

# Using ACT with the cognitively inflexible

A case study

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# What's the point of a case study?

- To illustrate why ACT might be useful for someone with a brain injury
- To present some ideas about ways it can be used and modified for someone with cognitive difficulties including poor cognitive flexibility
- To think about whether these modifications change the essence of ACT
- To consider some of the challenges of using ACT with those with cognitive impairment
- To use as a springboard for ideas for empirical studies with  $N > 1$

# Case study: Sean

- ◉ 40 year old male
- ◉ Involved in pedestrian vs train accident in December 2006
- ◉ Sustained severe traumatic brain injury
- ◉ Occipital & right parietal lobe lesions
- ◉ Inpatient rehabilitation for 6 weeks post-injury

# History

- Employed as postal worker
- Previously began business/finance degree but did not complete
- Long history of depression including previous suicide attempts
- Strong family history of depression
- Previous treatment with antidepressants and counselling
- Heavy alcohol use since early 20s

# Presenting features

## ○ Psychological:

- > Depression - anhedonia, passive suicidal ideation, worthlessness, hopelessness
- > Highly self-critical, entrenched beliefs of “I’m stupid/worthless” and “Everything I do will fail”
- > Strengths - empathic, reliable, motivated to change, supportive sister & close friends

# Presenting features

## ○ Cognitive:

### > Strengths:

- Verbal communication skills
- Verbal learning ability
- Verbal abstract reasoning

### > Weaknesses:

- Visuospatial skills
- Visual memory
- Slowed speed of information processing
- **Cognitive flexibility**
- **Idea generation**
- Problem solving skills

# A snapshot from 2007

- Neuropsychological assessment to guide rehabilitation, esp. education/training goals
- Psychoeducation
- Tried CBT, with limited success
  - > Thought diaries
  - > Did not believe “helpful” thoughts
- Then decided to try ACT

# Why try ACT?

- Behavioural focus of intervention
- Cultivation of mindful acceptance of difficult experiences
- Focus on values as a guide for generating goals & activities, while taking into account cognitive (& physical) limitations
- No requirement to dispute irrational or unhelpful thoughts



# Potential challenges

- Cognitive requirements of ACT include:
  - > Learning and memory
  - > High-level language comprehension and expression
  - > Abstract reasoning / metacognition
  - > **Cognitive flexibility**
  - > **Idea generation**

# Outcomes: 2007-08

- Almost all goals achieved
- Reduction in subjective mood ratings
  - > BDI-II reduced from moderate to mild range
- Valued Living Questionnaire – “education/training” category self-rated success:
  - > 0/10 at beginning
  - > 7/10 at end of treatment

# Presenting issues: 2012

- Significant decline in mood over past 12-18 months
  - > Anhedonia
  - > Feelings of worthlessness and hopelessness
- Increased suicidal ideation, including one near-attempt
- Recurring of stories:
  - > “It’s too late for me”
  - > “I’ve done nothing with my life”
  - > “I’m stupid/ugly/blue collar trash”

# Presenting issues: 2012

- Precipitating factors:
  - > Finished drug & alcohol counselling course with excellent marks, however was not able to do a clinical placement
  - > Unable to find volunteer work
  - > Sister and her husband (main supports) going through very difficult time
  - > Negative experiences when meeting new women, particularly relating to perceived judgment of his occupation

# Goals for therapy: 2012

- Reduce drinking (currently up to ½ slab of beer most days)
- Find weekend volunteer work, preferably in drug and alcohol field
- Look actively for a relationship
- Find at least one new interest/recreational activity

# Therapeutic strategies: ACT

## ◉ **Acceptance**

- > Demons on the boat metaphor

## ◉ **Defusion** techniques

- > Naming the story
- > “I’m having the thought that...”
- > “This an unhelpful thought that hasn’t gotten me anywhere in the past”

## ◉ **Contact with the present moment**

- > Quotes by Tolstoy, Russ Harris – “there is only now”
- > Mindfulness during daily activities

## ◉ **Self-as-context**

- > Good chair/bad chair metaphor
- > Thinking of his story as if it was someone else

# Therapeutic strategies: ACT

## ○ Values

- > Valued Living Questionnaire, frequent review of valued living
- > Is the activity I'm contemplating consistent with my values?

## ○ Committed action

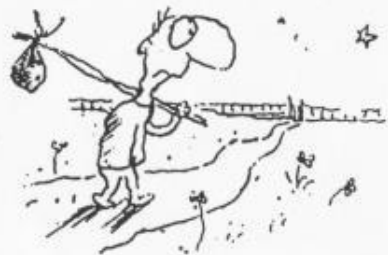
- > Short term goals in line with values
- > Homework exercises between every session

# Modifications: General

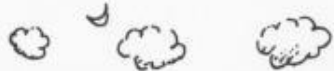
- Frequent repetition and consolidation of concepts and strategies
- Frequent sessions to begin with, then gradually further apart
- Regular booster/maintenance sessions
- Use of visual/written aids/worksheets



Go to the end of the path until you get to the gate.

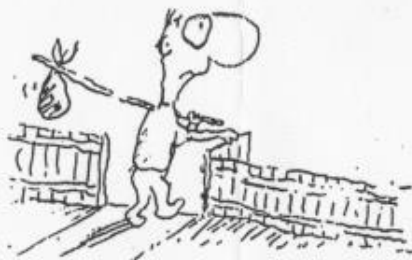


Sit down and have a rest every now and again.



## HOW TO GET THERE

Go through the gate and head straight out towards the horizon.



But keep on going.  
Just keep on with it.



Keep going towards the horizon.



Keep on going as far as you can.  
That's how you get there.



# Modifications: ACT

- Increased emphasis on behavioural aspects of therapy
- Limited use of mindfulness exercises
- Reduced focus on self-as-context
- Focus on 2-3 most useful defusion techniques
- Assistance with generating ideas for committed actions/goals in line with values
- Some assistance with skills, e.g., social communication

# Writing samples: 2013

“When I think ‘I wish I could have my time over again, I would do everything differently’, I must remind myself that the past is the past and can’t be changed, but I can take action now to create a better future.”

“I make room for the feelings of boredom that not drinking can cause...Drinking can lessen feelings of depression in the short term, but I make room for more unhappy feelings short term as I know I will feel better long term.”

# Outcomes: 2013 so far

- 4/4 (100%) goals achieved
- Reduction in subjective mood ratings:

|                          | October 2012          | June 2013     |
|--------------------------|-----------------------|---------------|
| <b>BDI-II</b>            | 25 (moderate)         | 14 (mild)     |
| <b>DASS – Depression</b> | 36 (extremely severe) | 18 (moderate) |
| <b>DASS – Anxiety</b>    | 4 (normal)            | 3 (normal)    |
| <b>DASS – Stress</b>     | 4 (normal)            | 13 (normal)   |

# Outcomes: 2013 so far

- Valued Living Questionnaire:

|                                | October 2012                             | June 2013                                |
|--------------------------------|--|--|
| Couple relations               | Importance 7/10<br>Success 3.5/10        | Importance 10/10<br>Success 2/10* (5/10) |
| Recreation/fun                 | Importance 8/10<br><b>Success 0/10</b>   | Importance 8/10<br><b>Success 5/10</b>   |
| Citizenship/commu<br>nity life | Importance 7/10<br><b>Success 3.5/10</b> | Importance 8/10<br><b>Success 8/10</b>   |
| Physical wellbeing             | Importance 10/10<br>Success 5/10         | Importance 10/10<br>Success 5/10         |

- Acceptance and Action Questionnaire (AAQ-II):
  - > Total score = 39

# Conclusions

- ACT is a potentially useful framework for dealing with the difficult life changes that occur following brain injury:
  - > Teaching skills to encourage attitude of acceptance towards difficult experiences
  - > Focus on values as a guide for therapy/life goals
- But usually requires modification to account for cognitive difficulties associated with ABI
- Not suitable for all clients with ABI, particularly those with poor verbal skills/abstract thinking
- Empirical investigation in ABI should focus on which ACT processes work and for whom