



Hodgson, Bellchambers & Spicer

**EVALUATION OF THE INST. OF
APPLIED BEHAVIOUR ANALYSIS'
(IABA) COMPETENCY BASED
TRAINING PROGRAM (CBT)**



**An Evaluation of the IABA
Competency Based Training
(CBT) Programme**

Matthew Spicer, (Anglicare Tasmania Inc.)
Charley Hodgson, (Lifestyle Solutions)
Rob Bellchambers, (Anglicare Tasmania Inc.)



Warning: Acronyms!

- IABA: Institute of Applied Behaviour Analysis
- CBT: Competency Based Training
- ISS: Intensive Support Service



Presentation Overview

- ISS Context, Service and Clients
- The Rationale for the CBT
- The IABA CBT Package Explained
- Method
 - Customisation and Mapping
 - Training Delivery – Time, Partnerships
 - Evaluation
- Findings



The rationale for the CBT...

Focus: complex and exceptional needs.



Types of Behaviour of Concern

- Complex Health Issues
- Suicide
- Aggression
- Property Damage
- Outburst
- Offending Behaviour
- Self Harm
- Drug Use
- Promiscuity
- Mental Health Problems



The rationale for the CBT (cont...)

- Improve QOL
- Keep Staff Safe
- Support LTM change based on skills development
- Both Plan Writers and Plan Implementers are not usually very good at teaching new skills!
- Collaboration between writers and implementers is often poor.
- If things go wrong then blame the support the support worker.



The CBT

- A self-instructional training course for the certification of staff working with people challenged by developmental disabilities
 - 16 Topics
 - 73+ Competencies
 - 130 Criteria
 - 4 Books
 - 2 DVDs
 - Facilitator's Manual
 - Tests and Answers for Each Topic



The CBT –Topics (modules)

1. Orientation
2. Administrative Requirements
3. Normalisation
4. Ethical Issues
5. Public Relations
6. Managing Client Records
7. Basic Principles of Behaviour
8. Instructional Strategies
9. Positive Reinforcement
10. Data Recording
11. Behaviour Assessment Report and Intervention Plan
12. Positive Programming
13. Reducing Behaviour Problems
14. Evaluation and Troubleshooting
15. Generalisation and Maintenance



The CBT: (Sample 1)

Topic 7 Basic Principles of Behaviour.

- Competency 7.3: Is able to identify and define consequential operations.
- Criterion 7.3a: Trainee correctly defines the following items: positive reinforcement, negative reinforcement, recovery from punishment, punishment I, punishment II, extinction.



The CBT: (Sample question 1)

a. Please check one choice under each number to correctly describe each of the following behavioural procedures.

- Positive Reinforcement
 1. contingent upon a behaviour occurring:
 - event is presented
 - event is terminated
 - nothing happens
 2. the procedure results in:
 - an increase in the behaviour
 - a decrease in the behaviour
- Negative Reinforcement
 1. contingent upon a behaviour occurring:
 - event is presented
 - event is terminated
 - nothing happens
 2. the procedure results in:
 - an increase in the behaviour
 - a decrease in the behaviour



The CBT – (Sample 2)

Topic 8: Instructional Strategies

- Competency 8.1: Identifies and distinguishes between the instructional strategies of shaping and chaining (forward, backward, global).
- Criterion 8.1a: Trainee scores 85% on an objective test on shaping and chaining (forward, backward and global).



The CBT: (Sample question 2)

Match the following instructional strategies with their definitions; then for each vignette, state what strategy is described.

_____ Shaping	1.	Teaching a sequence of behaviours by starting with the last step until it is learned, then the second to last, etc.
_____ Forward Chaining	2.	Teaching a sequence of behaviours by starting with mastery of the first step.
_____ Backward Chaining	3.	Teaching a sequence of behaviours by starting with mastery of the easiest steps first.
_____ Global Chaining	4.	Process of differentially reinforcing successive approximations (small steps) toward the desired level of behaviour until it is fully achieved.
	5.	Teaching a sequence of behaviours by starting with the most difficult step.

Method

- Method
 - Customisation and Mapping
 - Training Delivery
 - Time
 - Format
 - Partnerships
 - Evaluation

Recognition: Mapping and validation.

- Customised Courseware.
- Recognition:
 - Mapping.
 - Benchmarking validation (Australian Quality Training Framework Standards, 2007).
 - External Validation: Consensus reliability check
 - Moderation: comes with standardised answers



Training Process

- Methodology:
 - Participants baseline commencement (n=26)
 - Repeated measure module 15.
 - Follow up test...after 3 months (n = 20)
 - Fortnightly classroom sessions of 3 1/2hrs
- Partnerships



Evaluation

- Evaluation Methodology:
 - Qualitative approaches: do people believe this has been beneficial?
 - Quantitative approaches: can we measure the effectiveness of this training (numerically)?



Qualitative outcomes

- Written feedback from:
 - Support Workers, Supervisors and Service Managers
 - Regarding the Acceptance and Usefulness of the CBT: in terms of its content and delivery methods.



Quantitative outcomes

- Scales:
 - The Challenging Behaviour Attributions Scale (CHABA), (Hastings, 1997)
 - Emotional Reactions to Challenging Behaviour scales. (Mitchell & Hastings, 1998)
 - Difficult Behaviour Self-Efficacy scale. (Hastings & Brown, 2002)



Findings

Qualitative Outcomes

Acceptability: Outcomes for Participants.

- *Non aversive strategies.*
 - "...it (the CBT) clarified some issues: "withdrawal of privileges" (punishment)". (NWRSS Worker)
 - "...my ethics continue to develop as the training continues (in regards to why punishment does not work)". (Optia Worker)

Acceptability : Outcomes for Participants.

■ *Functional analysis.*

- “...it reminded me not to be judgemental” (Anglicare Worker)
- “...some topics opened my eyes to *why* people we support have behaviours and *how* to respond” (Optia Worker)
- “...I enjoyed it...I now realise there is a reason for behaviour” (NWRSS Worker)
- “...I really enjoyed topic ten (data recording)” (Optia Worker)



Acceptability : Outcomes for Participants.

■ *Quality*

- “...having done the training I want to change things for the people I support so that they can have meaningful and quality life” (Optia Worker)
- “...it was helpful in (assisting me to) understand what we can do to improve the quality of life of the people we support” (Anglicare Worker)
- “...I can't wait to implement all that we have learnt” (Lifestyle Solutions Worker)



Acceptability : Outcomes for Participants.

■ *Quality*

- “it certainly opened my outlook as to the many barriers that the people we support can face”
(Lifestyle Solutions)



Feedback on delivery...

- “...the training has been beneficial done as a group”
(NWRSS Worker)
- “...gained a lot from the sessions, which could be put in practice” *(Optia Worker)*
- “...role play was very helpful” *(Anglicare Worker)*
- “..had great discussions about the topics which has helped me absorb the information and gain new skills”
(Lifestyle Solutions Worker)



Feedback on delivery...

- “the discussions we have had in relation to the topics have helped me absorb the information and gain new skills” (*Lifestyle Solutions*)
- “it has improved my skills in my other job” (*Lifestyle Solutions*)



Feedback on delivery... (Supervisors)

- “...beneficial for unpacking and practicing appropriate ways in which to interact with the public when there were incidents” (Kerryanne Aherne, Client Services Manager: ISS, Anglicare Tasmania)
- “...significant benefits of group discussions and role play” (Wendy Witzerman, Client Services Manager: , Anglicare Tasmania)
- “...opportunities to share learning...support collaboration, building camaraderie...supports the times when we have to share staff...they are all on the same page” (Leanne Aulich, NWRSS)



Feedback from Service Managers (Content)

- "...staff are responding to opportunities for full inclusion of the people we support across all our programs...and PSR's have shown an increase in accurate data collection, focusing on target behaviour...and staff now understand the language...they understand the interventions and can support implementation" (Grant Munday, Program Co-ordinator, LWB)
- "...the training should result in a higher skilled and motivated work force..." (Jennie Gamble, Area Manager, Anglicare Tasmania).
- "...staff understand what's behind behaviours...this instills confidence" (Leanne Aulich, NWRSS)



Acceptability : Delivery (CEO's)

- "... (there is a) realisation that we all experience similar challenges... there is benefit in the cross fertilisation of experiences, the sharing of ideas, strategies and solutions, fostering informal networking and alliances...and...building capacity and morale" (Geraldine Harwood, CEO, Optia Inc.)
- "...this training might raise the bar"
(Neal Rodwell, General Manager, NWRSS)



Qualitative outcomes (Acceptability)

- Content themes and learning trends:
 - Non aversive strategies.
 - Functional analysis.
 - Quality
- Delivery.
- Feedback from:
 - Frontline Supervisors/Programme Co-ordinators
 - Service Managers/CEO's



Quantitative Outcomes

Comparison with literature....CHABA

Study	LB	PE	EM	BM	ST
1	0.53	0.08	0.60	-0.09	0.52
2	1.05	0.3	1.1	0.60	0.3
3	0.98	0.39	0.91	0.44	0.48
4	1.12 (1.42)	0.81 (1.13)	1.13 (1.33)	0.62 (0.96)	0.75 (1.08)
5	1.03 (1.38)	0.69	1.12	0.69	0.49

1 - Hastings, (1997) - 90 staff working with people with ID – mean experience 7.7 years

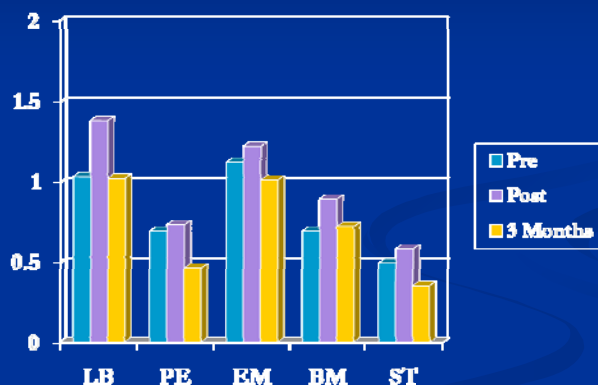
2 - Smidt, Baladin, Reed & Sigafoos (2006) – a communication training package with 18 staff experience ranged from a few weeks to 30 plus years

3 - Tierney, Quinlan & Hastings (2006) tested 48 staff, (mean experience 7.58 years) before and 3 months after a 3 day CB training course

4 - Lowe et al (2007) tested 122 nurse and nurse aides (mean experience 12.7 years) before, straight after and 1 year after completion of a 10 day 80 hour Positive Behavioural Support training course.



The CHABA scores after 3 months



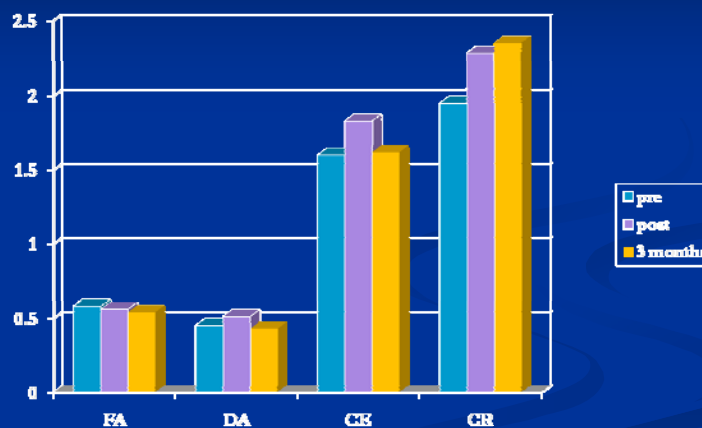
Comparison with literature.... Emotional Reactions to CB

Study	FA	DA	CE	CR
1	0.67	0.69	n/a	n/a
2	0.80	0.70	0.19	1.77
3	0.96	0.77	n/a	n/a
4	0.98	0.87	n/a	n/a
5	0.58	0.45	1.60	1.95

- 1 – Mitchell & Hastings, (1998) – tested 83 staff who worked with people with ID (mean experience 5.7 years)
 2 - Jones & Hastings (2003) – showed 123 staff a video of someone engaging in self injurious behaviour (mean experience 4.0 years)
 3 - Tierney, Quinlan & Hastings (2006) tested 48 staff, (mean experience 7.58 years) before and 3 months after a 3 day CB training course
 4 – Lowe et al (2007) tested 122 nurse and nurse aides (mean experience 12.7 years) before, straight after and 1 year after completion of a 10 day 80 hour Positive Behavioural Support training course.



Emotional Reactions scores after 3 months



Comparison with literature.... Self Efficacy

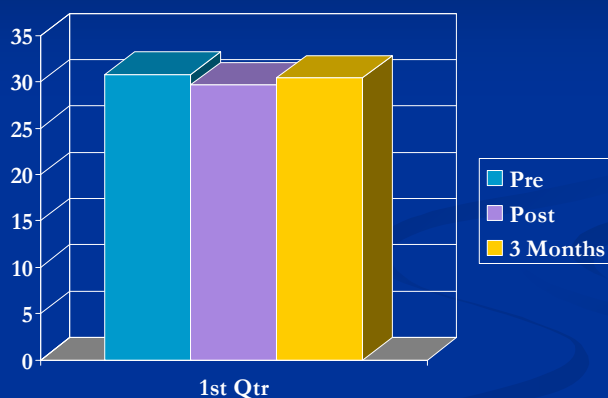
Study	SE (pre)	SE (post)
1	23.0	25.8 (sig)
2	25.1	26.2 (sig)
3	30.8	29.7 (ns)

1 –Tierney, Quinlan & Hastings (2006) tested 48 staff, (mean experience 7.58 years) before and 3 months after a 3 day CB training course

2 – Lowe et al (2007) tested 122 nurse and nurse aides (mean experience 12.7 years) before, straight after and 1 year after completion of a 10 day 80 hour Positive Behavioural Support training course.



Self-Efficacy scores after 3 months



What does it all mean ?

- ISS staff have outstanding baseline scores which were maintained
 - Low Fear/Anxiety, Low Depression/Anger
 - High Cheerful/Excited, High Confident/Relaxed
- Staff enjoyed and benefited from group work
- Resolved Support Worker 'Isolation'
- Developed Cross Organisational Supports



What does it all mean (cont...)?

- Assisted Learning and Application of skills
 - Train and Maintain
- Improved quality of skills teaching to clients
- Not only decrease in behaviours of concern BUT also (anecdotally) increase in QOL activities



Where to from here?

- Continue collaboration with ISS organisations
- Improve CBT based on feedback;
 - Simplify text!
 - Shorten the content.
 - More practical context
- Further evaluation with larger numbers
- Develop measures of staff behaviour
- Link Training to Outcome Data of the People we Support



Contact Details

Charley Hodgson

Matthew Spicer

charley.hodgson@ls.org.au

m.spicer@anglicare-tas.org.au

