



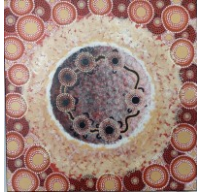
Clinical Training in Acceptance and Commitment Therapy (ACT) for psychological adjustment after traumatic brain injury: ACT

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Acknowledgement of country



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- A/ Prof Grahame Simpson, Director BIRRG
- Sarah Chuah, Project Officer ACT-Adjust
- icare for research funding



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icare



- NSW Government initiative www.icare.nsw.gov.au
- Provide funding for specialist brain injury support services for:
 - icare Lifetime Care participants (those who have an injury as a result of an MVA)
 - PTA > 7days interim participation (2 years) then a review for lifetime care depending on FIM score
 - Workers in the icare Workers Care Program (those who incurred their injury at work)

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Workshop Learning Outcomes



- To develop an understanding of Acceptance and Commitment Therapy
- To understand core ACT-Adjust components
- Develop an understanding of how therapy, in particular ACT-Adjust, has been modified to account for impairments post BI
- Integrate culturally responsive and reflexive practices into your ACT delivery

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Mindfulness exercise





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TBI Sequelae

Physical

Behavioural

Cognitive

Emotional



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Prevalence of psychiatric conditions



- Depression most common 33-40% (Guillamondegui et al., 2011; Jorge et al., 1993)
- Anxiety 18-60% (Bryant et al., 2010; Whelan-Goodinson, Ponsford, Johnston, & Grant, 2009)
- Psychiatric diagnosis received after TBI 48.5 – 49% (Gould, Ponsford, Johnston, & Schönberger, 2011; Valishnavi, Rao, & Fanny, 2009)

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Loss after TBI



Identified as:

- Tangible losses:
 - Physical health, memory problems, employment
- Losses around perception of control e.g. relying on others for care or transport
- Loss around life roles
- Loss of the self and identity – Who am I after my injury?



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Participant Story



The injury has sort of redefined who I am.

Before my accident I was a busy mum and wife. I did a lot of running of the household but I'm also a florist and I'm intensely creative and need that in my life.

After my injury the most impactful thing was the complete and utter change in that I was unable to do even simple tasks and you feel that that's not good enough. I thought that I was behaving in a really weird way and I felt really conscious of that and embarrassed. That stopped me from going back to work and socialising. I was waiting to feel like myself again, and it just didn't happen. My inner voice was one of panic for a very long time.

Maria*, aged 51, TBI from a fall (*not her real name)

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Changes after TBI : Summary



- Overall, after a TBI – a mixed psychological presentation
- Difficult to distinguish between some symptoms of TBI and mental illness, e.g. apathy, poor concentration, memory problems, etc.
- In summary after a TBI
 - Physical changes are easy to see
 - Cognitive, behavioural and emotional changes can be more subtle

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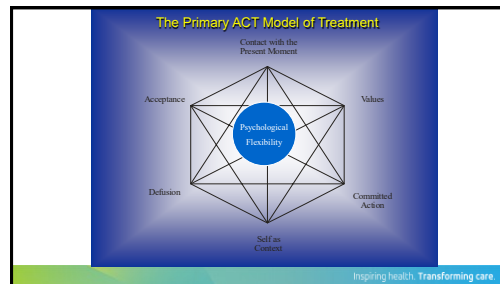
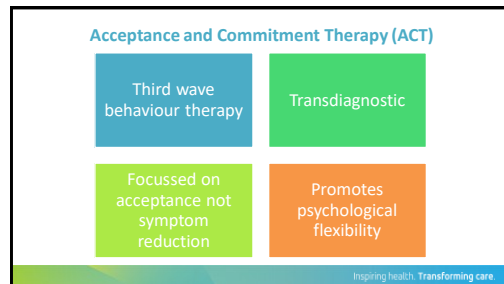
Compensatory Strategies used in Therapy after TBI





- Therapeutic education and formulation specific to BI and in the context with pre injury history
- Attention, Concentration, Alertness and Fatigue
- Communication
- Memory and learning
- Executive functioning, abstract reasoning, generativity and problem solving

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[illegible]

Latest review

CBT showed moderate effects on reducing anxiety, depression and suicidality and small effects on sleep disorders.

ACT on the basis of 2 clinical trials, demonstrated small to moderate effects on depression, anxiety and overall distress

Does not include the latest RCT

Neuropsychological Rehabilitation

An International Journal

ISSN: 0960-2809 (Print) 1464-0804 (Online) Journal homepage: www.tandfonline.com/loi/ncrj20

Psychosocial interventions for mental health difficulties following moderate-to-severe traumatic brain injury: A systematic review and meta-analysis

Sarah Carrier, Dana Wong, Holly Emery, Paul Gertler, Grahame K. Simpson, Olivia Zuber, Tamara Owensworth, Skye McDonald, Jacinta Douglas, Travis Vissane, and Cynthia Hensen & On behalf of the Guideline Development Group (Full list of members available here <https://osf.io/guqul/files/7wfluc>)

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Broader ABI literature

- A number of studies in stroke including case studies and two group based (Majumdar & Morris, 2019; Niu et al., 2022)
- A recent scoping review of outcome measures indicated n=54 studies covering case studies, single case experimental design and RCTs (n=22 not all completed) across multiple sclerosis, stroke, traumatic brain injury, spinal cord injury, Parkinson's disease and epilepsy as well as a range of neurological conditions (Forte et al., 2022).
- Recent systematic review (Han, Wilroy & Yuen, 2023): 24 RCTs (1 Australia, 3 UK) covering MS, Fibromyalgia, TBI, Epilepsy, Stroke, diabetic related pain. ACT had medium-to-large effects in the immediate post-test and follow-up on reducing depressive symptoms, anxiety, pain intensity, and perceived functional impairment and improving quality of life and acceptance in individuals with neurological disorders.

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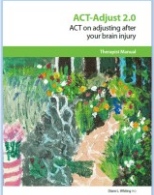
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ACT-Adjust 2.0

Act on adjusting after your brain injury



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Development of ACT-Adjust

- Initially developed in 2009
- Tested in an RCT (published 2020) between 2011 – 2014
- Original version delivered in dyads (group format), consisted of 7 sessions
- Modified in 2019 by panel of psychologists to individualised treatment, eHealth compatible, increased to 9 sessions
- Current version ACT-Adjust 2.0
 - Session length 1-1.5 hours,
 - 9 sessions delivered weekly with 2 relapse prevention (sessions 8 & 9)
 - Introduction of the GAS to assist with committed action

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Techniques to account for cognitive impairments

- Using a client workbook
- Therapist facilitates completion of workbook by writing the client's ideas on the whiteboard or notes page of computer – client copies into book
- Between session practice of activities with text reminders
- Mindfulness exercises recorded on client's phone
- Experiential exercises as concrete as possible
- Sessions interspersed with didactic and experiential exercises
- Session material repeated at beginning of next session
- Session 8 (2 week break) & 9 (4 week break) reviews program content (relapse prevention)



ACT-Adjust 2.0
ACT workbook for older and younger adults
Workbook

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ACT-Adjust 2.0 – session content (page 11)

Session	Content
1	Introduction to program Confronting the agenda
2	Control is the problem
3	Acceptance and defusion
4	The observing self
5	Mindfulness
6	Values
7	Goal setting and committed action
8	Review and relapse prevention
9	Review and relapse prevention



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Session structure

Administer any outcome measures (e.g. DASS-21 and/or AAQ-ABI [p. 105 therapist manual, p.57 workbook])

Mindfulness activity

Review and rate home tasks (session 2-9)

Review previous session

Main content (components of the Hexaflex)

Set & discuss home task (sessions 1-8)

Rate motivation and confidence on home task (e.g. p 28 therapist manual or at session end workbook)

Negotiate next session

Optional: Administer any outcome measures e.g. Session Rating Scale

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Psychiatrist

Dr. David Clark

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Session one – Confronting the agenda (Therapist manual p. 9)

- 1. Education about the program and content
- 2. Ground rules (therapy guidelines)
- 3. Reasons for attending therapy
- 4. Introduces the concept of
 - 1. mindfulness
 - 2. practising exercises at home (home tasks)

Psychiatrist

Dr. David Clark

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Event	Feelings	Thoughts Self Evaluation	What I've Done to Feel Better Reinforcing

Home task rating scale (workbook p 15, manual p 28)



- Rating scale to assess confidence and motivation toward home task
- Rate success the following week
- Identify barriers, tick box provided to assist with generativity
- Open space for client to write more detailed barriers e.g. my mum died during the week

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Home Task Rating Sheet

Week 1



Date: _____

Part A

After discussing the home task please answer the first two questions:

How confident are you about your ability to complete the home task	1 Not at all	2	3 Moderately	4	5 Totally
How motivated are you to complete the home task	1 Not at all	2	3 Moderately	4	5 Totally

Part B

Thinking about your home task over the past week:

Are you satisfied with your performance on your home task	1 Not at all	2	3 Moderately	4	5 Totally
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Thinking about your home task over the past week:

Are you satisfied with your performance on your home task

1 Not at all	2	3 Moderately	4	5 Totally
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Barriers to completing your home task please tick as many which apply:

Forgot

Too busy

Home task too hard or didn't understand

Didn't want to do it

Seemed pointless or not relevant

Any other reason for not completing your home task, please state:

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1 0

Strategies to improve homework adherence

POPHAR CONTACT

Healthcare Professionals

- Predictors of homework adherence in TBI (Zelenich et al. 2020)
 - Older client, longer time since injury, therapist competence in assigning and reviewing homework, strength of working alliance all associated with stronger homework engagement.
- Strategies we use in ACT-Adjust
 - Text message reminders, using phone to record mindfulness exercises, homework rating scale, motivational techniques, consistent reviewing of homework tasks
- Anecdotally
 - Some clients just don't seem to do the homework regardless of all these strategies

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ACT-Adjust 2.0 – session content (page 11)

POPHAR CONTACT

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Session 2: Control is the Problem

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Healthcare Professionals

- Session focusses on education about using ways to control our feelings and thoughts
- Explores workability again (repetition of concept from Session 1)
- Introduces Acceptance
- Introduces the concept of Valued Action

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1 1

Internal and external sources of control (Page 32-33 Manual)





In life we are taught to control things and problem solve

Experiential exercise:

Walk to the back/side of the room while telling yourself you can't walk to the back of the room.

Discuss

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Pros and Cons of exercise with clients



- Pros
 - Making a construct more concrete
 - Introducing break by getting the client to get up and move around
- Cons
 - If the client has physical limitations

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Control is the problem (Session Two)



- Chocolate Cake exercise (Page 32-33 Therapist Manual)

Suppose I tell you right now that I don't want you to think about something. I'm going to tell you what it is very soon. And when I do, don't think it even for a second. Here it comes. Remember, don't think of it. Don't think of ... warm chocolate cake! You know how it smells when it first comes out of the oven ... Don't think of it! The taste of the chocolate icing when you bite into the first warm piece ... Don't think of it! As the warm moist piece crumbles and crumbs fall to the plate ... Don't think of it! It's very important; don't think about any of it!"





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What to do when metaphors go wrong



Try to explain the metaphor and rationale to the client

Try another metaphor to illustrate your point

Modify the metaphor so it is clearer to the client

Reflect on your delivery of the metaphor

Move on to the next section



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Benefits of using Metaphors with TBI clients





- Creates a richer context for the client
- Assists in improving retention
- We can modify the metaphor to be meaningful for the client and applicability to their culture
- Information is presented using multiple modalities i.e.
 1. Verbal discussion
 2. Visual Imagery
 3. Experientially

(Kangas & McDonald, 2011; Whiting, Deane, Simpson, McLeod, & Garrochi, 2017)

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Activity (approx. 5 minutes)





Chinese Finger Trap (manual p. 35/workbook p. 19)
(workability/ concept of control)

Instructions:

Take out your Chinese finger trap from your bag

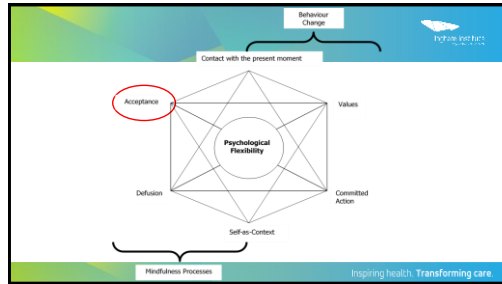
Insert your fingers in either end, you might have to use a finger which fits more snugly

Try to remove your fingers

Discuss experience with the group

Discuss how this tool would be useful with clients who have a TBI

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Session 3 – Acceptance and Defusion (p. 43 Therapist manual)

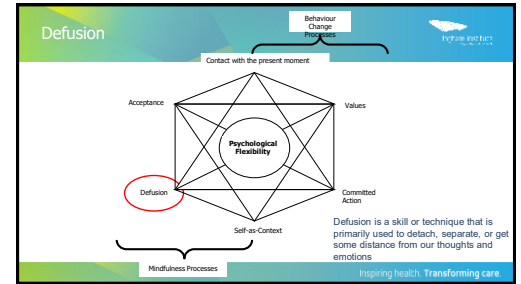
- Understand the concept of Acceptance
- Learn strategies to defuse from difficult emotions or memories

"Instead of being upset about things, or feeling really down, I just go 'okay, that's fine, don't blame yourself for it.' "

Tara* aged 64
* Name changed

Free Breathe Open Let Appreciate Allow Acknowledge Welcome Understand

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Milk, milk, milk (Hayes et al., 2003)



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Physicalise the Thought (p46) (time 20 minutes)



- Role Play

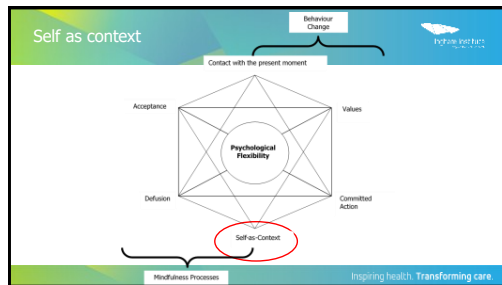
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Session 4: The Observing Self



People are not the content of their thoughts or feelings, but rather are the consciousness; experiencing or observing the thoughts and feelings

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Self as context

- Difficult construct to explain to people with a TBI
- Somewhat abstract
- How do we make it more concrete?

"My brain injury hindered my abilities, and my short-term memory has been affected. There's been an awful lot of things that have changed. I tried really hard only to realise I wasn't the same person as before. There was a lot of self-doubt about every part of my existence." **Ethan*, 44, Sydney, NSW.**

*name has been changed

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Activity – Self as Concept

What are your roles? How do you see yourself? Write below.
The mind creates stereotypes or shortcuts around these descriptions.

Complete the table as you describe your own contextualised self

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Session 1: Mindfulness Self

Handout 1.1

The Contextualised Self

We tend to see ourselves in context, as the story we tell about ourselves.

Such as a parent who is worried about the state of the world, or a worker who is an overachiever, or a person who is a bit of a mess.

How would you describe yourself?

We call this the contextualised self, and it's a very important part of who we are. It's the story we tell about ourselves, and it's the story we tell others about us.

What are your values? How do you see yourself? What makes you who you are?

Bricklayer	Free spirit
Concrete	Introvert
Builder	Good listener
Father	Hard worker
Son	A writer
	Indecisive
	Not smart
	Supportive friend
	Critic





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Chess board Metaphor (p58-59)



Concrete metaphors again – you can use an actual chessboard if you like to reinforce the concept



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Session 5: Present Moment Awareness (p.63 therapist manual)



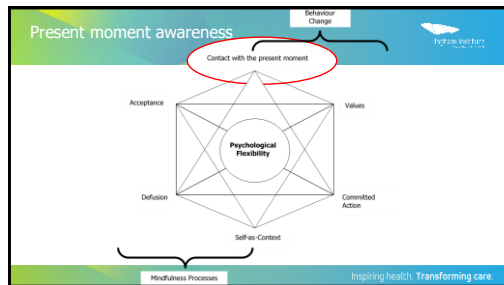
"I had a fair bit of anxiety and the mindfulness helped me clear my mind. Even the first time we did the mindfulness thing – I thought it was like hippies sitting around with crossed legs, humming, but then I thought, well, actually it's pretty cool, to be able to sit and daydream, and starting to think. And your mind wanders, and after a while, I learned to relax and notice the clock ticking, things like that."

Simon*, 53, Hunter, NSW

**Name has been changed*



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Mindfulness

- Education about mindfulness
- Making mindfulness more concrete with an experiential example

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Mindfulness of eating (p 67)

Issues with mindfulness of eating?

- Anosmia
- Swallowing/chewing difficulties
- Don't like the food choice you have provided

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Compensating for cognitive changes

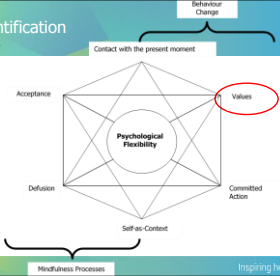


- Mindfulness exercises introduced in first session and woven through the sessions
- Every session begins with a mindfulness activity (repetition)
- Exercises are recorded on phone
- Clients prompted to practice and listen to mindfulness activities between sessions
- This is reviewed at the beginning of each session when homework is rated
- Some mindfulness activities are repeated
- They get longer as the program progresses building tolerance and skill
 - first session 2 minutes, sessions 8 & 9 8-10 minutes

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Values identification
Session 6, p74





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Values after brain injury



- Values identification is an important component of ACT
- Provides the framework for committed action and guiding the establishment of "SMART" goals
- Values create an opportunity to define and personalise goals in relation to client's preferred life directions
- Values serve as a source of motivation.
- Effective adjustment to brain injury can be facilitated by client centred goal planning and attainment, resulting in improved functioning and psychological well-being.

"Since the program finished I've been looking into getting into some work. I'd like to use my experience as a carpenter to get into some teaching work at TAFE. I want to do work that will be fulfilling."

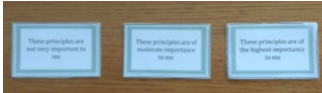
Simon *, 53, Hunter, NSW.*Name has been changed

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Survey of Life Principles – Values Card Sort (p73)

Instructions:
Ask the participant to sort the cards into three piles.
Pile 1: These values are not very important to me
Pile 2: These values are of moderate importance to me
Pile 3: These values are of the highest importance to me

Discard pile 1, shuffle piles 2 & 3 and repeat steps 1-3
From Pile 3 (the highest importance), have the clients identify their top 10 values
Rank them in order
Rate how important that value is in your life at the present time
Rate how well you are acting in accordance to that value



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Card Sort Activity



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Survey of Life Principles



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Pros and cons with Card Sort activity



- Pros
 - Concrete examples of values (principles) provided to client
 - Client doesn't have to generate ideas
- Cons
 - Clients can perseverate on one area and not cover all valued life domains
 - Clients can be overwhelmed by 60 choices
- Alternatives
 - Valued Living Questionnaire (VLQ) (Wilson, Sandoz, Kitchens, & Roberts, 2010) – currently modified by Dana Wong and colleagues in Victoria, initial research (Miller et al., 2022)

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Value	Domain	Number
n=19 participants across 3 timepoints		
Maintaining the safety & security of my loved ones	Security	31
Showing respect for parents & elders	Social Restraint	29
Being honest	Relationships	27
Having relationships involving love & affection	Relationships	25
Being loyal to friends, family and/or my group	Relationships	24
Having genuine and close friends	Relationships	16
Leading a stress-free life	Positive Experiential Control	15
Striving to be a better person	Creative self direction	14
Feeling good about myself	Positive Experiential Control	14
Being safe from danger	Security	14

Significant Birthday exercise (p. 76-77)



- Provides less structure than the Card Sort
- Generates more personal values
- Other metaphors include the Funeral exercise, 80th birthday exercise

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Significant Birthday Exercise

(March 2020, 10x10)

Imagine you are at your birthday party. It is an important one like your 21st, or your 50th or 100th birthday. At your party you can walk around but no-one can see you. You have the opportunity to hear what people are saying about you.

- What would you like to hear?
- What sort of things about you as a person would you want people to be saying?

-
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Committed Action



- Linking values with goals
- Identifying and committing to valued based behaviour
- Implementing the GAS as a measurement tool

GOAL SETTING



"I miss work but I know I can't go back. Now I'm focussing on my physical rehab and looking forward to getting back to golf and fishing."

Clint*, 64, Outer Metropolitan Sydney

(*Not real names)

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Session 7: Committed Action

Yeshiva University
Jewish Education Center

- Linking values with goals
- Identifying and committing to valued based behaviour
- Implementing the GAS as a measurement tool

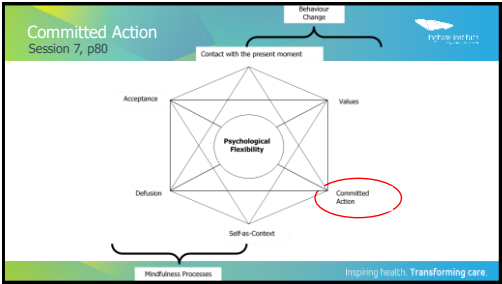
"I miss work & I know I can't go back. Now I'm focussing on my physical rehab and looking forward to getting back to golf and fishing."

Clint*, 64, Outer Metropolitan Sydney
(*not real name)

GOAL SETTING



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Goal Attainment Scale

- Five level scale
- Scored from -2 to +2
 - Much less than expected (-2)
 - Somewhat less than expected (-1)
 - Expected level of outcome (0)
 - Somewhat more than expected (+1)
 - Much more than expected (+2)
- Complete level 0 first

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Goal Attainment Scale

Index	Goal 1	Goal 2	Goal 3
Timeline	2 weeks	2 months	2 years
Level of Measurement			
Much less -2			
More expected			
Somewhat less -1			
More expected			
Expected level 0			
More expected			
Somewhat more +1			
More expected			
Much more +2			
More expected			
Comments			

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Goal Attainment Scale (GAS)		
Value	Having genuine and close friends	
Timeframe	4 weeks	
Level of attainment:	Goal	
Much less than expected (-2)	Didn't happen at all	
Somewhat less than expected (-1)	Organise a meeting with friends but outside the timeframe	
Expected level of outcome (0)	Meet with XX for lunch and/or coffee once	
Somewhat more than expected (+1)	Meet with xx and another friend for coffee once	Fill in first
Much more than expected (+2)	Meet F2F with one friend at least 1 per week	ming care.

GAS evidence



Strengths

- Provides a measure to both client and therapist of goal accomplishment
- Facilitates collaborative goal setting

Limitations

- Requires skill and expertise in developing the 5 levels
- Poor construction of scale may result in poor measurement (Grant & Ponsford, 2014)



Goal Setting using GAS (p84-86)



Break into groups of 2 (30 minutes total – change over after 15 minutes)

- One client, one therapist
- Specify the value you are working towards
- Identify an activity you would like to complete
- Complete GAS chart (just use one goal)
- Swap over
- Bring back to the group and discuss



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Thank you




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