The route to psychosis: what differentiates individuals with psychotic experiences with and without a ‘need for care’?

Emmanuelle Peters
Senior Lecturer & Hon. Consultant Clinical Psychologist
My collaborators ..

Philippa Garety
Elizabeth Kuipers
Caroline Brett
Tom Ward
Keith Gaynor
Anna Lovatt
Kathryn Greenwood
Yvonne Linney
David Hemsley
Stephen Joseph
Samantha Day
Craig Steel
Emma Lawrence
Susie Colbert
Daniel Freeman
Oliver Mason
Peter Kinderman
Max Birchwood

Mike Jackson
Craig Morgan
Paul Chadwick
Robin Murray
Caitlin Phillips
Charlie Heriot-Maitland
Jan Scott
Patricia Thornton
Til Wykes
Paul Osler
Sarah Medford
Sharon Prince
Helen Miles
Matthew Knight
Philip McGuire
Louise Johns
Steffen Moritz
Matthew Broome
Psychosis is a disorder of the brain
Psychosis as a distinct category
Psychosis on a continuum
Psychotic experiences in general population are common.

- **47 studies** (35 cohorts yielding 217 estimates of prevalence/1-year incidence)
- Median prevalence rate of around 5%
- Median incidence rate of around 3%
- With distress, prevalence = 4%
- Without distress, prevalence = 8%
Delusions
PDI-40 – distribution of scores in general population

Comparison between controls, New Religious Movements & deluded

Peters et al (99a) *British Journal of Clinical Psychology*, 38, 83-96
Do you ever think people can communicate telepathically?

- **NO**
  - Not at all
  - Distressing
- **YES**
  - Hardly ever think about it
  - Don’t believe it’s true
  - Think about it all the time
  - Believe it is absolutely true

If YES please rate on right hand side:

- **Not at all**
  - 1
- **Distressing**
  - 2
- **Very distressing**
  - 3
- **Hardly ever think about it**
  - 4
- **Think about it all the time**
  - 5
- **Don’t believe it’s true**
  - 1
- **Believe it is absolutely true**
  - 4
## PDI dimensions (New Religious Movements vs. inpatients)

<table>
<thead>
<tr>
<th></th>
<th>NRMs (n = 29)</th>
<th>Deluded (n = 33)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDI</td>
<td>11.5</td>
<td>11.8</td>
</tr>
<tr>
<td>Distress</td>
<td>22.8</td>
<td>36.2 ***</td>
</tr>
<tr>
<td>Preoccupation</td>
<td>24.9</td>
<td>37.6*</td>
</tr>
<tr>
<td>Conviction</td>
<td>39.8</td>
<td>49</td>
</tr>
</tbody>
</table>

***: Mann-Whitney tests

Peters et al (99a) *British Journal of Clinical Psychology, 38, 83-96*
It’s not *what* you believe, it’s *how* you believe it.
Hallucinations
Comparison between healthy & psychotics on CAPS

Same or different? Voices in psychotic and healthy samples

118 psychotic outpatients
- Older onset
- More frequent
- Longer duration
- Unpleasant content
- Higher distress
- Less control
- 48% external attribution

111 healthy voice-hearers
- Younger onset
- Less frequent
- Shorter duration
- Pleasant content
- Lower distress
- More control
- 74% external attribution

Location
Number
Loudness
Personification

Daalman et al (11) *Journal Clinical Psychiatry*, 72, 320-325
Beliefs and relating to voices in psychotic and healthy samples

Andrew et al (08) Psychological Medicine, 38, 1409-1417
Sorrell, Hayward & Meddings (10) Behav & Cogn Psych, 38, 127-140

<table>
<thead>
<tr>
<th>Location</th>
<th>Number</th>
<th>Personification</th>
<th>Gender &amp; identity of voice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Louder</td>
<td>22 psychiatric</td>
<td>Older onset</td>
<td>Quieter</td>
</tr>
<tr>
<td>Quieter</td>
<td>21 healthy voice-hearers</td>
<td>Younger onset</td>
<td>Quieter</td>
</tr>
<tr>
<td>Older onset</td>
<td>32 psychiatric</td>
<td>More frequent</td>
<td>Less frequent</td>
</tr>
<tr>
<td>More frequent</td>
<td>(Andrew et al)</td>
<td>Longer duration</td>
<td>Shorter duration</td>
</tr>
<tr>
<td>Longer duration</td>
<td>(Sorrell et al)</td>
<td>Unpleasant content</td>
<td>Pleasant content</td>
</tr>
<tr>
<td>Unpleasant content</td>
<td>21 healthy voice-hearers</td>
<td>Higher distress</td>
<td>Lower distress</td>
</tr>
<tr>
<td>Higher distress</td>
<td>18 healthy voice-hearers</td>
<td>Less control</td>
<td>More control</td>
</tr>
<tr>
<td>Less control</td>
<td>41% external attribution</td>
<td>33% external attribution</td>
<td></td>
</tr>
<tr>
<td>41% external attribution</td>
<td>Omnipotent &amp; malevolent beliefs</td>
<td>Benevolent beliefs</td>
<td></td>
</tr>
<tr>
<td>Omnipotent &amp; malevolent beliefs</td>
<td>Dominant, intrusive</td>
<td>Engagement and closeness</td>
<td></td>
</tr>
<tr>
<td>Dominant, intrusive</td>
<td>Resistance and distance</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Developing good relationships with voices (both healthy & psychiatric)

<table>
<thead>
<tr>
<th>Core processes</th>
<th>Diminishing fear</th>
<th>Establishing control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Categories that impact on core processes</td>
<td>Relating to voice and self</td>
<td>Connecting with a community</td>
</tr>
<tr>
<td>Subcategories</td>
<td>Personification of voices</td>
<td>Seeking understanding through others</td>
</tr>
<tr>
<td></td>
<td>Actively engaging Asserting boundaries</td>
<td>Developing sense of belonging</td>
</tr>
<tr>
<td></td>
<td>Developing strong sense of self and independence</td>
<td></td>
</tr>
</tbody>
</table>

Jackson, Hayward & Cooke (12) *Int Journal Social Psychiatry*, 57, 487-495
It’s not *what* you hear, it’s *how* you relate to it

(although content is important)
Cognitive models of psychosis
Basic Cognitive Model

Events and experiences

Appraisal

Symptoms

Slide reproduced with permission from Philippa Garety
A Cognitive Model of the Positive Symptoms of Psychosis (Garety et al 2001; 2007)

Bio-psycho-social vulnerability → Trigger → Emotional changes

Basic cognitive dysfunction
Anomalous experience

Appraisal of experience

Positive Symptoms

Appraisal influenced by:
- reasoning & attributional biases
- dysfunctional schemas of self & world
- isolation & adverse environments

Maintaining factors
- reasoning & attributions
- dysfunctional schemas
- emotional processes
- appraisal of psychosis
What is the pathway to psychosis?
A Cognitive Model of the Positive Symptoms of Psychosis (Garety et al 2001; 2007)

Bio-psycho-social vulnerability

Trigger

Emotional changes

Basic cognitive dysfunction

Anomalous experience

Appraisal of experience

Positive Symptoms

Appraisal influenced by:
- reasoning & attributional biases
- dysfunctional schemas of self & world
- isolation & adverse environments

Maintaining factors:
- reasoning & attributions
- dysfunctional schemas
- emotional processes
- appraisal of psychosis
A Cognitive Model of the Positive Symptoms of Psychosis (Garety et al 2001; 2007)

- **Bio-psycho-social vulnerability**
- **Trigger**
- **Emotional changes**
- **Basic cognitive dysfunction**
  - Anomalous experience
- **Appraisal of experience**
- **Positive Symptoms**

**Appraisal influenced by:**
- reasoning & attributional biases
- dysfunctional schemas of self & world
- isolation & adverse environments

**Maintaining factors**
- reasoning & attributions
- dysfunctional schemas
- emotional processes
- appraisal of psychosis
Appraisals of Anomalous Experiences
Interview (AANEX)

- **Meaning/reference**: e.g. ideas of reference, sense of having insights, elation
- **Cognitive/Attentional**: e.g. thought blockages, distractibility, loss of automatic skills
- **Hallucinatory/Paranormal**: e.g. visual or somatic hallucinations, passivity, magical and precognitive experiences.
- **Dissociative/Perceptual**: e.g. depersonalisation, derealisation, Out of Body Experiences, oversensitivity to stimuli
- **First Rank Symptoms**: e.g. voices, thought transmission and insertion, ‘made’ emotions

Participants

**Undiagnosed**
- n = 38
- Age = 25 – 51yrs (mean = 34 yrs)
- Male/Female = 20/18
- Advertisement + Screening

**Diagnosed**
- n = 37
- Age = 17 – 62yrs (mean = 32 yrs)
- Male/Female = 20/17
- Inpatients and Outpatients

**‘At Risk’**
- n = 21
- Age = 19 – 29yrs (mean = 24 yrs)
- Male/Female = 14/7
- OASIS clinical service
Is there a continuum of severity of experiences between undiagnosed and diagnosed individuals?
Is there a *quantitative* difference?

(1) Frequency of experiences

- Undiagnosed (n=38)
- Diagnosed (n=37)
Do the undiagnosed and diagnosed groups have different types of experiences?
Is there a qualitative difference?

(2) Types of experiences

- Mean/Ref
- Cog/Att
- Hall/Para
- Diss/Perc
- FRS

Undiagnosed (n=38)
Diagnosed (n=37)
Qualitative differences between undiagnosed and “at-risk” group

- Undiagnosed (n=38)
- At-risk (n=21)
A Cognitive Model of the Positive Symptoms of Psychosis (Garety et al 2001; 2007)

Bio-psycho-social vulnerability → Trigger → Emotional changes

Basic cognitive dysfunction → Anomalous experience → Appraisal of experience

Appraisal influenced by:
- reasoning & attributional biases
- dysfunctional schemas of self & world
- isolation & adverse environments

Maintaining factors:
- reasoning & attributions
- dysfunctional schemas
- emotional processes
- appraisal of psychosis

Positive Symptoms
IQ scores in undiagnosed and diagnosed groups (Brett, unpublished PhD

<table>
<thead>
<tr>
<th></th>
<th>IQ scores (WASI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Controls (n = 24)</td>
<td>110</td>
</tr>
<tr>
<td>At risk (n = 22)</td>
<td>110</td>
</tr>
<tr>
<td>Diagnosed (n = 24)</td>
<td>110</td>
</tr>
<tr>
<td>Undiagnosed (n = 23)</td>
<td>130</td>
</tr>
</tbody>
</table>
It’s not *what* you experience, it’s *how much* you experience it
[but cognitive difficulties important]
A Cognitive Model of the Positive Symptoms of Psychosis (Garety et al 2001; 2007)

Bio-psycho-social vulnerability → Trigger → Emotional changes

Basic cognitive dysfunction → Anomalous experience

Appraisal of experience → Positive Symptoms

Appraisal influenced by:
- reasoning & attributional biases
- dysfunctional schemas of self & world
- isolation & adverse environments

Maintaining factors:
- reasoning & attributions
- dysfunctional schemas
- emotional processes
- appraisal of psychosis
Appraisals of anomalous experiences

Dimensions of appraisals

It’s not *external* appraisals, but *paranoid* world-view
Disentangling experiences and appraisals experimentally
Can the Card Task be used to investigate appraisals?

Anomalous experience

Appraisal?
The Card Task
Please mentally select a card and concentrate on it

Do not click on your card or say it aloud

After you have memorised your card, please press any key to continue.....
The card you have chosen will now be selected and removed from the pile.

Please press any key to continue....
How do you think this was done?
Appraisals in diagnosed & undiagnosed people – Cards task

Adaptive appraisals: NS
Maladaptive: U=270, p<.01

Ward et al, In Prep
Appraisals in diagnosed & undiagnosed people – Cards task

Ward et al, In Prep
Virtual Acoustic Task: Headphone presentation of voices ‘outside-the-head’

Appraisals in diagnosed & undiagnosed people – Virtual Acoustic Task

Conviction ratings

- Non-diagnosed: \( n = 34 \)
- Diagnosed: \( n = 28 \)

Adaptive appraisals: NS
Maladaptive: \( U = 238, p < .001 \)

Ward et al, In Prep
Appraisals in diagnosed & undiagnosed people – Virtual Acoustic task

Ward et al, In Prep
Unusual Experiences Enquiry study

Emmanuelle Peters, Mike Jackson & Philippa Garety
Tom Ward, Craig Morgan, Mike Hunter, Peter Woodruff, Philip McGuire

Recruitment in the two main sites is about to begin and will run until early 2015. Participants in the ‘non-need for care’ group will also be recruited from Sussex.
A Cognitive Model of the Positive Symptoms of Psychosis (Garety et al 2001; 2007; Psych Med)

- Bio-psycho-social vulnerability
- Trigger
- Emotional changes
- Basic cognitive dysfunction
- Anomalous experience
- Appraisal of experience
- Positive Symptoms

Appraisal influenced by:
- reasoning & attributional biases
- dysfunctional schemas of self & world
- isolation & adverse environments

Maintaining factors:
- reasoning & attributions
- dysfunctional schemas
- emotional processes
- appraisal of psychosis
### Trauma in diagnosed and undiagnosed groups

<table>
<thead>
<tr>
<th>(% scoring &gt;1 for each trauma category)</th>
<th>Diagnosed (N = 25)</th>
<th>Undiagnosed (N = 27)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal trauma</td>
<td>2.76 (1.83) 88%</td>
<td>2.44 (1.42) 92.6%</td>
</tr>
<tr>
<td>Impersonal trauma</td>
<td>1.04 (.94) 64%</td>
<td>1.19 (1.36) 59.3%</td>
</tr>
<tr>
<td>Stressful experiences</td>
<td>1.44 (1.04) 80%</td>
<td>1.85 (.95) 96.3%</td>
</tr>
<tr>
<td>Total number of types of traumatic event</td>
<td>5.24 (2.62)</td>
<td>5.44 (2.52)</td>
</tr>
</tbody>
</table>

Lovatt et al (2010) *Journal Nervous & Mental Disease, 198, 813-19*
### Regression of types of trauma on appraisals

<table>
<thead>
<tr>
<th>Appraisal</th>
<th>Type of trauma</th>
<th>ORs</th>
<th>95% C.I.s (lower)</th>
<th>95% C.I.s (upper)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other people</td>
<td>Interpersonal</td>
<td>2.01</td>
<td>1.27</td>
<td>3.18</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Normalising</td>
<td>Interpersonal</td>
<td>0.58</td>
<td>0.38</td>
<td>0.87</td>
<td>&lt;.01</td>
</tr>
</tbody>
</table>

Lovatt et al (2010) *Journal Nervous & Mental Disease, 198, 813-19*
# Trauma in psychiatric and non-psychiatric voice-hearers

<table>
<thead>
<tr>
<th>Trauma (NB &gt; 75% in both groups had a trauma)</th>
<th>Psychiatric (n=22)</th>
<th>Non-psychiatric (n=21)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Childhood (No. traumas)</td>
<td>1.4</td>
<td>0.7</td>
</tr>
<tr>
<td>Adulthood (No. traumas)</td>
<td>2.1</td>
<td>1.1</td>
</tr>
<tr>
<td>CSA (n)</td>
<td>11*</td>
<td>3</td>
</tr>
<tr>
<td>Intrusion (IES)</td>
<td>20.5*</td>
<td>4.2</td>
</tr>
<tr>
<td>Avoidance (IES)</td>
<td>21.3*</td>
<td>3.4</td>
</tr>
<tr>
<td>PTSD (% meeting criteria)</td>
<td>78*</td>
<td>25</td>
</tr>
</tbody>
</table>

Andrew et al (2008) *Psychological Medicine, 38, 1409-17*
Trauma in psychiatric and non-psychiatric voice-hearers

Andrew et al (2008) *Psychological Medicine, 38, 1409-17*

<table>
<thead>
<tr>
<th>Beliefs about voices</th>
<th>Trauma</th>
<th>B</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malevolence</td>
<td>IES scores</td>
<td>.91</td>
<td>7.0</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Benevolence</td>
<td>IES scores</td>
<td>.25</td>
<td>5.0</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Omnipotence</td>
<td>IES scores</td>
<td>.19</td>
<td>4.2</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>
Type (interpersonal) and impact of trauma, not presence, linked to pathological appraisals
A Cognitive Model of the Positive Symptoms of Psychosis (Garety et al. 2001; 2007; Psych Med)

Bio-psycho-social vulnerability → Trigger → Emotional changes

Basic cognitive dysfunction → Anomalous experience → Appraisal of experience

Appraisal influenced by:
- reasoning & attributional biases
- dysfunctional schemas of self & world
- isolation & adverse environments

Maintaining factors:
- reasoning & attributions
- dysfunctional schemas
- emotional processes
- appraisal of psychosis

Positive Symptoms
Response styles in diagnosed & undiagnosed people – Cards task

Adaptive styles: \( t=2.7, p < .01 \)
Maladaptive styles: \( t=3.5, p < .001 \)

Ward et al, In Prep
Safety behaviours in diagnosed & undiagnosed groups

Gaynor et al, In Prep
Mediation model between safety behaviours, threat appraisals, & distress

Threat appraisals

Path A = .55 (p < .001)
Path B = .50 (p = .001)
Path C = .45 (p < .01)

Safety Behaviours

Anomaly-related distress (or anxiety)

Gaynor et al, In Prep
Threat appraisals

Safety Behaviours

Path A = 0.55 (p < 0.001)

Path B = 0.50 (p = 0.001)

Path C = 0.45 (p < 0.01)
Path C = 0.23 (p = 0.1)

Anomaly-related distress (or anxiety)

Path C shows initial relationship between SBs & distress, and its reduction when threat added to equation (Sobel test: Z = 3.04, p = 0.001)

Gaynor et al, In Prep
How you *deal* with experiences matter, but driven by what you *think* about them
A Cognitive Model of the Positive Symptoms of Psychosis (Garety et al 2001; 2007; Psych Med)

Bio-psycho-social vulnerability → Trigger → Emotional changes → Basic cognitive dysfunction → Anomalous experience → Appraisal of experience → Positive Symptoms

Appraisal influenced by:
- reasoning & attributional biases
- dysfunctional schemas of self & world
- isolation & adverse environments

Maintaining factors:
- reasoning & attributions
- dysfunctional schemas
- emotional processes
- appraisal of psychosis
<table>
<thead>
<tr>
<th>Participant</th>
<th>Out-of-the-ordinary experience (OOE)</th>
<th>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Holly</td>
<td>Receiving visions from God</td>
<td></td>
</tr>
<tr>
<td>Omar</td>
<td>Body taken over by spirits</td>
<td></td>
</tr>
<tr>
<td>Beth</td>
<td>Telepathic communication and speaking with God</td>
<td></td>
</tr>
<tr>
<td>Tom</td>
<td>Receiving symbolic messages from other realms</td>
<td></td>
</tr>
<tr>
<td>Nessa</td>
<td>Hearing voices, and thoughts of being watched / filmed</td>
<td></td>
</tr>
<tr>
<td>Leroy</td>
<td>Hearing voices when nobody is there</td>
<td></td>
</tr>
<tr>
<td>Jenny</td>
<td>Body taken over by spiritual energy</td>
<td></td>
</tr>
<tr>
<td>Clive</td>
<td>Visions of people who have died and religious figures</td>
<td></td>
</tr>
<tr>
<td>Maria</td>
<td>Receiving words directly from God</td>
<td></td>
</tr>
<tr>
<td>Daniel</td>
<td>Spiritual calling, and developing intuitive perception</td>
<td></td>
</tr>
<tr>
<td>Flora</td>
<td>Visions and voices of spirits (mediumship skills)</td>
<td></td>
</tr>
<tr>
<td>Stefan</td>
<td>Body taken over by an external force</td>
<td></td>
</tr>
</tbody>
</table>

Heriot-Maitland et al (12) *British Journal of Clinical Psychology, 51, 37-53*
<table>
<thead>
<tr>
<th>Super-ordinate theme</th>
<th>Group theme</th>
<th>Group differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate situational context</td>
<td>Emotional suffering</td>
<td>6 C, 5NC</td>
</tr>
<tr>
<td></td>
<td>Existential questioning</td>
<td>2C, 6NC</td>
</tr>
<tr>
<td></td>
<td>Isolation</td>
<td>4C, 4NC</td>
</tr>
<tr>
<td>Subjective nature</td>
<td>Emotional fulfilment</td>
<td>3C, 4NC</td>
</tr>
<tr>
<td></td>
<td>Loss of ego boundaries/control</td>
<td>3C, 2NC</td>
</tr>
<tr>
<td></td>
<td>Fearful absorption</td>
<td>4C, 3NC</td>
</tr>
<tr>
<td></td>
<td>Insight into deeper meaning</td>
<td>3C, 5NC</td>
</tr>
<tr>
<td></td>
<td>New way of thinking</td>
<td>3C, 3NC</td>
</tr>
</tbody>
</table>

Few differences in triggers & nature of experiences

Heriot-Maitland et al (12) *British Journal of Clinical Psychology, 51, 37-53*
<table>
<thead>
<tr>
<th>Super-ordinate theme</th>
<th>Group theme</th>
<th>Group differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inter-personal context</td>
<td>Others’ views (pathologising) (normalising) Validation from others (accepting) (invalidating)</td>
<td>6C, 6NC 3C, 6NC 1.5C, 5NC 5C, 2NC</td>
</tr>
<tr>
<td>Background personal context</td>
<td>Previous knowledge/understanding Attitude of experiential openness</td>
<td>3.5C, 6NC 0C, 3NC</td>
</tr>
<tr>
<td>Appraisal/ incorporation</td>
<td>Considering multiple appraisals Desirability (desirable) (undesirable) Transiency (temporary process) (permanent state) Spirituality-psychosis link</td>
<td>2C, 5NC 4C, 5.5 NC 2C, 0.5NC 2C, 5NC 2C, 0NC 4C, 6NC</td>
</tr>
</tbody>
</table>

**Differences in interpersonal & personal context, and how experiences appraised & incorporated**

Heriot-Maitland et al (12) *British Journal of Clinical Psychology, 51, 37-53*
Conclusions
The route to psychosis includes ...

- Distressing & preoccupying beliefs
- Unpleasant, malevolent voices
- More severe anomalous experiences
- Cognitive difficulties
- Maladaptive (paranoid) appraisals
- Reasoning biases
- Interpersonal trauma
- Maladaptive response styles and safety behaviours
CBT for psychosis
A Cognitive Model of the Positive Symptoms of Psychosis (Garety et al. 2001; 2007)

1. **Bio-psycho-social vulnerability** → **Trigger** → **Emotional changes**

2. **Basic cognitive dysfunction** → **Anomalous experience** → **Appraisal of experience** → **Positive Symptoms**

Appraisal influenced by:
- reasoning & attributional biases
- dysfunctional schemas of self & world
- isolation & adverse environments

Maintaining factors:
- reasoning & attributions
- dysfunctional schemas
- emotional processes
- appraisal of psychosis

Garety
CBTp manuals I

1) Kingdon & Turkington (94) CBT of Schizophrenia.
2) Fowler et al (95) CBT for Psychosis: Theory and Practice.
3) Chadwick et al (96) CT for Delusions, Voices and Paranoia.
5) Kingdon & Turkington (02) The Case-Study Guide to CBT of Psychosis.
6) Morrison (02) A Casebook of CT for Psychosis.
7) Morrison et al (03) CT for Psychosis.
8) Klingberg et al (03) Relapse Prevention in Psychosis (German).
9) French & Morrison (04) Early detection and CT for people at high risk of developing psychosis.
CBTp manuals II

10) Kingdon & Turkington (05) CT of Schizophrenia.
11) Byrne et al (06) A Casebook of CT for Command Hallucinations
12) Freeman et al (06) Overcoming paranoid and suspicious thoughts.
13) Gumley & Schwannauer (06) Staying well after psychosis.
14) Chadwick et al (06) Person-based cognitive therapy for distressing psychosis
15) Beck et al (09) Schizophrenia: Cognitive theory, research & therapy
Effect sizes of 33 trials

Mean effect size on positive symptoms: .40 (95% CIs: .25 - .55)
What are we changing in CBT for psychosis?
A Cognitive Model of the Positive Symptoms of Psychosis (Garety et al 2001; 2007; Psych Med)

Bio-psycho-social vulnerability → Trigger → Emotional changes

Basic cognitive dysfunction → Anomalous experience

Appraisal of experience

Maintaining factors:
- reasoning & attributions
- dysfunctional schemas of self & world
- isolation & adverse environments

Positive Symptoms

Appraisal influenced by:
- reasoning & attributional biases
- dysfunctional schemas of self & world
- isolation & adverse environments
<table>
<thead>
<tr>
<th></th>
<th>TAU</th>
<th>CTCH</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Baseline</strong></td>
<td>94%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>6 months</strong></td>
<td>39%</td>
<td>14%</td>
</tr>
<tr>
<td><strong>12 months</strong></td>
<td>53%</td>
<td>14%</td>
</tr>
</tbody>
</table>

*Effect size at 6 months = 1.1*

Trower et al (04) *British Journal of Psychiatry, 184, 312-320*
Mean scores on the Voice Power Differential Scale

Voice more powerful

I am more powerful

CTCH

TAU

Mean score

Baseline 6 month 12 month

Assessment

Group X time : p<0.001
How can the literature inform our therapeutic practices?
• Continuum of anomalous experiences
  ... normalise
• Cognitive deficits
  ... acknowledge differences
• Distressing appraisals
  ... validate distress
• Reasoning biases
  ... don’t just challenge
• Experiences in context
  ... not just walking symptoms
91% (N = 250) are satisfied/very satisfied with therapy

Miles, Peters & Kuipers (07) *Behav & Cog Psychotherapy*, 35, 109-117
What do service-users say about CBT for psychosis? (PICuP):

- “I wouldn’t be here today if it wasn’t for CBT. Not only did it help me recover, but it was educational and empowering”
- “During therapy I have found ways to cope with my problems, and have continued to use them throughout my experience”
- “Looking at different ways of explaining some unusual experiences was so helpful. Now I have the illness – the illness doesn’t have me”
- “My therapist helped me make maps of my thinking. Negative thinking is a road made of quicksand … the groove goes deep, it’s etched on your bones. CBT is one way of recreating another groove. The value of positive thinking is the most precious CBT has given me” (D.S., Creative Routes, 2005)
THE END