Communication and assessment apps for use with children and young people

ACAMH 2023

David V Glasgow
Honorary Professor, Nottingham Trent University
Sexual Offences, Crime and Misconduct Research Unit
Consultant Forensic & Clinical Psychologist
Carlton Glasgow Partnership
Director, Child & Family Training, York

www.inmyshoes.org.uk

www.childandfamilytraining.org.uk
C&FT are a not-for-profit organisation. We train professionals working with children and families to use evidence-based tools, including where children and young people may or have been victims of abuse. Our aim is to promote health and development of children, young people and families by building on their skills and strengths, and those of professionals working with them.
An Interactive Visual Analogue Scale (VAS):
• Establish capacity
• Express & prioritise goals/preferences
• Evaluate relationships
• Quantify symptoms, wishes & preferences

A Draw-&-Tell tool:
• Build rapport
• Enhance communication
• Establish capacity
• Scaffold narrative
• Record wishes and fears
• Describe experiences

A feelings (emotions & sensations tool):
• Locate & explore sensations (inc. pain)
• Attribute causes to injury, (including perpetrator)
C&FT apps: The overarching principle

A clear understanding of children’s experiences and (inter)personal world is essential for appropriate therapy, advocacy, care and protection. **Symbol supported** assessment and communication can engage and enhance the communications of children who would otherwise struggle to communicate.
Child interacting with, and using symbols
Child engaging with symbols
(Mum is my hero
Barbara too)
Symbols & Communicative Intent:
DeLoache 2004
Young children value prototypicality over detail

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>DETAILED (Non-Prototypical)</th>
<th>VAGUE (Prototypical)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bird</td>
<td><img src="image" alt="Penguin" /></td>
<td><img src="image" alt="Bird" /></td>
</tr>
<tr>
<td>House</td>
<td><img src="image" alt="Traditional Chinese House" /></td>
<td><img src="image" alt="House" /></td>
</tr>
<tr>
<td>Cat</td>
<td><img src="image" alt="Lion" /></td>
<td><img src="image" alt="Cat" /></td>
</tr>
<tr>
<td>Fish</td>
<td><img src="image" alt="Ray" /></td>
<td><img src="image" alt="Fish" /></td>
</tr>
</tbody>
</table>

Allen et al 2010

Figures on right selected by children to be symbols of verbal category
The Venerable FRT

FAMILY RELATIONS TEST
Children’s Version

EVA BENE  Ph.D., M.A.
and
JAMES ANTHONY  M.D., B.Sc., D.P.M.

Test Manual
The youthful SCARF
... 3D symbols better behind glass

DeLoache used a model room to show young children where a toy was hidden in a real room with identical layout.

A glass fronted model lead to greater success - measured by child finding toy in real room.
Using new technology, symbols & icons

- The ability to use symbols to represent people & objects typically develops at about 2 years (perhaps earlier)
- Conversations supported by children’s drawings are more productive
- Thought and speech bubbles enhance theory of mind ability, and possibly facilitate CBT (ID)
- Children now familiar with screen based symbols and avatars
- Children of all ages engage very positively with apps
- Eye contact can intimidate and impair cognitive function in young children
- Children also prefer collaborative, side by side conversations to face to face, interrogative interviews
- Adolescents and children on the autistic spectrum often particularly uncomfortable with eye contact
In My Shoes

A comprehensive communication digital toolkit-

(Mac OS & Windows)
<table>
<thead>
<tr>
<th>Facet of interview/assessment</th>
<th>Relating to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 People</td>
<td>Representation of self and others</td>
</tr>
<tr>
<td>2 Settings and context</td>
<td>Domestic, educational and leisure</td>
</tr>
<tr>
<td>3 Affect</td>
<td>Positive and negative</td>
</tr>
<tr>
<td>4 Pain, injury and discomfort</td>
<td>Pain type, location &amp; intensity</td>
</tr>
<tr>
<td>5 Thought</td>
<td>Self report and attributed to others</td>
</tr>
<tr>
<td>6 Speech</td>
<td>Self report and attributed to others</td>
</tr>
<tr>
<td>7 Cognition and interpretation</td>
<td>Subjective interpretation of events and circumstances</td>
</tr>
<tr>
<td>8 Degree, intensity and comparison</td>
<td>Of and between individuals, experiences, objects and alternatives</td>
</tr>
</tbody>
</table>
Interview facets as Standardised IMS symbols

- **People**
- **Emotions**
- **Scales**
- **Sensations**
- **Structured Narrative, Conversation & record**
- **Thoughts & Speech**
- **Backdrops**
- **Messages**

**My 3 wishes...**

1. It happened two times

2. It happened two times
Oliver describes being ‘mad’ (angry)
Oliver doesn’t want me to interrupt the guide
Animated or video Guides: 11 languages/cultures

- Structure and standardise conversation
- Enhance collaborative interaction
- Offer cultural and/or linguistic localisation
- Improve accessibility to children with a disability

(Also Norwegian & Turkish)
The collaborative focus
Pattern of interacting with IMS

Sheila & Ella I
Attention & interaction with IMS

Sheila & Ella II
Attention & interaction with IMS

Sheila & Ella III
Attention & interaction with IMS

Sheila & Ella IV
This Much

An Interactive Visual Analogue Scale (VAS):

- Quantify symptoms, wishes & preferences
- Establish capacity
- Express & prioritise goals/wishes
- Evaluate relationships
- Explain distinctions
Inspiration for This Much:  
In My Shoes ‘Experiences’ module
Versatility of the experiences module mood & aggression

- Dead mad
  - Criticised in front of people

- Pressure building
  - Hearing women laugh
  - Pointing out my mistakes
  - Being let down by someone
  - Someone laughing at my mistakes
  - Hearing men laugh
  - Being told to hurry up

- Pretty chilled
  - Someone getting mad at me
  - People not listening to me
  - Being criticised 1 to 1
  - Not getting lends back
  - Taking me for a fool
When I see my dad

**good**
- go to Maccy D
- go back to dads

**ok**
- When I wake up
- We drive to park

**bad**
- leave mum
- go to nanna T
- get in dads car
- go to dads
The sadness I feel n
<table>
<thead>
<tr>
<th>unipolar scale</th>
<th>bipolar scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>happy</td>
<td>angry - happy</td>
</tr>
<tr>
<td>angry</td>
<td>sad - happy</td>
</tr>
<tr>
<td>sad</td>
<td>cross - tick</td>
</tr>
<tr>
<td>thumbs down / up</td>
<td>thumbs down / up</td>
</tr>
<tr>
<td>none</td>
<td>happy - sad (3 point scale)</td>
</tr>
</tbody>
</table>

The sadness I feel now
The sadness I feel now
...assessment tool.

Designed by David Glasgow
Developed by Phil Jimmieson.
A feelings (emotions & sensations) tool

- Explore positive and negative affect
- Locate & explore sensations, including pain
- Attribute causes to injury, (including perpetrator)
Backdrop

A Draw-&-Tell tool:

- Build rapport
- Enhance communication
- Establish capacity
- Scaffold narrative
- Record wishes and fears
- Describe experiences
Backdrop as a worksheet creator and platform

What I want to say
my letter to the judge

What I think about ...

A perfect day...
Bedtime  
Morning
Evening  
Afternoon

About...
3 good things  
3 bad things

①  
②  
③
Evidence relating to In My Shoes & Apps:
Children’s pain

Calam et al (2002b)  
Account of In My Shoes development & potential in pain measurement

- Good correlation between In My Shoes and established pain measures
- In My Shoes excellent test-retest reliability

Watson, et al. (2002)  
In paediatric arthritis:
- Good usability
- Good acceptability (95% of children preferred the app to traditional pain measures)

- Parents said app captured complexity of pain in a child-friendly way
Professional feedback (Social workers)

Grasso et al (2013) surveyed 39 In My Shoes social worker users, in relation to a total of 592 cases.

Uses:

- 28.9% reported that they used In My Shoes regarding family placement
- 42.1% for care proceedings and reviews
- 47.4% in cases of child abuse and neglect
- 63.2% to investigate the child’s experience of education and school

Overall:

- 76% of users reported that In My Shoes was either ‘Very Useful’ or ‘Essential’ in their work.
Autistic Spectrum disorder

Barrow & Hannah (2012) reported using In My Shoes with children with an autistic spectrum disorder (ASD). They found that some children tended to be irritated by the guide, but added:

“It might have been expected, given the difficulties associated with ASD, that participants might have found distinguishing between visual representations of themselves and others confusing. However, a number of the participants indicated that they were able to distinguish between self and other representations … ‘That’s just a girl. Not me . . . It could be one of my friends’"
Validity & acceptability: Adults with learning disability

Glasgow & Crossley (2004) investigated In My Shoes and ability of patients detained in secure hospital to report the cause of significant injuries.

• Accuracy & completeness of In My Shoes as good as two other interview approaches

• In My Shoes was much preferred by interviewees.
Exploring children’s experiences of a parent with bipolar disorder

Backer et al (2016) conducted a qualitative study of In My Shoes used to elicit and account of children’s (6-10 yo, N=10) experiences of a parent with bipolar disorder:

• Children of all ages were able to describe their parent and the symptoms of bipolar disorder (whether the child knew about the illness or not)
• Four year old children could discuss their parent’s mood and behaviour
• Children older than seven could reflect about the impact on themselves both emotionally and practically
• Both positive and negative experiences were described
• Children in two parent families were able to describe their perception of the parent without bipolar, and their role within the family
• One child talked about his father’s and his own fears of becoming bipolar
Validity:
Very young children (4-5 years old, N = 23)

Bokström et al 2015 (using Swedish version) investigated the use of In My Shoes to interview children about a routine health assessment between 2. They concluded:

“… the results suggest that In My Shoes can be used to help children to describe their health care experiences, with detail, depth and reasonably high accuracy. The children actively made use of and interacted with the In My Shoes, and held their interest for an extended period of time.”
Very young children (4-5 years old, N=54)

Fängström et al 2016 (using Swedish version) compared In My Shoes with NCAC forensic interview (FI) re: accuracy, completeness and responsiveness of child:

• 96 % of the children actively made use of and interacted with In My Shoes.
• In My Shoes elicited accounts as accurate and complete as NCAC, except for objects.
• In My Shoes gave significantly more information about people than NCAC

“… In My Shoes interviews were as good as best practice interviews on all accuracy measures for both age groups, except for object accuracy that was better in the forensic interview condition. Events description completeness was similar in both interview conditions; however, In My Shoes interviews generated more complete statements about people present at the visit.”
Validity:
Very young children (4-5 years old, N=60)

Fängström et al 2017 (using Swedish version) compared In My Shoes with NCAC and situationally shy, with non shy children:

• Quieter, more inhibited children interviewed with In My Shoes showed a greater increase in verbal responsiveness compared with the standard interview.

“… The results showed that for the shy children in the In My Shoes group their talkativeness increased and their answer latency decreased, including the amount of encouragement the child needed to talk, while no changes were observed for the shy children in the Standard verbal interview group.”
Properties of the apps toolkit 1

1) Removes production demands and variability of ad hoc symbols (i.e. drawing, dolls etc)

2) Appealing, motivating & empowering

3) Progresses from general to specific and self disclosing

4) Comfortable pace of interview, for both the interviewee and interviewer

5) Clear modular structure and framework for interviewing

6) Equal support for exploring non abuse related/positive experiences

7) May be used pre-interview & ‘without prejudice’

8) Can be readily localised
Properties of the apps toolkit 2

9) Portable and self contained

10) Establishes Communicative Intent

11) Readily learned by interviewers

12) More positive engagement (‘screen generation’)

13) Discourages/regulates fantasy play, promotes veracity

14) Accessibility enhancements for disabled children

15) Existence of a product allows better regulation

16) Detailed, tamper resistant record
David V Glasgow
Consultant Forensic & Clinical Psychologist
Honorary Professor, Nottingham Trent University
Sexual Offences, Crime and Misconduct Research Unit
Carlton Glasgow Partnership
Director, Child & Family Training, York

www.childandfamilytraining.org.uk
www.inmyshoes.org.uk
DVGlasgow@Gmail.com