The Utility of ACT in Enhancing Psychological Flexibility for Individuals with Acquired Brain Injuries (ABI)

Maria Kangas, Ph.D.

Centre for Emotional Health,
Department of Psychology, Macquarie University, Australia

Acquired Brain Injuries: ABIs

- Due to medical conditions or disease
  - e.g., brain tumours, stroke
- Accidents or assaults – inc. Traumatic Brain Injuries (TBIs)
- Degenerative disorders
  - Alzheimer's disease, dementias, MS
- Per annum, thousands worldwide sustain an ABI
  - Approx. two-thirds sustain mild-to-moderate injuries → good prognosis

ABIs & Psychological Problems

- ~ 40% of ABI patients - anxiety and/or depression
  - hindering physical, functional and social well-being.
- Cognitive behavioural therapies (CBT)
  - growing evidence-base post-ABIs
- However, mixed findings have emerged – **Why?**

Potential Limits of CT - CR

- Cognitive Restructuring (CR) – core component of CT/ CBT
  - identifying, evaluating, challenging/disputing & replacing negative, dysfunctional thoughts
- CR may be approached as an ***intellectual exercise*** devoid of personal significance/ relevancy.
  - E.g., client 'Jenny' - 6 weeks post-CBT primarily using CR:

'feeling worse in herself and more defensive in response to the specific CBT intervention' noting *'I get it but I just don't feel it'*

[Ashworth, Gracey, & Gilbert, 2011].

CR vs. ACT

- CR – contra-indicated in coming to terms with negative appraisals grounded in reality of self & lifestyle changes

- **ACT – may have utility for distressed ABI patients:**

  1) Focus on improving ***functionality*** vs. symptom reduction per se.

  2) adheres to a health vs. illness model
     - emotional upheaval inevitable, universal experience

  3) Learning/Re-learning value-based 'active' living

ACT & ABI

- Focus: resume living a valued life, accepting limitations inc. physical & neurological deficits & ***enhancing psychological flexibility.***

- **Applying ACT model to persons with ABI: HOW?**

  - Although paucity of RCTs – emerging studies

  - E.g., Pilot case-series: Distressed adult brain tumour (BT) survivors *(Kangas & McDonald)*

    - 8 individual x 90 minute sessions over 10 weeks [6 consec. weeks & 2 fortnightly f/up sessions]

Case Presentation: 'Luke'

- Middle aged male – right hemisphere brain tumour (BT)
- Referred 2.3 years post-diagnosis & post-craniotomy plus 20 sessions of fractionated radiotherapy
- Met criteria for depression (severe range) & comorbid anxiety
- Quality of life scores were low (> 3 SD below mean)
- Low community integration
- Low acceptance /psy. flexibility & high experiential avoidance
- Cognitive & executive skills: Below average - average range
  - BUT – pre-BT: high functioning executive role.
  - *Not working at referral*

Application of 6 Core Elements

- Non-linear & dynamic – although start with acceptance
- Modifications – ***'tiered' approach*** contingent on:
  - Severity of ABI - mild to moderate to more severe
  - Prognosis – recovery & 'real' risk of further decline
  - Pacing of material & sessions (e.g., concentration & fatigue)
  - Simplifying 'standard' components/ exercises & increased collaborative demonstration/practice vs. 'meta-cognitive' counselling
  - Client resources – CDs (verbal/visual) vs. sole written aids

(1) Acceptance

- ★ Both positive & negative feelings & thoughts, particularly for events & circumstances one has no control or cannot change
- ★ BT – normalize & validate experience *'BT-patient-survivor journey'*
  - ➢ acceptance of BT – lingering side-effects
  - ➢ living with uncertainty – real risk of progression
- ★ ***Approaches:***

  i) Dissecting the problem – struggles, avoidance & control strategies - inc. costs to self & QOL

  ii) Willingness & acceptance towards valued living – metaphor aids

  iii) Sitting mindfulness exercise

(2) Cognitive Defusion

- ★ Alter undesirable function of appraisals (vs. changing form & frequency)
- ★ BT Triggers: rumination, absorption, 'hooking-in', anticipatory fear
  - ➢ anniversaries – diagnosis, medical check-ups, side-effects flare-up
- ★ **Approaches:**

  **NB: Meta-cognitive component – variable modifications beyond mild ABIs*
  Clients can be too literal (e.g., alliteration exercises – depressed thought)

  i) Illusion of control exercises

  ii) Interactive metaphor – clipboard activities *(adapted from R.Harris)*

  iii) Mindfulness exercise extended yet BT specific

(3) Present in Here & Now

★ Interacting with one's experience & environment in non-judgmental manner

★ BT: Shifting from being 'stuck in past' – why me?
Also unhooking from future-oriented fears – what if?

➢ life encompasses more than just one's 'BT (ABI) experience'

★ **Approaches:**

i) Extending mindfulness practice – simplifying 'curious scientist'

ii) Initiating value-based goals & activities
('put on hold' since ABI/BT experience)
➢ Activity Scheduling – enhance pleasure & mastery
– interacts with Values component (#5)

(4) Self-as-Context

★ Differentiating between somatic & psychological experiences vs. essence of self
****NB – This component is more challenging for moderate to severe ABIs*

★ BT: prolonged experience akin to other ABIs
(from initial injury/diagnosis → medical Txs/Rehab
→ Recovery/ongoing rehab)

➢ Sense-of-self : adapting to life-threatening experience
- 'BT patient', 'BT Survivor' etc.

- changes in sense-of-self including loss of sense-of-self

★ **Approaches:**

i) BT is just one aspect of life among many
- extending metaphor work

ii) 'Observer self' adapted

(5) Values- Valued Goals

- ★ Focus on re-identifying valued life goals – taking into account real obstacles
- ★ BT: factoring in physical, somatic and cognitive deficits
  - forced change in family and occupational roles.
- ★ **Approach:**
  - ➢ 'Life Compass' work – 10 broad life domains
    - prioritizing certain domains – personally meaningful
    - For 'Luke': family & work – reconnecting & re-engaging

(6) Committed Action

- ★ Taking effective action consistent with clients valued-goals
  - ➢ conventional behavioural principles & strategies
- ★ **Approaches:**
  - ➢ Graded behavioural exercises, exposure & behavioural activation
    - avoided activities/events – pleasure & mastery
    - reinitiating contact or meaningful conversations with partner
  - ➢ Skills-acquisition/re-acquisition: e.g. volunteer work

Concluding Therapy

- **Follow-up/Booster sessions**
  - consolidation of skills, mindfulness practice & valued-based actions
- ***Anticipating/Planning for future-setbacks***
  - potential for realistic physical decline/progression of disease

Luke's Outcomes

- BT experience – life crisis
  - → impact on employment & social relations
- Treatment gains by 6 weeks
- 10 weeks/ end of BABT Program: No longer symptomatic
- Gains sustained at 3 months FU
- Improvements in social relations, work prospects, & problem-solving skills

Concluding Comments

- Case-series: Promising yet preliminary outcomes → RCTs
- Generalization to other ABI samples
  - inc. more moderate to severe cognitive impairments ...
- One size does not fit all
  - ***therapist psychological flexibility!***

EMAIL: maria.kangas@mq.edu.au