Transformation: Broad Spectrum Approaches to Promote Recovery and Resilience in Schizophrenia

Dr. Paul Grant
Dr. Aaron P. Brinen
Dr. Ellen Inverso
EXCLUSION

DEFINITELY YES   PROBABLY YES   PROBABLY NO   DEFINITELY NO
Individuals in State Hospital or on ACT Team

91% → “alone”
## Translation of Negative Symptoms

<table>
<thead>
<tr>
<th>Negative Symptom</th>
<th>Underlying Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amotivation</td>
<td>Defeatist beliefs</td>
</tr>
<tr>
<td>Asociality</td>
<td>Asocial beliefs</td>
</tr>
<tr>
<td>Anhedonia</td>
<td>Negative expectancies</td>
</tr>
<tr>
<td>Alogia</td>
<td>Negative expectancies</td>
</tr>
</tbody>
</table>
Defeatist Beliefs

“Taking even a small risk is foolish because the loss is likely to be a disaster.”

“If I fail partly, it is as bad as being a complete failure.”
Grant & Beck (2009)

Defeatist Beliefs

- Neurocognitive Performance
  - -.32* (to Defeatist Beliefs)

- Negative Symptoms
  - .41**
  - .24* (to Neurocognitive Performance)

- .32* (from Neurocognitive Performance to Negative Symptoms)

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Continuum of Severity

High Risk

Deficit Syndrome
Pupil Response During Digit Span Forward Task

3 Defeatist Attitude groups X 3 Digit Array quadratic interaction: $F(2,90) = 3.66, p = .030$

(Granholm et al., in press)
“I prefer hobbies and leisure activities that do not involve other people.”

“People sometimes think I am shy when I really just want to be left alone.”
Asocial Beliefs Predicts Asocial Beliefs

Asocial Beliefs (Baseline)$^a$

-0.63$^*$

Social Functioning (1 Year)$^b$

Social Functioning (Baseline)$^b$

-0.26

Asocial Beliefs (1 Year)$^a$

$Z = -1.3, p < .10$

$^*p=0.01$

$^a$Asocial Beliefs= subscale score, revised Social Anhedonia Scale

$^b$Social Functioning=average standardized score of the social withdrawal, interpersonal communication, and prosocial subscales, Social Functioning Scale

Grant & Beck (2010)
Path Analysis

• Two Paths
  • Neurocognition through emotion perception, defeatist beliefs and motivation to time in activity.
  • Asocial beliefs through motivation to time in activity
• Treatments addressing recovery for individuals with schizophrenia should target asocial beliefs and defeatist beliefs.
Summary: Dysfunctional Beliefs

- Defeatist beliefs potential mediators of negative symptoms and functioning
- Patients with most severe negative symptoms (Deficit) endorse defeatist and asocial beliefs to the greatest degree
- High risk patients show greater defeatist beliefs that correlate with negative symptoms
- Experimental evidence that defeatist beliefs predict difficulties with effort, motivation, and negative symptoms
- Two pathways to time in activity
Fusion of Cognitive Therapy and Recovery

- Traditional cognitive therapy has similar components as recovery:
  - long-term goals
  - collaboration
  - engagement
  - emphasis on positive assets

- CT-R = fusion cognitive

- Effective in a randomized clinical trial
Clinical Trial of Recovery-Oriented Cognitive Therapy

Randomized Trial to Evaluate the Efficacy of Cognitive Therapy for Low-Functioning Patients With Schizophrenia

Paul M. Grant, PhD; Gloria A. Huh, MSED; Dimitri Perivoliotis, PhD; Neal M. Stolar, MD, PhD; Aaron T. Beck, MD

ARCH GEN PSYCHIATRY   PUBLISHED ONLINE OCTOBER 3, 2011   WWW.ARCHGENPSYCHIATRY.COM
Summary of CT-R Clinical Trial

• Compared to the Standard Treatment (ST) patients, CT+ ST patients had:
  • Better functioning ($d = 0.56$)
  • Reduced avolition-apathy ($d = -0.66$)
  • Reduced positive symptoms ($d = -0.46$)

(Grant et al., 2014, Archives of General Psychiatry)
Cycle of Recovery

- Increased Motivation
- Reduced Positive Symptoms
- Improved Functioning
Clinical trial follow-up

*Follow-up to Grant et al., 2012; N = 60

• Gains maintained over the course of 6-month follow-up in which no therapy is delivered:
  • Better Functioning
  • Reduced Negative Symptoms
  • Reduced Positive Symptoms
Cognitive therapy for people with schizophrenia spectrum disorders not taking antipsychotic drugs: a single-blind randomised controlled trial
Implementation Outcomes

• Outcomes during six months of supervised recovery-oriented cognitive therapy for a sample of 376 individuals with low-functioning schizophrenia in a large mental health system.

• 69% of individuals made progress within at least one recovery dimension
CT-R: The Overview

• Motivating connection and action towards individual’s Ambitions are the core

• The individual sets the goals for recovery
  • Ambitions are broken down, steps are concrete
  • Action towards the goals is the therapy target
  • Obstacles are addressed as they impede action
  • Conceptualization is the key to the obstacles
  • Achieving the Ambitions reinforces the curative beliefs: Experiential Learning
Motivating Connection

• Strategically increase individual’s participation and motivation in recovery.
• Slowly build from small engaging activities to larger activities
• Essential first step.
• Not purposeless. It targets increased energy, motivation, and affect.

Engagement is NOT Rapport
Methods of Assessing Motivation

• Assessing or freeing motivation can take many forms:
  • Pleasurable Activities
  • Communication priming
  • Simple gifts
  • Ambitions
Ambitions: Personal, Meaningful, Valued

• We change ourselves because we want something.
• Ambitions: our personal, meaningful and valued desires that cause us to change.
• Fear stops behavior but does not teach new behavior
• Find the motivating Ambition!!!!!
The “7 Year Old” Guideline

• Look for ambitions that would have excited you at 7 years old!
• Which ambitions would a 7 year old like?
• Some ambitions are really obstacles?
Positive Action Scheduling

• Positive action scheduling: Systematically evaluate, increase, and monitor an individual's current daily activities.

• Purpose:
  1. Ambitions can be attained with a systematic plan
  2. Cognitive shift that more activity (fun, proud, social) leads to less psychosis and increased mood and energy.
  3. Increased motivation/energy and mood
  4. Decreased psychosis
Obstacles

• Obstacles are addressed as they impair activity or progress towards Ambitions.

• Obstacles:
  • Negative Symptoms
  • Hallucinations
  • Delusions
  • Trauma Reactions
  • Problems with substances
  • Anger/Aggression
Challenges in Recovery

• Curses and throws at team
• Pants and falls down everyday
• Talks to self all day, hits self, hard to understand
• Is lord of universe
• Only talks about having famous people’s body parts and 100s of kids
• Living an alternative reality
Length of illness & response to CT-R

• Length of illness (LOI) correlated with changes in GAS from baseline to the end of treatment
  • The association between LOI was not as strong at follow-up.
• More rapid improvement in those with shorter LOI
  • LOI of 12 years or less began to show evidence for improved functioning as early as 6 months and significant improvement by the end of active treatment
  • Maintained at follow-up
• Those with a longer LOI (more than 12 years) did not show statistically significant improvement until the end of the follow-up phase
Length of illness predicts response to CT-R

These findings may suggest that individuals with a longer history of symptoms may require longer-term treatment.
Paradoxes of Schizophrenia

• Acute stage of psychosis: Protect individual from doing harmful things, including hospitalization, the administration of medication to reduce psychotic thinking, and use of medication to limit aggressive behavior.

• Chronic Phase: Measures continued. For the most severe problems, institutionalization is provided to protect the individual from engaging in harmful behavior.

• The paradox is that the measures in the chronic phase that are intended to protect the individual makes the disorder worse: increases the pervasiveness and tenacity of the negative symptoms.
Paradoxes of Schizophrenia

- The negative symptoms, specifically are individuals’ attempt to protect against the imposed mental health system.
  - Traditionally: Symptoms seen as due to the disease
  - Actually: Due to the attempts by society to control the consequences of the disease.
    - Incarceration, forced medication, use of restraints, and other aspects of social control impact the individual’s self-esteem.
    - Individual reinforces cluster of beliefs about being broken, marginalized, dehumanized.
    - Defeatist beliefs are reinforced.
  - Individuals who are labeled the sickest are generally the most complacent about their conditions. They show less anxiety and depression than do the others.
- Most dramatic transformations occurred in individuals who are the most withdrawn. They still have the basic cognitive structures for recovery.
Long-Term Schizophrenia: Degeneration vs Regeneration

• Symptomatic—Over the course of schizophrenia, the patients become more withdrawn and they seem to be more refractory to any kind of intervention.

• Atrophy of the brain: Over a period of several years or decades, there is a progressive thinning of the brain in those individuals, who have not recovered.

• Negative Symptom individuals show a decline of as much as two standard deviations below normal on neurocognitive tests.

• However, they are not refractory
  • We have observed improvement in regressed, individual cases.
  • Individuals with the longest standing course of schizophrenia start to show a significant improvement, over the control group, during the follow-up period.
  • Psychotherapy might take longer course.
Long-Term Schizophrenia: Degeneration vs Regeneration

• Although researchers have found reduction in brain tissue in individuals with schizophrenia,

• Recent research (Guo et al, 2016) has found that the brain can reorganize and compensate in these individuals, as they recover.
Patient Mode vs. Adaptive Mode
Activities that activate the adaptive mode
System of Care
Beck Recovery Training Network
Shift Missions
Morning Shift

• Wake up energized

• Get involved in highly interactive therapeutic activities

• Work on meaningful action steps toward their recovery goals
Evening Shift

• Individuals engage in “after-work” activities.
Overnight Shift

• Helps to sustain sleep, collaboratively addressing challenges that may come up
Weekend Shift

• Individuals rediscover active ways to explore their passions with other people.
• to prepare for the week ahead
• completing steps toward ambitions
“A way of living a satisfying, hopeful, and contributing life even with limitations caused by illness.”

Jacobson & Greenley, 2001; Anthony, 1993

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Recovery: Important Ideas

• Recovery is possible

• Those who have recovered identified three key factors
  • Able to engage in productive work
  • Meaningful relationships with others
  • Manage their own stress and experiences