Early intervention for Stigma: Talking to children about Severe Mental Illness

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Clinical Context

STIGMA

Self Stigma

Stigma Common in adolescence

Mental Illness high in adolescence

Reduces help seeking

Exacerbates mental illness

Theoretical Issues – Group categorisation processes

- Sharpen intergroup differences between those with and without mental illness (Tajfel 1963)

- Reduce within group differences in mental illnesses (Ostrom 1992)

- Increase inter-group anxiety due to uncertainty regarding behaviours (Stephan 1985)

- Especially towards mental illness due to ‘unpredictable/violent’ stereotype (Stuart 1998)
Theoretical Issues –
Inter-Group Contact theory
(Allport 1954)

• Theory
• Prolonged, positive, equal status and cooperative inter-group contact, supported by institutional authorities brings about intergroup attitude change (Brown & Hewstone, 2005; Pettigrew and Tropp 2011).

• Mechanism
• Bringing KNOWN and REPRESENTATIVE members of different groups into meaningful contact with each other reliably improves intergroup attitudes and reduces prejudice

Theoretical Issues –
Extended Contact theory
(Wright 1997)

• Theory
• Reduced stigma if one knows that other members of the ingroup, observed through video, play or story, enjoy positive relationships with stigmatised group

• Mechanism
• Reduced intergroup anxiety; ‘inclusion of the other in the self’ (Aron, 1991); perception of different norms about behaviour
Stigma towards mental illness and EIP

- Greater than for any other condition (Falk, 2001; Hinshaw, 2005; Thornicroft, 2006).


Anti-stigma campaigns

- Collaborative anti stigma projects with service users

- Influencing media scheduling (TV)
  [http://www.bbc.co.uk/iplayer/episode/b01dhkj7/Waterlo]  

- Media advertising campaigns

- Schools based interventions targeting 14-15 year olds where stigma is high
School interventions

Focus
- Educational sessions targeted at causes (neurobiology/heritability) and perceived dangerousness to increase understanding and address common myths, negative attitudes and stereotypes (Schachter et al., 2008; Yamaguchi, Mino & Uddin, 2011).

Outcome
- Reduced social distance/blame but reduced hope for recovery (Lincoln, Arens, Berger and Rief 2008).

School Interventions –

Focus
Intervention programmes delivered with users

Outcome
Most effective approach to address mental health stigma in schools (Yamaguchi and colleagues 2011).
School Interventions

Focus
Intervention programmes delivered using videos (plays, stories, puppets)

Outcome
Indirect extended ‘video’ contact conditions in older children have demonstrated intermediate effects between those for direct contact and education (Yamaguchi et al, 2011).

Conclusions so far...

• Anti-stigma campaigns focus on challenging stigma

• Most studies with young people focus on adolescence

• Best outcomes with contact

• Challenging and changing beliefs is not easy

• Shaping beliefs as they develop may be easier
Research questions?

- What do younger children understand about and how do they respond to mental illness?
- Can we influence younger children’s beliefs and attitudes to be more positive before stigma develops?

What do we know already?
Incremental learning model
(ethnicity and gender based)

Theory
- Stigma increases incrementally to peak around age 5
- declines as children understand that expressing discrimination is undesirable (Corrigan & Watson, 2007).

Evidence
- 5 year olds show more prejudice towards mental illness than older children (Weiss 1985; 1986; 1994 )
- age trend is consistent with prejudice in other domains (Aboud, 1988; Brown, 2010).
- BUT indicators of mental illness are subtle.
- Young children cannot recognise mental illness & don’t understand distinction between mental & physical illness
What do we know already?
Cognitive stage model

Theory
- children need sufficient cognitive skill to recognise mental illness as construct/group
- skills thought to develop with concrete operational stage around age 7 (Aboud, 1988)

Empirical
- Knowledge/stigma towards mental illness increases with age, greatest in males & older people (Fox et al. 2010; Hennesey et al. 2008; Jorm & Oh, 2009).
- Stigma towards mental illness from age 8 (Wahl, 2002; Emerson, 2010; Reavley & Jorm, 2011).
- Age 14, half words to describe mental illness are popular derogatory slang, “nuts”, “freak” “psycho” (Rose et al. 2007).
- Teenagers most common group to harass mentally ill (Berzins et al. 2003)

What do we know already?
School interventions in young children

Empirical studies all in Canada
- One observational/no outcome (Shah, 2004).
- One pre-post design and educational content (Lauria Horner et al. 2004).
- One educational vs control in older children (Ventieri et al. 2011).
- One puppet play vs control and included SMI but uptake low (Pitre et al 2007).

Outcomes
Improved knowledge and attitudes social distance, separatism, social restrictiveness and stigma.
The studies

Study 1 – A qualitative study of young children’s understandings of mental illness

Study 2 – A quantitative study of the role of age and gender in young children’s understandings of mental illness

Study 3 – A pilot RCT of an extended contact intervention in 7-8 year olds

Study 1

Research Question
What do younger children understand about and how do they respond to mental illness?

Design
• Semi-structured interviews, from six focus groups
• Thirty-three children aged 7-11 recruited from school council of two schools in B&H
• Watched 4 cartoons depicting children with mental illness (Animal Phobia, Depression, OCD, Psychosis).
Charlie used to be one of Jacob’s good friends but he hasn’t seen him around much lately. Jacob went over to Charlie’s house on the weekend for the first time in months.

Charlie didn’t want to go outside so they decided to play computer games. Charlie hardly spoke to Jacob except to tell him when it was his turn.
Jacob noticed that Charlie had started to stare out his window and he looked frightened.

Charlie, why are you looking out your window like that?

It's my neighbours, I heard them last night outside my window whispering about me.
Why would they be whispering about you Charlie? Are you sure it wasn’t just the wind?

Its because I have a special power. I can do things with my eyes.

Did you see that? When I stared at that man across the street he turned and walked the other way. I can also make buses go past when I want to. Look!
But Jacob could not see out of the window. He decided to continue playing the game and tried to beat Charlie’s high score.
Study 1- Interview

1. Knowledge/understanding
What do you think is happening in the story?
Why do you think Charlie is behaving like that?

2. Attitude/Intended behaviour
How does Charlie feel?
If you were Charlie’s friend how would you feel? What would you do?
Would you want to be friends with Charlie?

3. Impact of labelling
This story is about a person with psychosis? What do you know about that?
Does this make a difference to whether you’d want to be friends with Charlie?

Study 1- thematic analysis

<table>
<thead>
<tr>
<th>Theme</th>
<th>Sub-theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Making sense of others</td>
<td>Specific Integrated</td>
</tr>
<tr>
<td>2) Attitudes</td>
<td>Sympathetic Holistic Critical</td>
</tr>
<tr>
<td>3) Consideration of friendship</td>
<td>Impact on the self Other’s perspectives</td>
</tr>
<tr>
<td>4) Desire for certainty</td>
<td>Difficulty in tolerating ambiguity Benefits of certainty</td>
</tr>
</tbody>
</table>
Study 1 - thematic analysis

Making sense of others

Specific/Simple
- Minor Aspects
- Common sense
- Emotions

Integrated
- Physical illness
- Medical illness
- Contact
- Developmental continuum
- Thoughts, feelings, behaviour

Study 1 - thematic analysis

Triggered Attitudes

Sympathetic
- Empathy

Holistic
- Pity

Critical
- Negative Character trait
- Additional information
Study 1- thematic analysis

Consideration of friendship

Impact on the self
- Negative emotions activated
- External pragmatic effects

Others perspectives
- Assessment of social value
- Transferability of social value

Study 1- thematic analysis

Consideration of friendship – negative emotions activated

Ava: A little bit um weird... Because... it would feel a bit strange that she has to keep washing over and over again and stuff like that and if I was her friend I wouldn’t feel that nice.

Melissa: [...] I don’t think I would want to get quite a close friend cause if something were to happen I would kind of feel responsible cause [...] Like if he had a breakdown or he almost died I'd feel a bit responsible.
Study 1- thematic analysis
Consideration of friendship – Others perspectives – assessment of social value

Liam: Because at first I thought that it would be pretty cool [to have a friend like Charlie] but loads of people might be freaked out.

Consideration of friendship – Others perspectives – transferability of social value

Jackson: Cause they think that you have got a weird friend and if you have a weird friend then that makes you weird.
William: Well basically if you had a weird friend, other people would think you ... "He’s mad!" Why is he friends with him?

Study 1- thematic analysis

Desire for certainty

Difficulty tolerating ambiguity

Benefits of certainty

Feeling confused is not nice
Desire for information
Negative social effects
Know how to act
Effects of labelling
Provide friends with knowledge
Study 1- thematic analysis

Desire for certainty – Difficulty tolerating ambiguity - Desire for information

Lilly: if he has another problem I would say next time just come and tell it straight to me then I would play with you.

Desire for certainty – Benefits of certainty – Know how to act

Lauren: I would already be her friend but I would try and be even more of a friend cause I would then understand what she is going through and try and help her get through it.

Study 1- thematic analysis

Desire for certainty – Benefits of certainty – Effects of labelling

Researcher: If you knew that Charlie had something that was called Schizophrenia or psychosis [...] do you think that would make any difference to whether you would be friends with him or not?

Hayley: Yeah more likely friends because then... if I did know what it meant then I would know what it means and then I could be careful about that and help him.

Liam: I just thought he was being a baby, but he's got an animal phobia.
Study 1- conclusions

- Mental illness schema are under development
- Greater knowledge/understanding linked to more sympathetic attitudes.
- Children actively sought meaning and had a desire for certainty about social situations.
- Stigma tended to emerge when children did not understand mental health behaviour and had no other language to describe it.

Study 2

Research Question
What do younger children understand about and how do they respond to mental illness? How does this differ with age and gender

Design
- 77 children aged 7-11 (36 boys, 41 girls)
- 2 vignettes – psychosis and OCD
- Questionnaire
- Knowledge, Attitude, Intended Behaviour, Inter-group Anxiety and self reported contact
I would like to play with Sarah and Adam at lunchtime

Imagine that you are with Sarah and Adam, or other people like them that you don't know. How much would you feel...

Afraid?

Study 2 – Schema largely positive

<table>
<thead>
<tr>
<th></th>
<th>Young Male N=15</th>
<th>Young Female N=16</th>
<th>Older Male N=21</th>
<th>Older Female N=25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>3.62 (.62)</td>
<td>3.73 (.86)</td>
<td>3.94 (.54)</td>
<td>3.76 (.43)</td>
</tr>
<tr>
<td></td>
<td>2.55-4.64</td>
<td>1.73-4.82</td>
<td>2.91-5</td>
<td>2.91-4.55</td>
</tr>
<tr>
<td>Attitude</td>
<td>4.18 (.73)</td>
<td>4.67 (.64)</td>
<td>4.62 (.50)</td>
<td>4.60 (.50)</td>
</tr>
<tr>
<td></td>
<td>3-5</td>
<td>2-5</td>
<td>3.33-5</td>
<td>3.67-5</td>
</tr>
<tr>
<td>Behaviour</td>
<td>3.99 (.81)</td>
<td>4.51 (.62)</td>
<td>4.36 (.47)</td>
<td>4.195 (.66)</td>
</tr>
<tr>
<td></td>
<td>2.8-5</td>
<td>2.6-5</td>
<td>3.1-5</td>
<td>2.6-5</td>
</tr>
<tr>
<td>Intergroup Anxiety</td>
<td>2.13 (.56)</td>
<td>1.98 (.50)</td>
<td>1.82 (.48)</td>
<td>2.33 (.60)</td>
</tr>
<tr>
<td></td>
<td>1.25-3</td>
<td>1-3</td>
<td>1-2.75</td>
<td>1.25-3.75</td>
</tr>
<tr>
<td>Inclusion of Self</td>
<td>1.8 (.68)</td>
<td>2.06 (.77)</td>
<td>1.9 (.72)</td>
<td>1.92 (.78)</td>
</tr>
<tr>
<td></td>
<td>1-3</td>
<td>1-3</td>
<td>1-3</td>
<td>1-3</td>
</tr>
<tr>
<td>% reported contact</td>
<td>13%</td>
<td>44%</td>
<td>55%</td>
<td>60%</td>
</tr>
</tbody>
</table>
### Study 2 – Age*Gender and Knowledge strong predictors

<table>
<thead>
<tr>
<th>IVs</th>
<th>Behaviour</th>
<th>Attitude</th>
<th>Anxiety</th>
<th>IOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>Gender</td>
<td>ns</td>
<td>ns</td>
<td>+0.22°</td>
<td>ns</td>
</tr>
<tr>
<td>AgeXGender</td>
<td>-1.32*</td>
<td>-0.89°</td>
<td>+1.36**</td>
<td>ns</td>
</tr>
<tr>
<td>Contact</td>
<td>+0.21°</td>
<td>+0.17ns</td>
<td>ns</td>
<td>0.26*</td>
</tr>
<tr>
<td>Knowledge (Contact)</td>
<td>+0.32**</td>
<td>+0.28*</td>
<td>-0.24*</td>
<td>+0.41***</td>
</tr>
<tr>
<td></td>
<td>+0.23*</td>
<td>+0.19ns</td>
<td>ns</td>
<td>+0.28*</td>
</tr>
</tbody>
</table>

Rsq: .23, .18, .20, .24

(Contact) shows effects of Contact, controlling for Knowledge.

### Study 2- Improved attitude in older boys

![Graph showing estimated marginal means of attitude by age and gender](image)
Study 2- Improved intended behaviour in older boys but deterioration in girls

Study 2- Reduced inter-group anxiety in older boys but an increase in girls
Study 2- Very oldest boys show same increase in inter-group anxiety as girls

Study 2 – main findings

- Schema largely positive
- Positive schema related to greater knowledge, higher reported contact & lower intergroup anxiety
- Knowledge and to a lesser (independent) extent contact seems to drive positive schema in this young group (makes sense if schema still developing)
- Interaction between age and gender in predicting schema (younger girls more positive than boys but reverse in older group)
Study 2 - Conclusions

- Childrens (boys) early mental illness schema are/become positive (Incremental model?)
- BUT driven by knowledge
- Mental illness schema and then stigma, develop in a staged way, first in girls, closely linked to anxiety (cognitive stage model?)
- Consistent- adolescent girls conform to social desirability rules of peers (Pinto-Foltz et al. 2009) and unlikely to tell peers of mental illness for fear of exclusion (Chandra and Minkovitz 2007).

Study 3

Research Question
Can an education and extended contact (story) intervention be used to promote and maintain positive mental illness schema in younger children?

Design
- Randomised controlled trial
- 42 children aged 7-8
- Experimental vs control stories
- 2 stories – psychosis and OCD
- Questionnaire’s completed one week later
Study 3 – The Mystery of the Necklace in the Tree

Suddenly, someone swung down from the tree above, right in front of us. Hanna and Abbie screamed with fright. None of us would ever have expected someone to swing upside down from above our heads like that! "Oh Paul, give it a rest!", said Jack. "Guys, this is my brother Paul".

"I'm not your brother, I'm the brother of the trees. Only they understand me and only I understand them", Paul said finally coming down from the tree to stand in front of them.

He was a tall thin boy, with a filthy shirt and torn, dirty jeans. Even his hair was dirty. It was obvious that it had been several days since he’d had a bath. I was also very curious about one thing I noticed: he didn’t wear shoes.

"He wants to take a nap and you're disturbing him", Paul said.

"He? Who are you talking about?", I asked him.

"The tree."

Study 3 – The Discussion

Five points

(i) the continuum of mental illness with normal experience;
(ii) the causal role of both genes and environment;
(iii) the importance of the way we understand and respond;
(iv) the possibilities for intervention and recovery;
(v) that its OK to talk about mental illness.

Specific learning approaches such as scaffolding, massed practice and errorless learning
**Study 3**

**Hypothesis**

- more positive mental health schema with intervention
- indirect contact effects through improved inclusion of self in other and reduced intergroup anxiety. (Cameron et al. 2006 and Wright et al. 1997).
- If intervention increases knowledge then knowledge might also prove to be a mediator

**Study 3**

**Key results**

- Effect of intervention highly significant (.23-.41 of variance explained)
- IOS and intergroup anxiety no independent effect on outcome after group (so not mediators)
- Knowledge had significant independent effect and reduced effect of condition (so a partial mediator) for Attitude and Behaviour but not IOS/Anxiety (-.32*, reduced from -.51*** for Attitude; -.36* from -.53*** for Intended Behaviour).
Study 3 – Intervention highly significant effects on mental illness schema

<table>
<thead>
<tr>
<th>IV</th>
<th>Behaviour</th>
<th>Attitude</th>
<th>Anxiety</th>
<th>IOS</th>
<th>Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>+.38*</td>
<td>+.25</td>
<td>-.16</td>
<td></td>
<td>+.17</td>
</tr>
<tr>
<td>Group</td>
<td>-.53***</td>
<td>-.51***</td>
<td>+.47**</td>
<td></td>
<td>-.64***</td>
</tr>
</tbody>
</table>

Rsq .40 .30 .23 .41 .26

F (2,39) 12.93*** 8.20*** 5.83** 13.55*** 7.02***

*** p < .001
** p < .01
* p < .05

Study 3 – Large reliable effects on mental illness schema

**Intervention**
- Education & extended contact

**Increased knowledge**

**Positive attitude**
- Positive Intended Behaviour

**Reduced Anxiety**

**Improved inclusion of self in other**
Final conclusions

- Children as young as 7 have developing schema around mental illness
- Children seek to understand and resolve uncertainty
- Knowledge and understanding (whether labelling, other learning or intervention) leads to more positive attitudes and intended behaviour
- Intergroup anxiety develops in pre-adolescence and contributes to stigma development
- A story based intervention shows promise for promoting positive mental illness schema
- Education and extended contact may promote different aspects of mental illness schema
Conclusions and next steps...

• By aged 14 upwards stigma has developed as a barrier to help seeking

• Early programmes that focus on knowledge and contact may maintain positive attitudes, reduce development of inter-group anxiety and enable children to talk about mental illness earlier.

• Other work is focussing on parents, teachers and service users to develop the best ways to talk to children and their communities