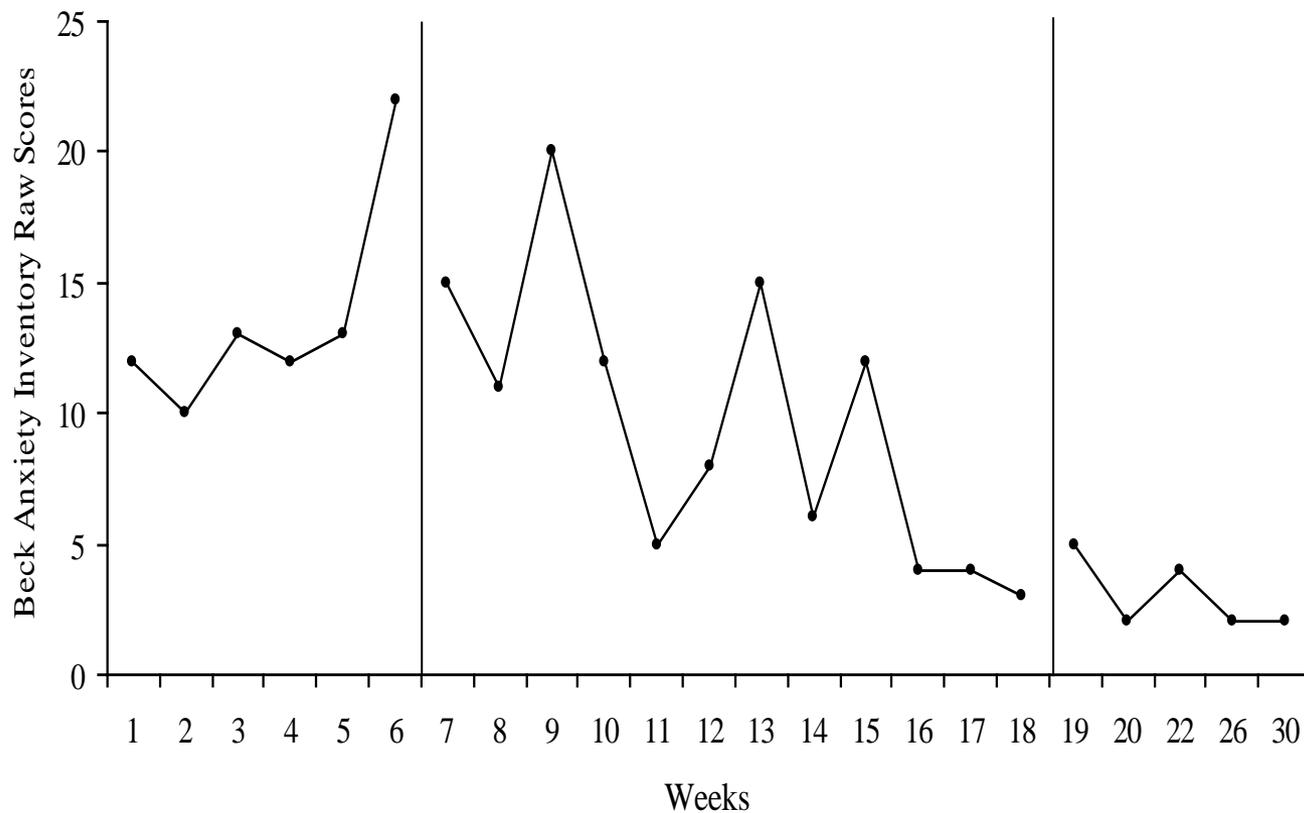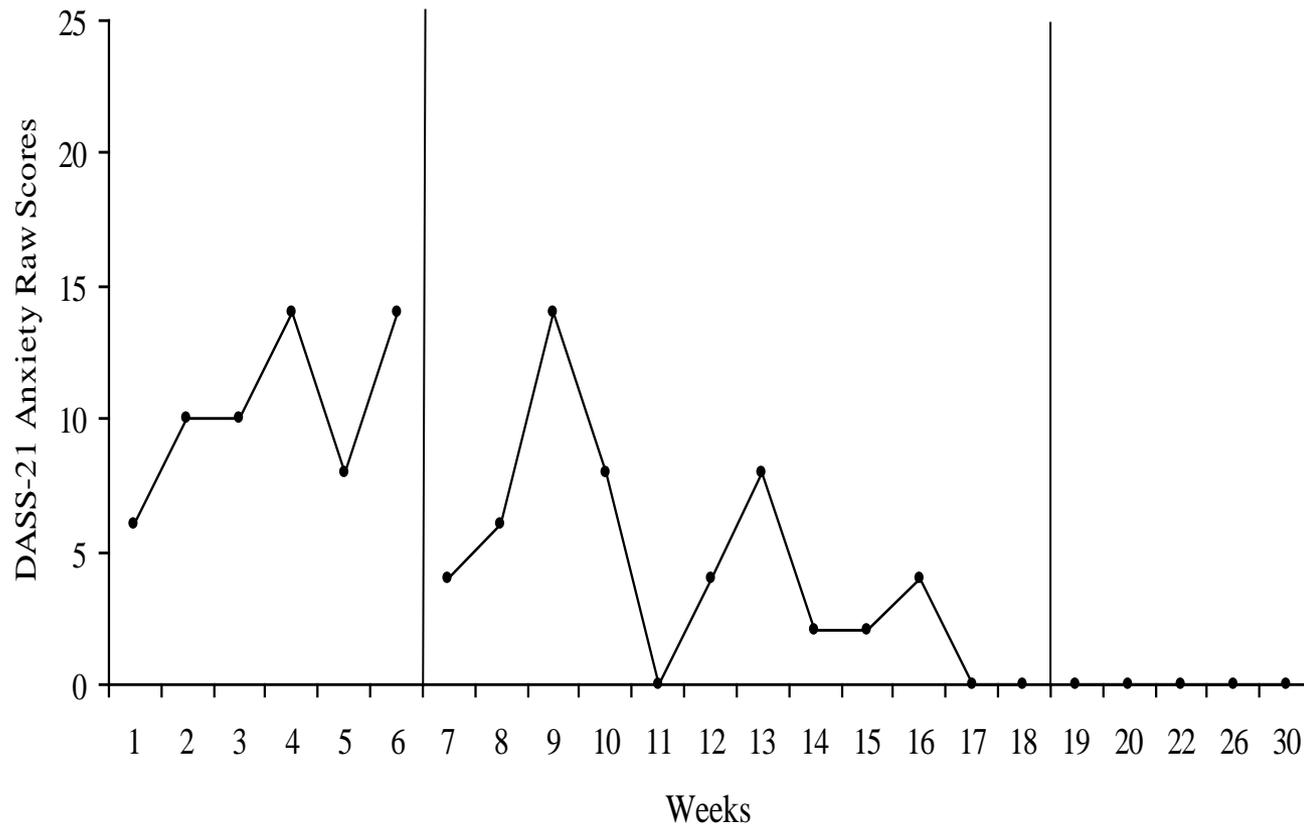
Conclusions

Effective, time efficient, and lasting treatment, yet rarely applied with anxiety

This study showed that increases in activity occurred in the context of concurrent decreases in reported anxiety and stress

In these cases, no need for adjunctive techniques

The treatment model matches the underlying principles of behavior