Rehabilitation Psychology

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Outline and aims

Outline

- Understanding the experience of illness and injury
- Background on rehabilitation psychology
- Central themes within rehabilitation psychology

Aims

- Give a flavour for what rehabilitation psychology entails
- Weave in some context through research and clinical examples

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A bit about me…

- Background in health psychology
- Doctoral research
  - Psychological responses to cardiac testing and diagnosis
- Postdoctoral research
  - Human factors
  - Mindfulness in schools
- Clinical training and practice
  - Chronic pain
  - Psycho-oncology

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The experience of illness and injury

- Illness and injury have the potential to be central parts of our lives
- Shift over the last century from infectious illness to chronic illness as major cause of sickness
- Injuries are the fifth leading cause of health loss and the third leading cause of premature mortality (MoH, 2013)
- Likelihood of occurrence of illness and injury increases with age
- Because people now live with illness for many years, psychological adaption and coping have become particularly important considerations

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The perspective of health psychology

- Take a moment to think of a time when you last had a cold
  - What did you notice (e.g. symptoms)?
  - How did you feel?
  - What did you think?
  - What did you do?
  - What might you do next time you get a cold?

- Even for a very minor common illness it is:
  - quite a complex process!
  - involves an important psychological component

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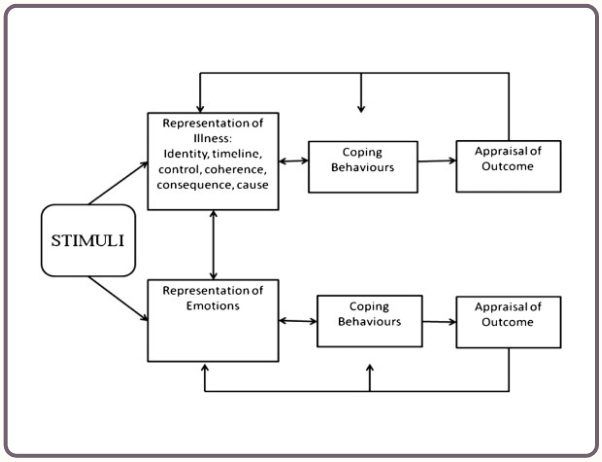
The common-sense model of self-regulation
(Leventhal et al., 1997)



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Illness Representations

Identity
- Label or interpretation of what symptoms mean
- The symmetry rule: label-symptom match

Cause
- Belief as to what lead to illness

Timeline
- Expectation as to how long will be affected

Consequences
- Perceived effects of illness on self and functioning

Curability or control
- Belief as to how much individual or others can treat illness

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What if you had a spinal cord injury?

- Clip: https://www.youtube.com/watch?v=M7OJ-RIfRoM
- While it is important to support physical rehabilitation, psychological factors play a key role in how well a person copes and recovers following an illness or injury

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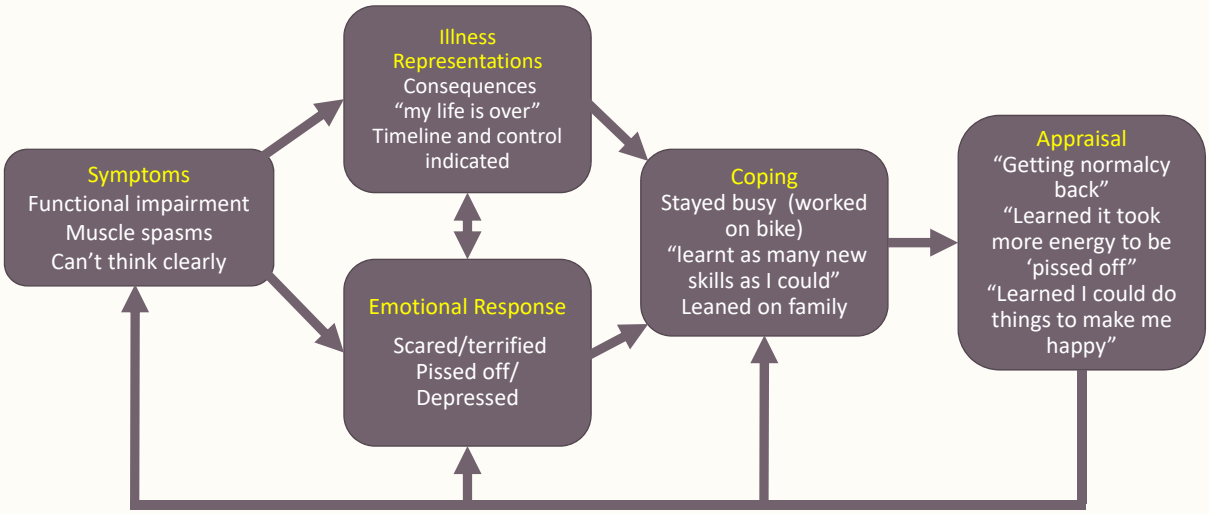
How might this look for Brian?



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Critique of the common-sense model

Strengths

- Responsive to changes in behaviour over time
- Suggests coping is an on-going, cyclical process throughout the rehabilitation journey
- Recognises importance of both emotional and cognitive aspects of adjustment and influence of others
- Evidence supporting model across range of illnesses

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Critique of the common-sense model

Limitations

- Can we really disentangle emotions from cognitions?
- Are some representations more important than others?
- Is the interaction between illness representations more important than their individual contribution?
- How does actual health status fit in (e.g. progressive illnesses)?
  - *How does that effect appraisal of coping effectiveness?*

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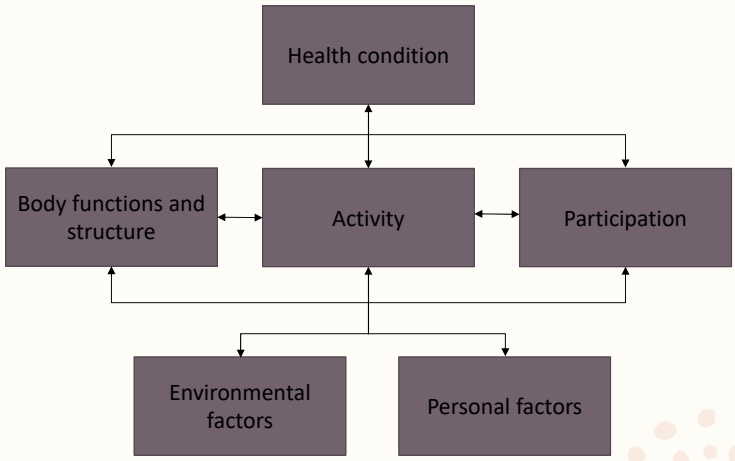
International Classification of Functioning, Disability and Health (ICF; WHO, 2002)



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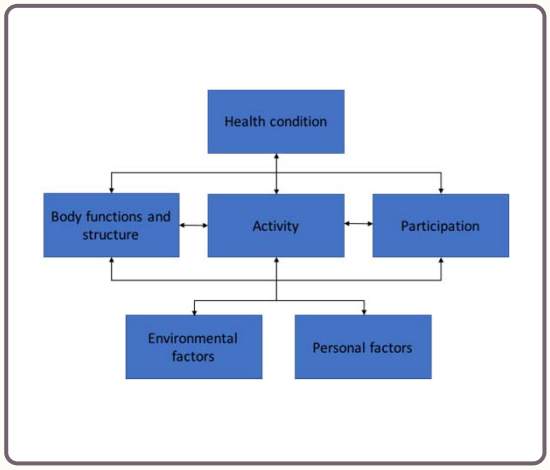

- Body: bones, muscles, ligaments → impairment
- Activity: speaking, walking, jumping → limitations
- Participation: work, social, athletic → restrictions

- Environmental factors: living conditions, occupational situation, social circumstances
- Personal factors: age, background, personality

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ICF Summary

- Provides a framework for the description of health and health-related states.
- Describes changes in body function and structure:
  - what a person with a health condition can do in a standard environment (capacity)
  - what they actually do in their usual environment (performance)
- Emphasis is on health and functioning rather than disability.
- Encourages shift from exclusively using diagnostic labels to instead developing a more complete picture of health status by describing behavioural and functional aspects of chronic diseases.

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Rehabilitation psychology

- Recognised scope of practice in psychology by the APA since the late 1990s
- Focuses specifically on how people adjust to illness and injury to optimise recovery and functioning
  - Illness and injury can be a huge shock – need to adapt to new limitations
  - Need to deal with what happened before we can look forward
- Physical rehabilitation doesn't work if people don't want to do it
- Current services don't address these factors well

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Context of rehabilitation in Aotearoa/ New Zealand

- Differences in NZ how treatment is funded
  - ACC supports after accidental injury
  - Ministry of Health supports medical conditions
- Is one better than the other?
- What if injury not recorded at time of accident?
  - Particularly an issue for TBI
    - Invisible injury
    - Often occurs as part of multiple trauma
    - How do you know if symptoms are due to trauma or something else?

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How does rehabilitation psychology fit in with other "scopes" of psychology practice?

Note: * = vocational scope

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Clinical contexts

- Sports injuries
- Neuromuscular disorders (multiple sclerosis, muscular dystrophy)
- Neurological trauma (traumatic brain injury, spinal cord injury)
- Chronic pain conditions (neuropathic pain, fibromyalgia)
- Cardiovascular rehabilitation (heart attack, stroke)
- Pulmonary rehabilitation (COPD)
- Limb amputation
- Transplantation
- Diabetes
- Burns

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Psychosocial impact of illness and injury

- Depression and anxiety
- Changed sense of self
- Self-efficacy and confidence
- Self-worth
- Fatigue and poor sleep
- Irritability and frustration
- Cognitive difficulties
- Fear for the future
- Impact on social relationships and roles
- Impact on work productivity/participation

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What do rehabilitation psychologists do?

- Psychological assessment
- Basic neuropsychological assessment
- Intervention delivery
- Interdisciplinary working
- Community-based practice
- Working with families/whanau
- Disability advocacy
- Research
- Inform health policy and guidelines
- Service evaluation

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Rehabilitation psychology interventions

- Making sense of illness and injury
- Facilitating lifestyle change
- Rebuilding sense of self
- Identifying values and meaningful goals
- Managing sleep and fatigue
- Coping with cognitive and behavioural difficulties
- Reducing emotional consequences
- Building social relationships
- Maximising independence and participation

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From the client's perspective

- May have suffered significant emotional trauma
- Removed from usual support systems, family, work, home, and friends
- Alone in an unfamiliar environment
- In some cases likely to face ongoing disability
- Uncertainty and worry about future
- Each person will react differently to the rehabilitation journey

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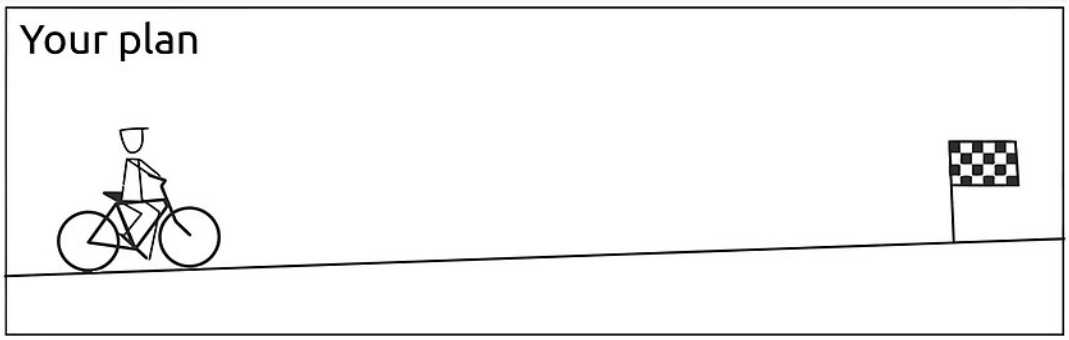

The rehabilitation journey?

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Factors influencing recovery following injury – patients' perspectives

- Qualitative study – semi-structured interviews
- High-performance athletes – recovery experience following anterior cruciate ligament reconstruction (ACLR)
  - Sports: soccer, hockey, indoor cricket, netball
- Themes
  - Coming to terms with the longevity/timeline of injury
  - Knowledge acquisition – gaining clarity about what to expect through rehabilitation process
  - Accessibility to professional support – physical and psychological
  - Learning to deal with the psychological aspects to recovery – acceptance and motivation
- Some participants reported that they struggled mentally throughout the recovery process but were given little in the way of professional support for this.
- Targets for psychological input: psychoeducation, expectations and coping skills, goal setting

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Themes in rehabilitation psychology

- Adjustment
- The therapeutic context
- Moving outside the therapy room
- The family context
- Brief outline of psychological treatment (chronic pain)
- Important constructs: acceptance, resilience, post-traumatic growth
- Brief outline of psychological treatment (psycho-oncology)

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Adjustment

- A central theme in rehabilitation psychology
- A process of modifying behaviours and thinking with the goal of achieving satisfactory quality of life
- Good psychological adjustment depends upon (Beaumont, 2004):
  - insight into the events and psychological changes that have occurred
  - personal acceptance of these changes
  - modification of self-view, beliefs, and personal goals
  - acquisition of appropriate coping strategies
- Within the context of rehabilitation, initial adjustment particularly relates to:
  1. diminished functional capacities
  2. altered interactions with the physical and social environments
  3. making sense of the illness or injury

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Adjustment after stroke (Theadom et al., 2019)

- Longitudinal qualitative study: 55 stroke patients plus 27 significant others (6, 12, 24 & 36 months post stroke)
- Explored people's experiences over the first 3 years to identify what factors influence adjustment
- Patients described ongoing process of: shock, disruption, fear, making sense of what had happened to them, evolving a new "normal", managing ups and downs.
- Adjustment process continued over 3 years, even for those who recovered.
- Implications: importance of attending to psychological processes:
  - "Rehabilitation services need to support patients to make sense of their stroke, navigate the health system, address individual concerns and priorities and to know what, when and how much to challenge themselves."

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Factors that influence positive adjustment

- Severity of illness less predictive of adjustment than social and psychological factors/influences
- Characteristics such as a robust sense of self-efficacy and an ability to problem-solve and deal with difficulties have been identified as good predictors for adjustment (Kilic et al., 2013)
- For those who do not adjust well: the earlier negative symptoms are treated, greater the likelihood of adaptive emotional recovery occurring

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Therapist factors – Scott Miller's work

- Four primary determinants of effective treatment (Duncan et al., 2010):
  - Treatment model/interventions
  - Positive expectancy (i.e., placebo effects)
  - Extra-therapeutic factors (e.g., social support)
  - Therapeutic relationship/alliance
- Much of client improvement is attributable to factors that cut across all different types of counselling/psychotherapy/psychological approaches
- Therapeutic relationship
  - Not only a matter of what the therapist brings to the table in terms of building the therapeutic relationship (e.g., empathy, acceptance, genuineness)…
  - But how clients experience these characteristics offered by therapists is critical

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Key aspects of therapeutic relationship in rehabilitation (Kayes et al., 2016)

- Interviews with patients from a range of healthcare contexts (stroke, TBI, SCI, MS)
- What matters most when working with rehabilitation professionals?
- Core theme: trust that professional is trying to do the right thing for them
- Four sub-themes
  1. Be my professional – being present, open and honest
  2. Show me you know how – being flexible to meet personal needs
  3. Connect with me – responding to what matters most to them
  4. Value me and my contribution – treating client as the expert

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Moving beyond the therapy room: Rehabilitation psychology in the community

- Participation is an important goal in rehabilitation
- Vocational rehabilitation
  - Preparing for work re-entry
  - Vocational goals as part of treatment
  - Addressing personal barriers (e.g., motivation, mood, stress)
  - Advocate for client (e.g., changing attitudes in the workplace)
- Health service
  - Interdisciplinary communication
  - Managing chronic conditions within disability context
  - Enhancing self-efficacy for service engagement (e.g., use of transport)

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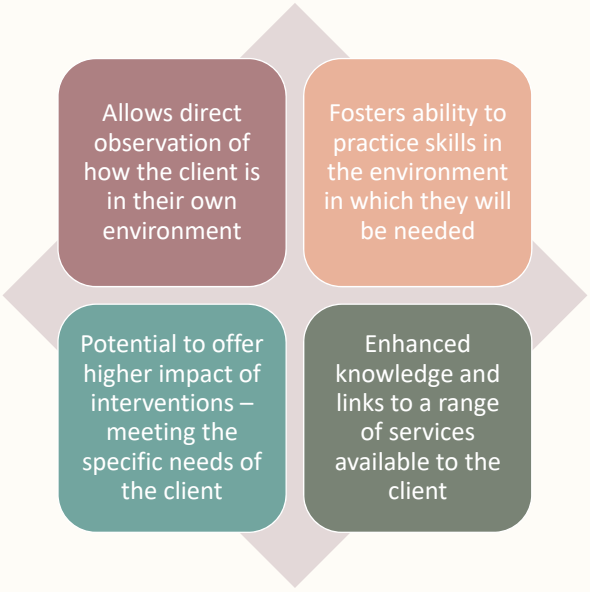

Value of working in the community

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Working with family/whanau

- Traditional models of chronic care management have typically paid little attention to family involvement.
- Why is consideration of family important for the patient?
  - Patients with supportive families are more likely to do better in rehabilitation than those who do not have such support (e.g., Braga et al., 2005)
- Carers within the family may be burdened in different ways
  - Financial
  - Changes in roles
  - Emotional
- Important considerations include:
  - Socioeconomic factors
  - Cultural factors
  - Psychological support

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Examples of family involvement in psychological interventions

Family day at pain management programme

- Offers family members the chance to:
  - *Increase their understanding of chronic pain*
  - *See what their loved ones have been learning and to participate in some activities*
  - *Process for themselves the impact that chronic pain has had on the whole family*

Family sessions in psycho-oncology

- Facilitation of communication between all family members allows opportunity to:
  - *Express individual needs for all family members*
  - *Triage according to needs (within service or elsewhere)*

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Rehabilitation psychology in context: psychological treatment for chronic pain
– Psychoeducation
– Mechanisms of chronic pain
– *Gate control theory*
– *Pain physiology: central sensitization*
– Mind body connection
– Hurt ≠ Harm
– Arousal reduction
– Relaxation
– Interoceptive exposure
– Mindfulness

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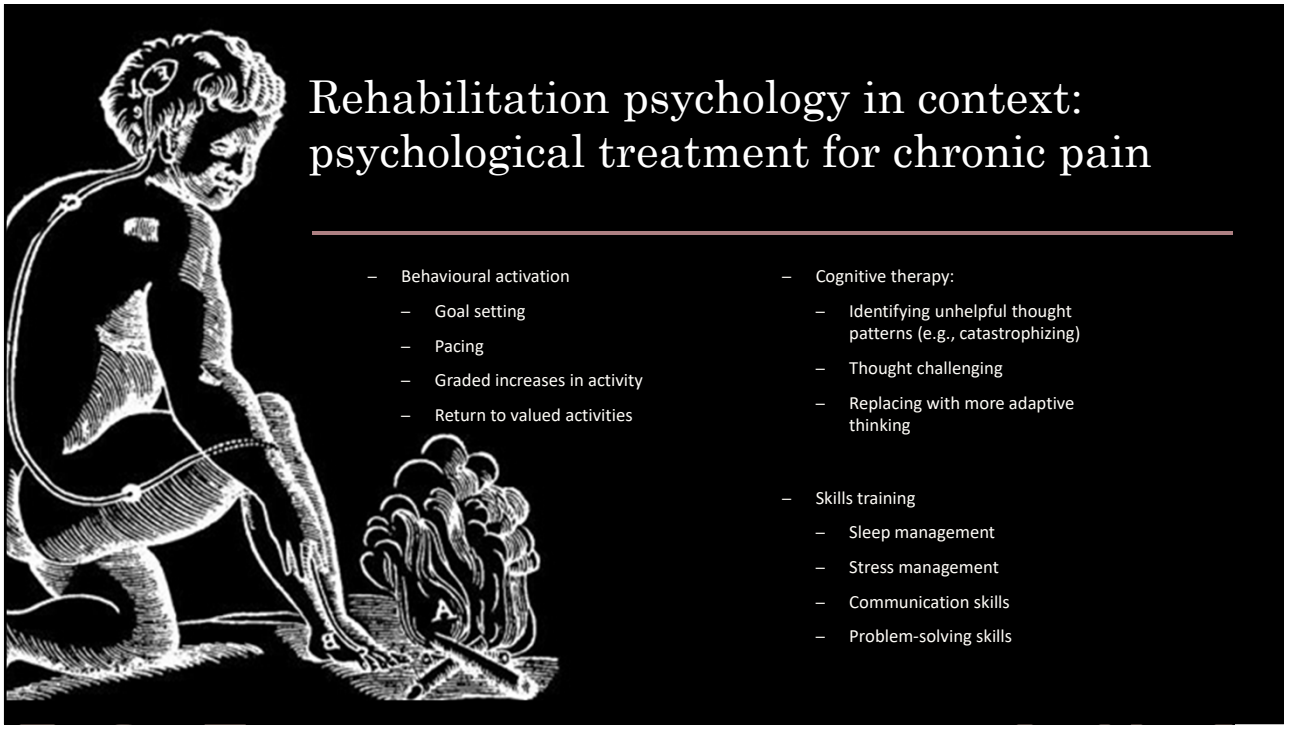
Rehabilitation psychology in context: psychological treatment for chronic pain
– Behavioural activation
– Goal setting
– Pacing
– Graded increases in activity
– Return to valued activities
– Cognitive therapy:
– Identifying unhelpful thought patterns (e.g., catastrophizing)
– Thought challenging
– Replacing with more adaptive thinking
– Skills training
– Sleep management
– Stress management
– Communication skills
– Problem-solving skills

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The role of acceptance in pain management

"Maybe acceptance isn't a good word, I think of it not as accepting it but just dealing with it."

- Acceptance
  - "A willingness to experience continuing pain without needing to reduce, avoid, or otherwise change it"
  - Associated with better physical, social, and emotional functioning – in other words, better adjustment!
  - But pain management can be a hard sell: Ferrari vs rusty bike
- The process of acceptance (LaChapelle et al, 2008)
  - Realizing the need for help
  - Receiving a diagnosis
  - Realizing there is no cure
  - Realizing it could be worse
  - Redefining normal
  - Acceptance as an ongoing daily process

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Resilience

- The ability to maintain stable psychological, social, and physical functioning when adjusting to the effects of illness or injury.
  - The the process of adapting well in the face of adversity
  - People may experience difficult emotions but may also have effective ways of coping
- Resilience linked to improved outcomes (e.g., Bodde et al, 2014)
  - Patients requiring amputation due to complex regional pain syndrome: resilience linked to improved quality of life and lower psychological distress
  - Therefore: "Improving resilience of patients in in- and outpatient rehabilitation clinics might be an additional treatment in rehabilitation care"
- What contributes to resilience:
  - Quant study: self-efficacy and low levels of negative mood were strong predictors of resilience in spinal cord injury (Guest et al, 2015)
  - Qual study: psychological strength, social support, perspective, adaptive coping, spirituality or faith, and serving as a role model or inspiring others contributed to resilience after spinal cord injury (Monden et al, 2014)

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Post-traumatic growth

- Evidence that people can experience positive change in response to a traumatic event
- Elements of post-traumatic growth include:
  - Undertaking new opportunities
  - Improved interpersonal relationships
  - Increase in spirituality
  - Greater appreciation of life
- PTG goes beyond an ability to resist challenges (i.e., resilience) and involves quality transformation – moving beyond baseline functioning in terms of relationships as well as views of self and life.
- Involves changes in values, beliefs, and behaviour

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Meta-analyses of links with PTG (e.g., Grace et al, 2015)

- Employment
- Longer education
- Subjective beliefs about change post-injury*
- Stronger beliefs about treatment control*
- Greater use of adaptive coping strategies*
- Longer time since injury/diagnosis
- Lower levels of depression*
- Lower levels of distress*
- Higher life satisfaction*
- Sense of personal meaning*
- Relationship status
- Older age

* = modifiable factors that can be targeted directly in therapy

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Cancer survivorship

- PTG relatively high in this population – likely to be beyond 50% (Stanton et al, 2006)
- As cancer outcomes improve, more people are living longer with, through, and beyond cancer
- Despite improved treatments, however, quality of life outcomes beyond cancer can remain impacted
- The cancer experience can have many additional impacts beyond the physical:
  - Psychological
  - Cultural
  - Spiritual
  - Sexual and reproductive
  - Relationship
  - Work and education related
  - Financial

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Psychological support for post-cancer rehabilitation

- Appropriate information resources and delivery
- Psychological support
- Self-management strategies
- Connections to support groups
- Return to education or work support (vocational rehabilitation)
- Access to appropriate spiritual care and cultural support that assesses and addresses needs

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Rehabilitation psychology in context: psychological treatment following cancer
– Post treatment – common questions for patients
– Now what?
– When will I get back to normal?
– Is what I'm feeling normal?
– Fears of recurrence – very common!
– Aims of psychological group-based programme:
– Processing loss and change
– Cope with associated fear
– Encourage post-traumatic growth
– "Your rehabilitation is just as important as your treatment"

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Rehabilitation psychology in context: psychological treatment following cancer
– Content of programme:
– ACT-based focus
– Processing experiences/emotions and exploring change
– Coping with uncertainty and post-treatment anxiety
– Mindfulness: engaging in the present
– Finding a new normal and exploring values
– Goal setting
– Outcomes:
– Reduced distress/emotional impact
– More confidence managing anxiety/worry/stress
– Increased psychological flexibility (AAQ-II)
– Feeling empowered to move forward as a cancer survivor

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In conclusion:

- Rehabilitation psychology focuses on adjustment to illness and injury
- Takes into account positive and negative aspects of illness
- Wide range of settings and contexts
- May extend to a community-based focus and involvement of family/whanau
- Wide context encompassed in treatment informed by health psychology and rehabilitation models
- Aims to fit psychological interventions with needs of client

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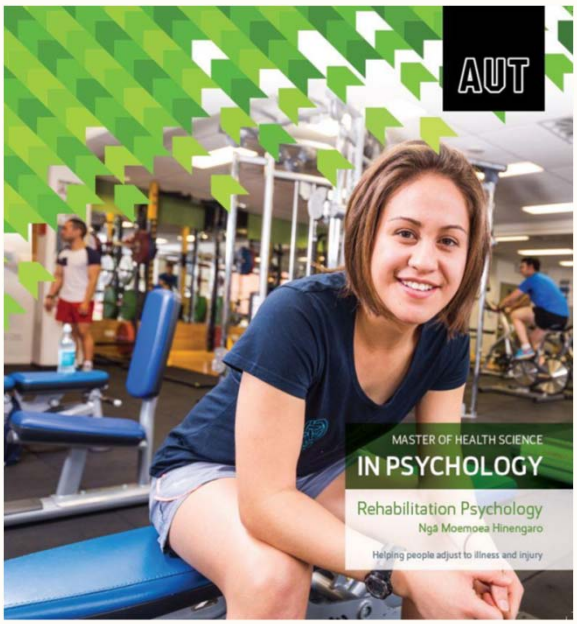

Programme outline

New programme (second cohort this year) offering pathway to registration as a psychologist under the general scope

Structure

1. Master of Health Science in Psychology (2 years)
   - Honours dissertation plus papers in therapeutic theory, skills, and practice
   - Thesis plus papers in rehabilitation psychology and neuropsychological assessment
2. PGDip Rehabilitation Psychology (1 year)
   - Internship (1500 hours)
   - Papers in professional practice, frameworks, contexts, and issues

More info: https://www.aut.ac.nz/study/study-options/health-sciences/courses/postgraduate-diploma-in-rehabilitation-psychology

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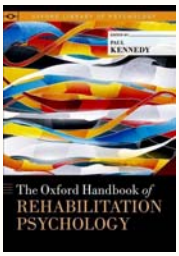
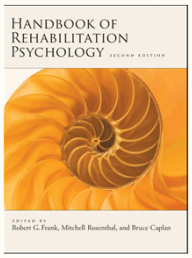
Further reading

- Textbooks:





- Journals:
  - Rehabilitation Psychology (APA): https://www.apa.org/pubs/journals/rep/
  - Clinical Rehabilitation: https://journals.sagepub.com/home/cre
  - Journal of Rehabilitation Medicine: https://www.medicaljournals.se/jrm/
  - Psychology and Health: https://www.tandfonline.com/loi/gpsh20

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