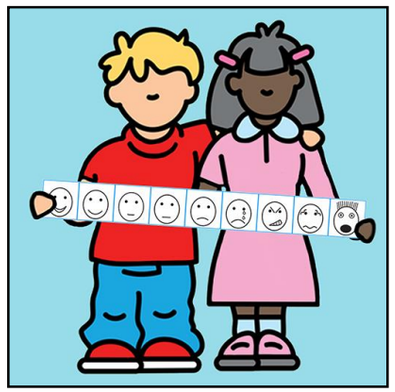
Communication and assessment apps for use with children and young people

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

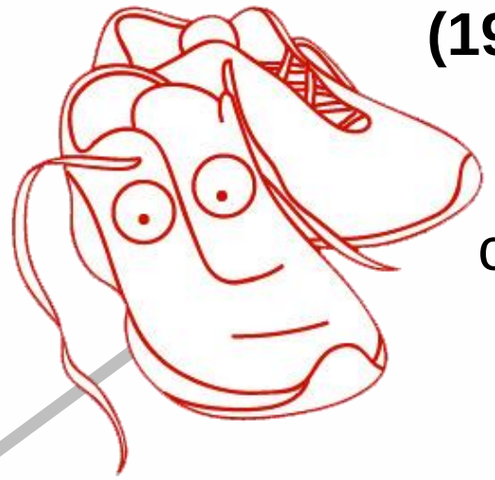
www.childandfamilytraining.org.uk

Child and Family Training (C&FT)

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.

Toolkit Development

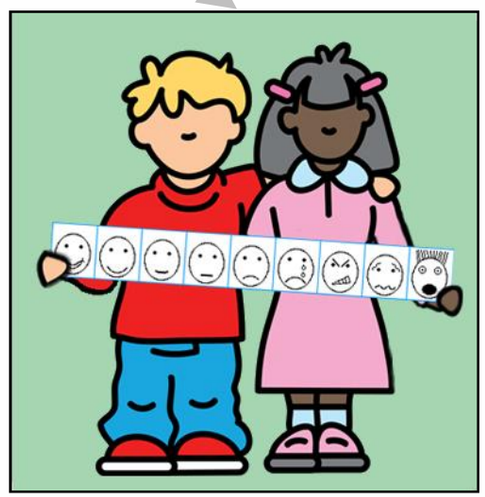
IMS (In My Shoes)
(1993➛present)



- a comprehensive communication toolkit-
(Mac OS X & Windows)

This Much! (2013)

Backdrop (2014)



This Feeling (2015)

In My Shoes inspired apps for iPad, Windows tablets Mac OS and Windows

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

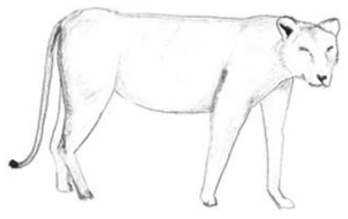
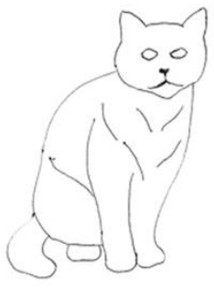
Balloon

Lollipop

Child

Experimenter

Young children value prototypicality over detail

CATEGORY	DETAILED (Non-Prototypical)	VAGUE (Prototypical)
Bird		
House		
Cat		
Fish		

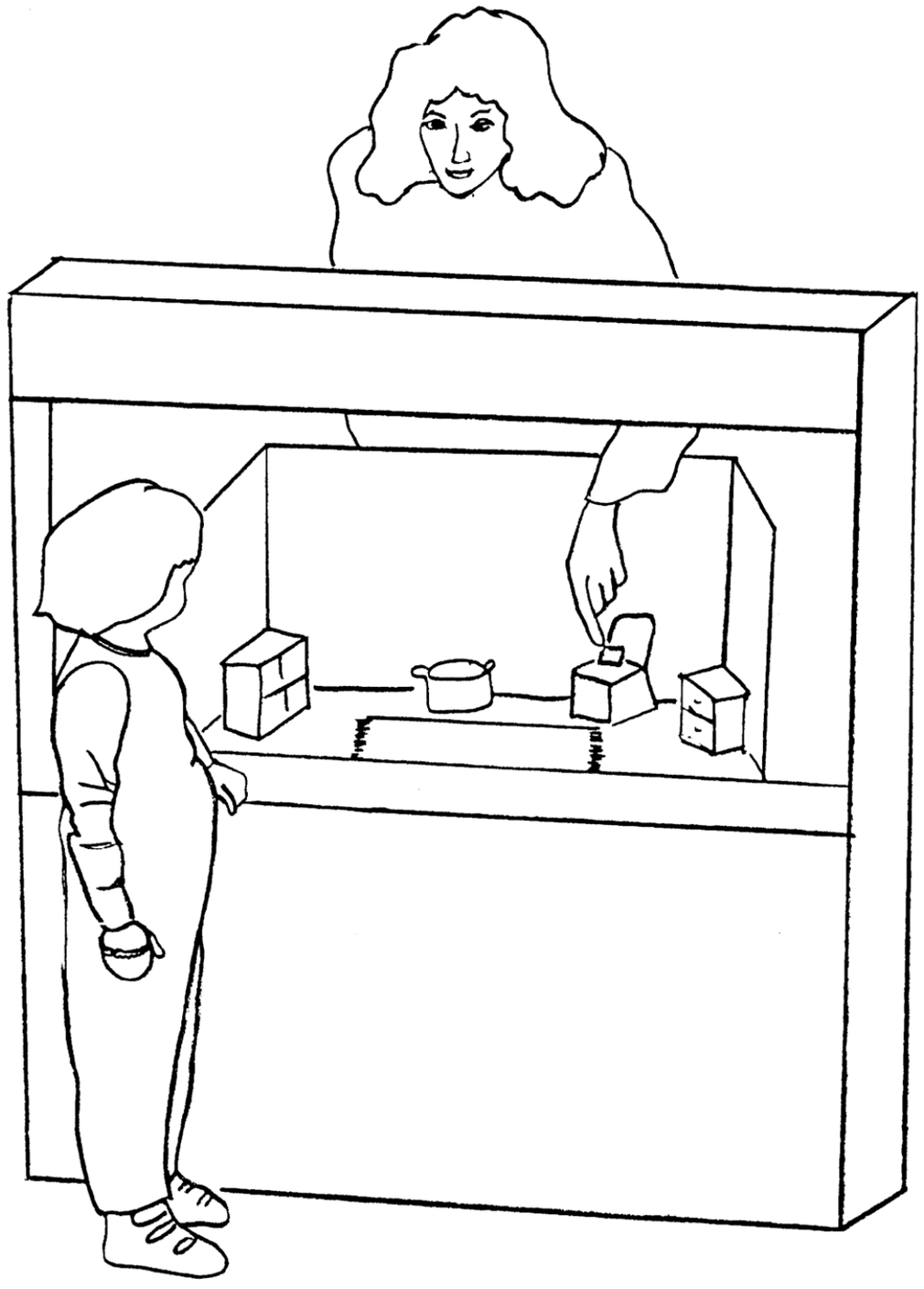
Allen et al 2010

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

The Venerable FRT

The youthful SCARF

… 3D symbols better behind glass



DeLoache (2000)

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

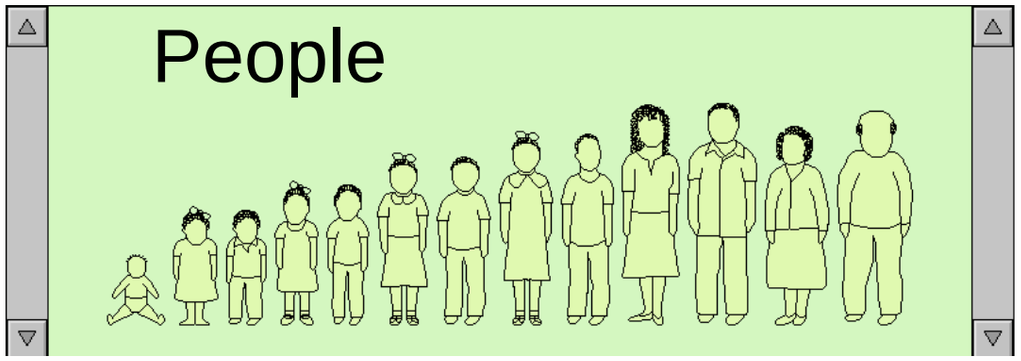
A comprehensive communication digital toolkit-

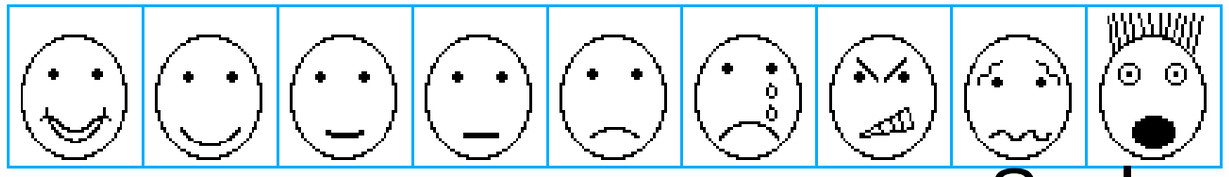
(Mac OS & Windows)

8 ‘Facets’ of communication & assessment

	Facet of interview/assessment	**Relating to:**
1	People	Representation of self and others
2	Settings and context	Domestic, educational and leisure
3	Affect	Positive and negative
4	Pain, injury and discomfort	Pain type, location & intensity
5	Thought	Self report and attributed to others
6	Speech	Self report and attributed to others
7	Cognition and interpretation	Subjective interpretation of events and circumstances
8	Degree, intensity and comparison	Of and between individuals, experiences, objects and alternatives

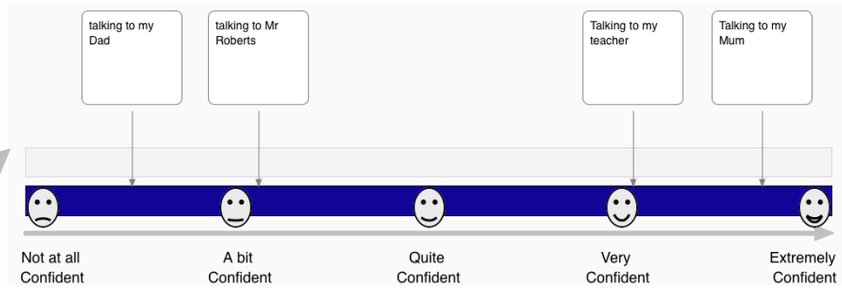
Interview 'facets' as Standardised IMS symbols



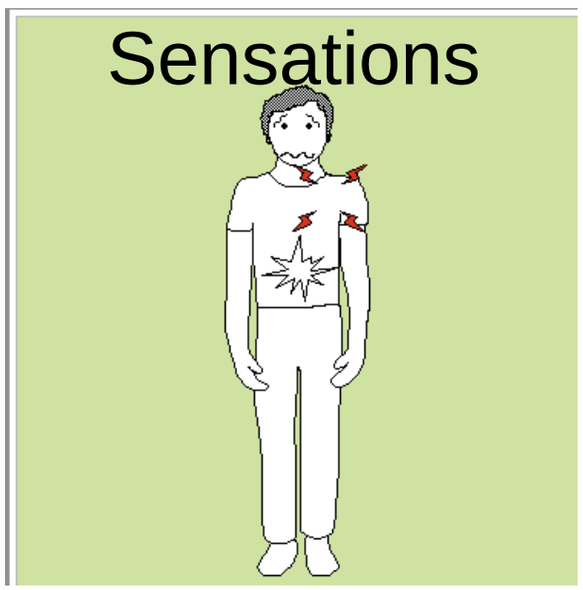


Emotions

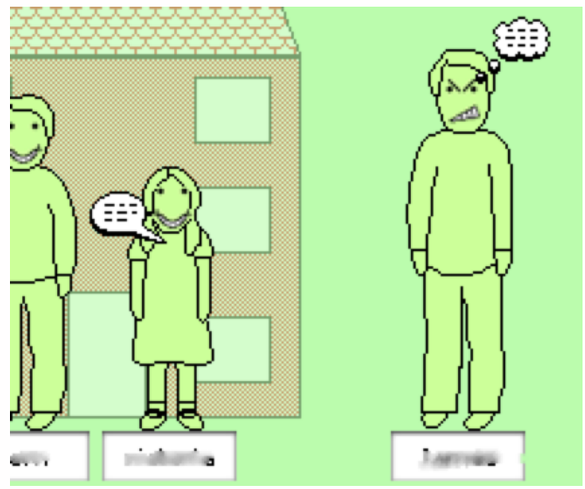
Scales

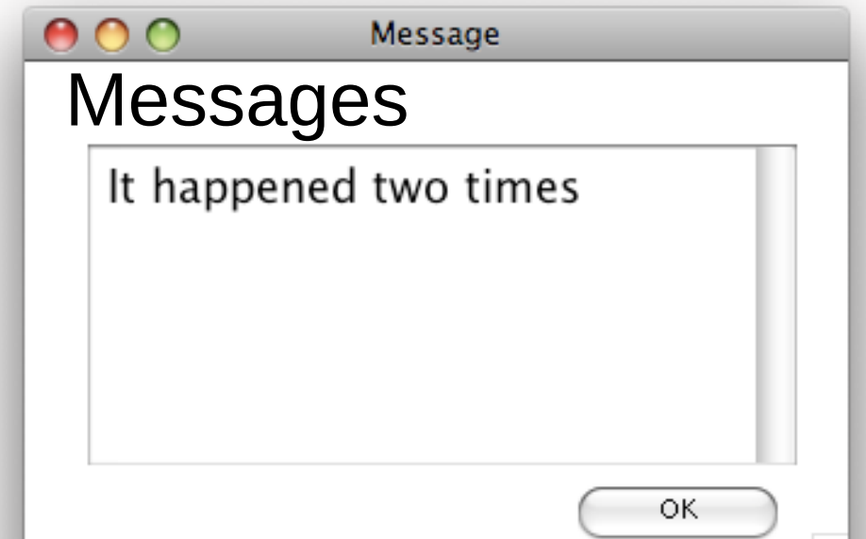


Thoughts & Speech



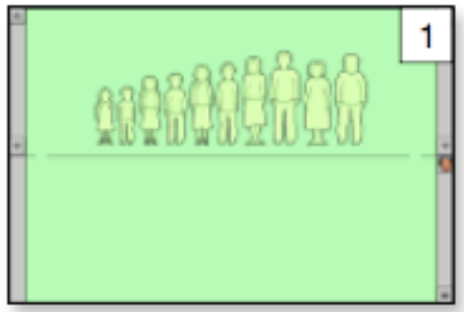
Structured Narrative, Conversation & record





Oliver describes being ‘mad’ (angry)

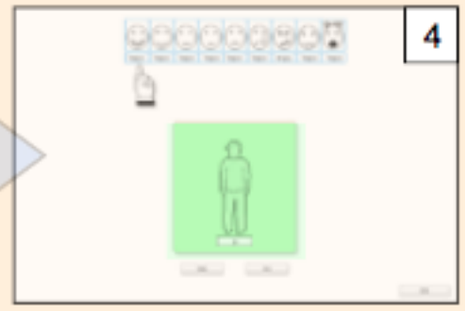
Oliver doesn’t want me to interrupt the guide



Introduction

Emotions

Emotions & Scenes



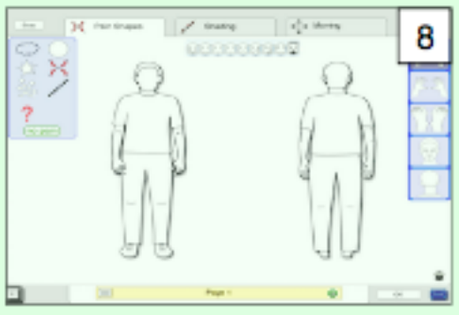
Have You Ever

Setting Your School

Places

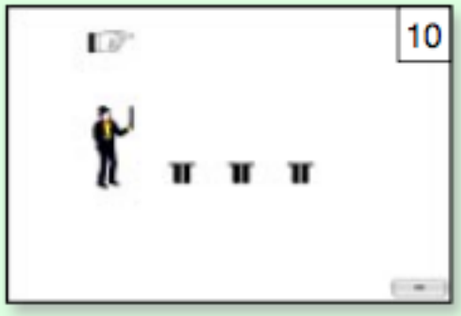
People

Emotions & People



Somatic Experiences

Experiences



Training

Session Saving: auto

Animated or video Guides: 11 languages/cultures

- Structure and standardise conversation
- Enhance collaborative interaction

English

Swedish

Black English woman

(Also Norwegian & Turkish)

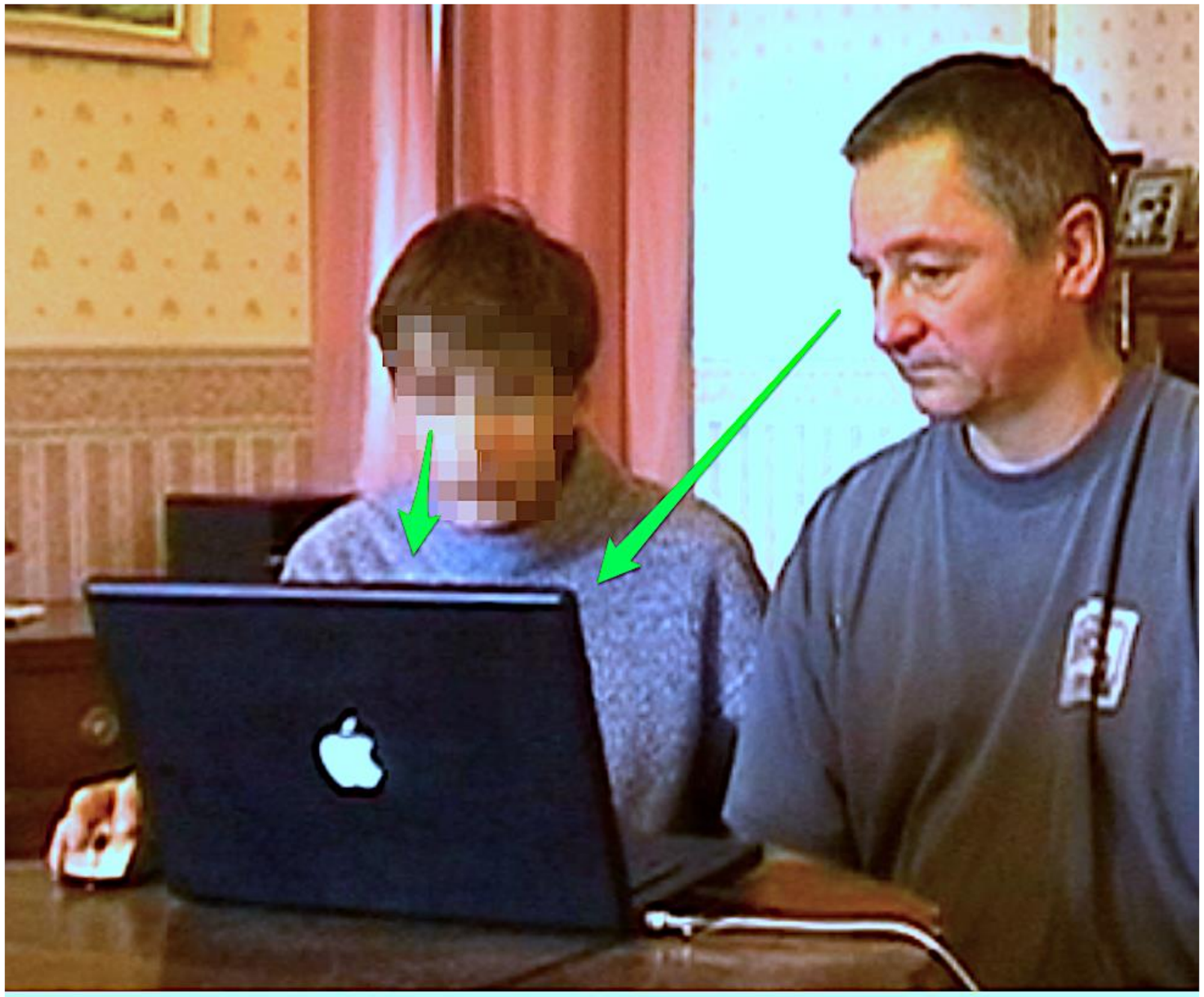
- Offer cultural and/or linguistic localisation
- Improve accessibility to children with a disability

Spanish

Sign Supported English

British Sign Language

The collaborative focus



Pattern of interacting with IMS

Sheila & Ella I

Attention & interaction with IMS

Sheila & Ella II

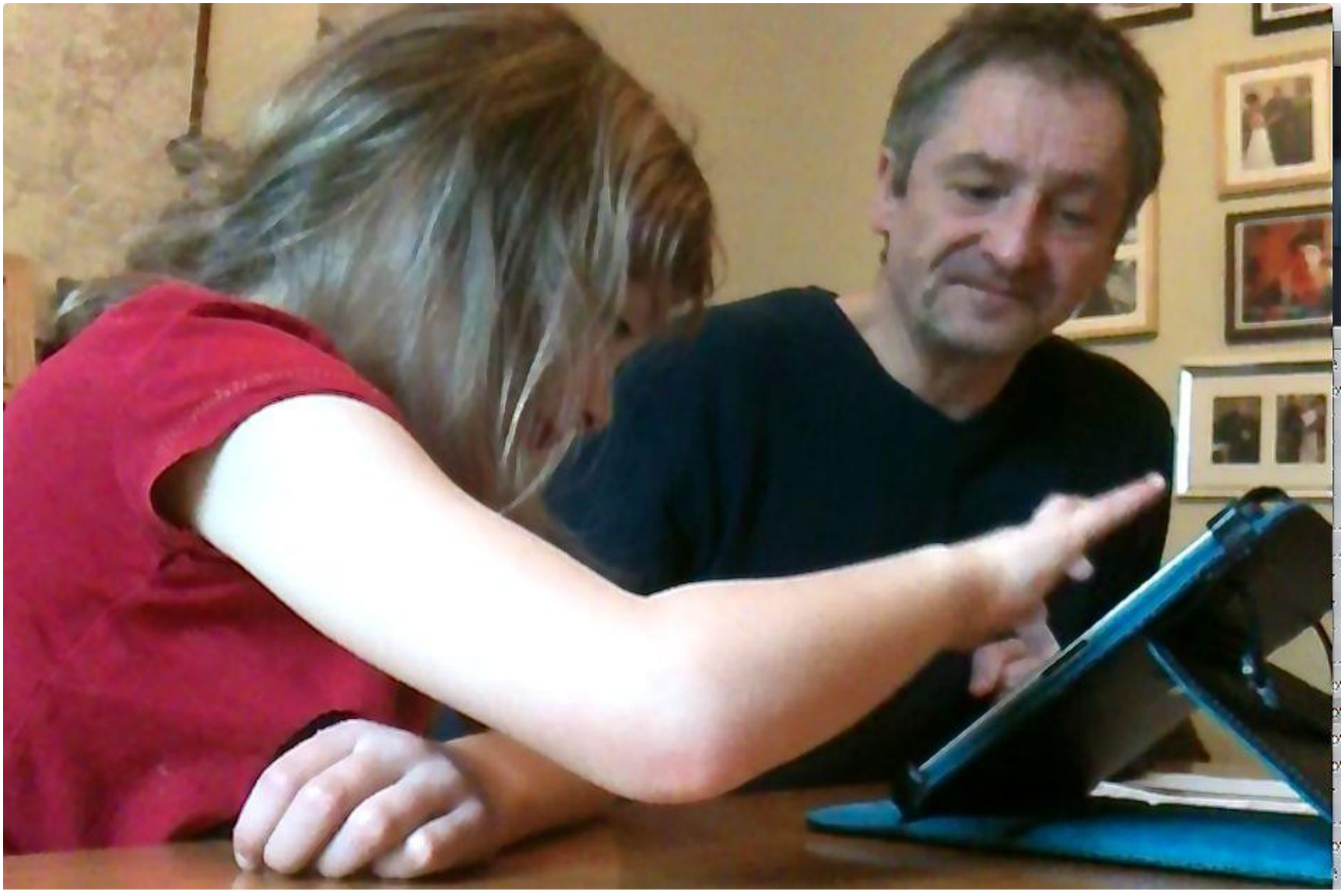
Attention & interaction with IMS

Sheila & Ella III

Attention & interaction with IMS

Sheila & Ella IV

Using touch tablet

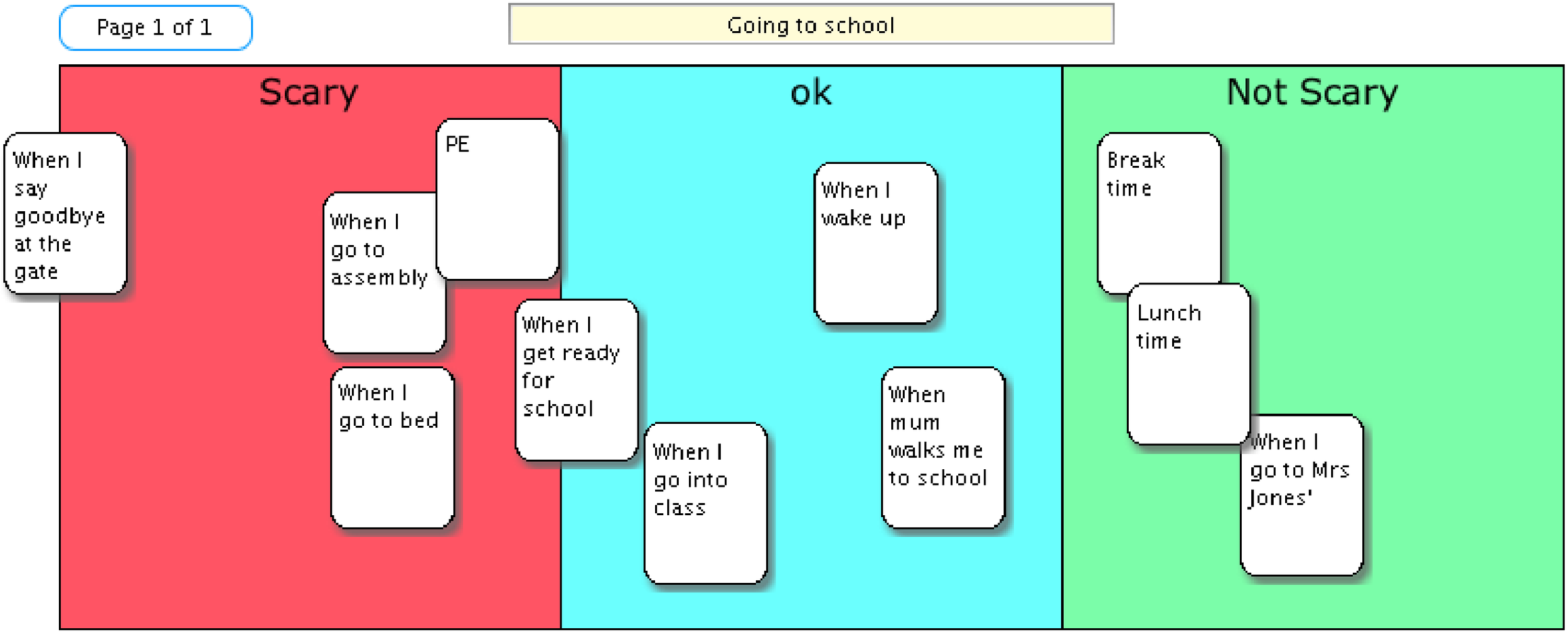


This Much

An Interactive Visual Analogue Scale (VAS):

- Quantify symptoms, wishes & preferences
- Establish capacity
- Express & prioritise goals/wishes
- Evaluate relationships
- Explain distinctions

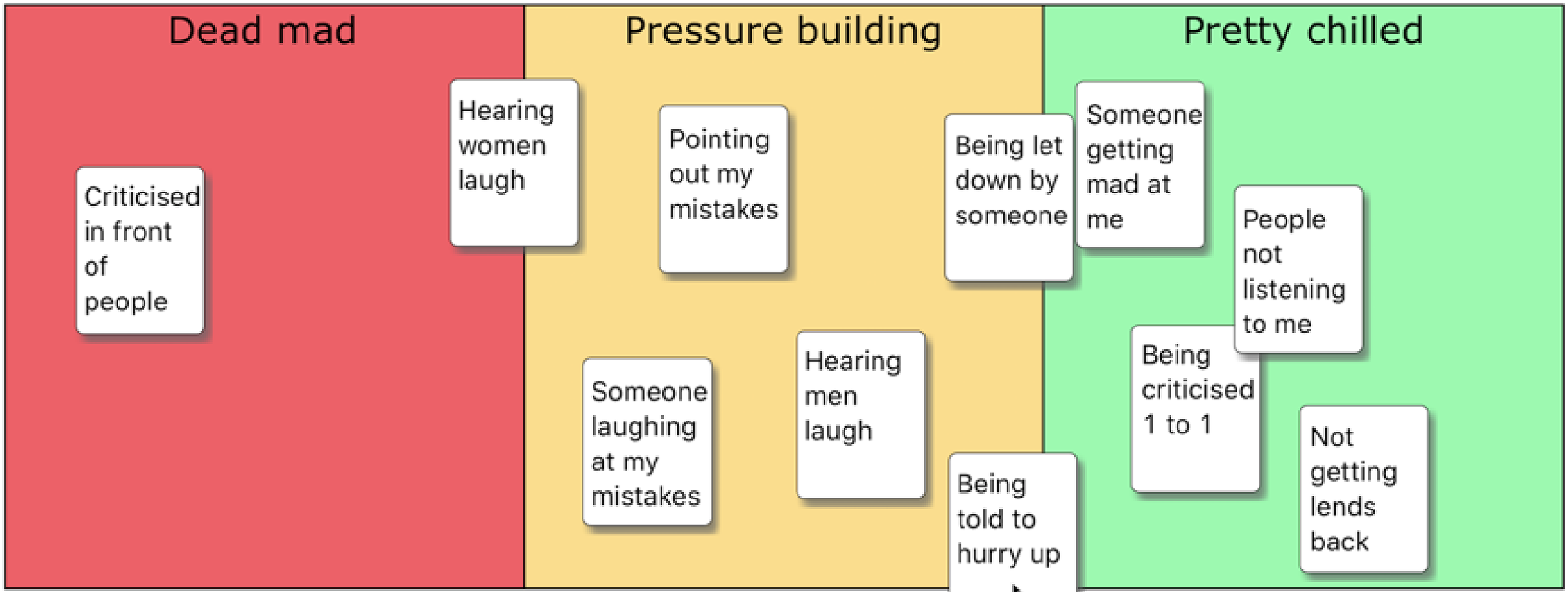
Inspiration for This Much:
In My Shoes ‘Experiences’ module



Versatility of the experiences module mood & aggression

Page 1 of 1

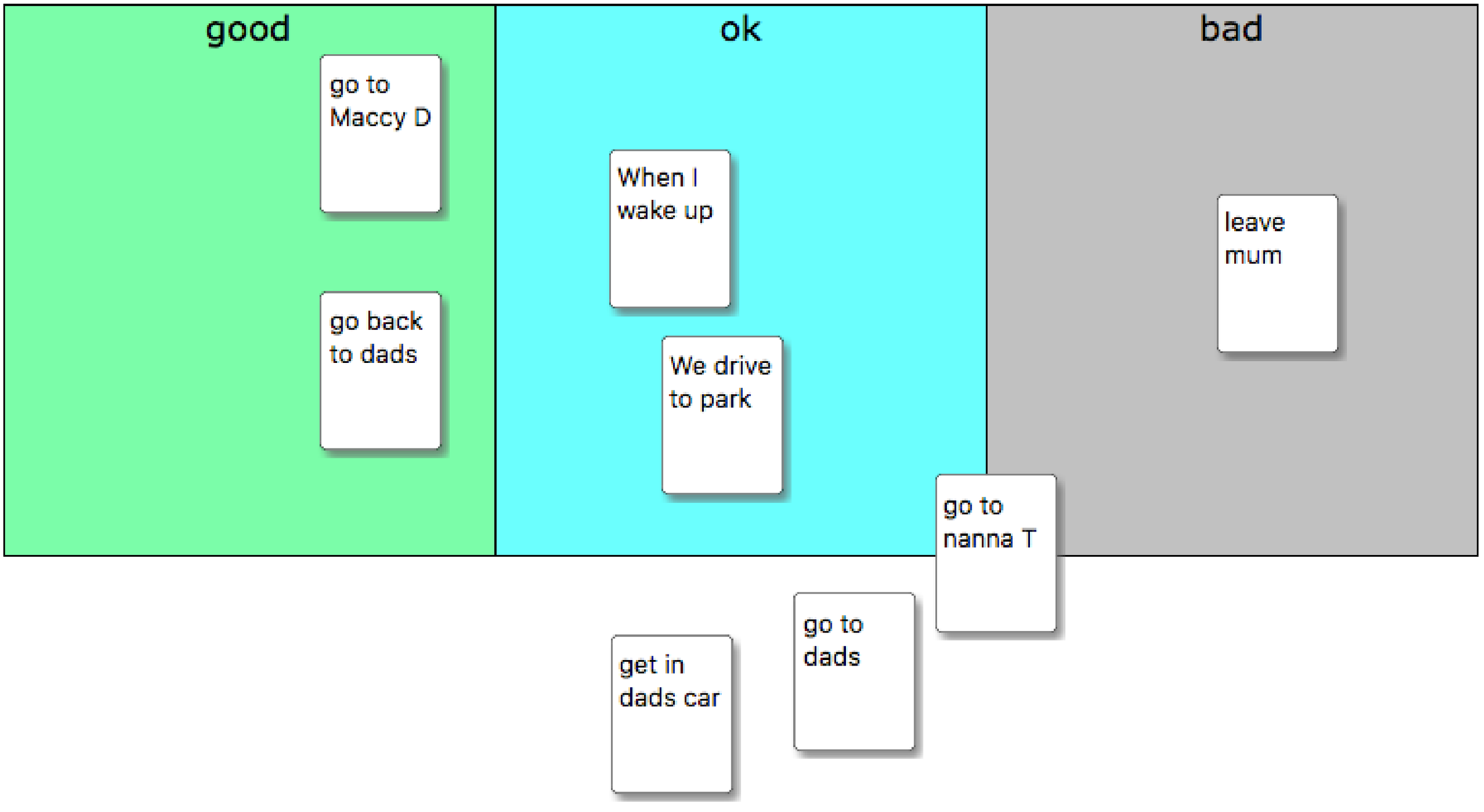
How mad do these make me?

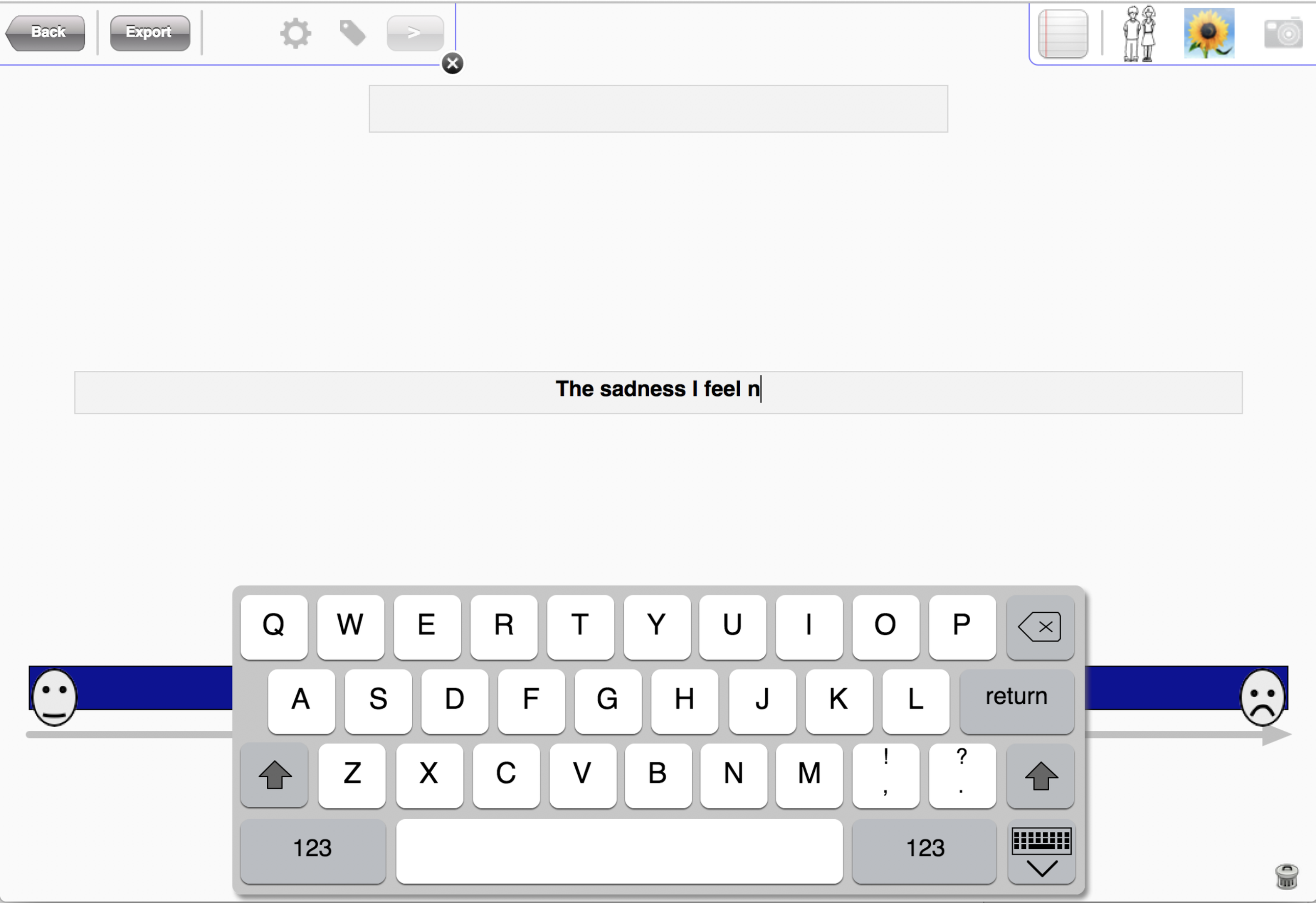


Versatility of Experiences module: Issues during contact

Page 1 of 1

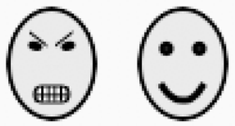
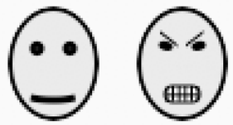
When I see my dad




Back
Export
The sadness I feel n
Q W E R T Y U I O P
A S D F G H J K L return
Z X C V B N M ! , ? .
123
123

Back | Export

Scales

unipolar scale	bipolar scale
happy	 angry - happy
 angry	sad - happy
sad	cross - tick
thumbs down / up	thumbs down / up
none	happy - sad (3 point scale)
	none

The sadness I feel now

Back | Export

Scale labels

None
Custom
Caring
Pain
Pain (classic)
Frequency
Degree/Intensity
Amount
Percent
Anger
Kindness
Sad

OK

The sadness I feel now

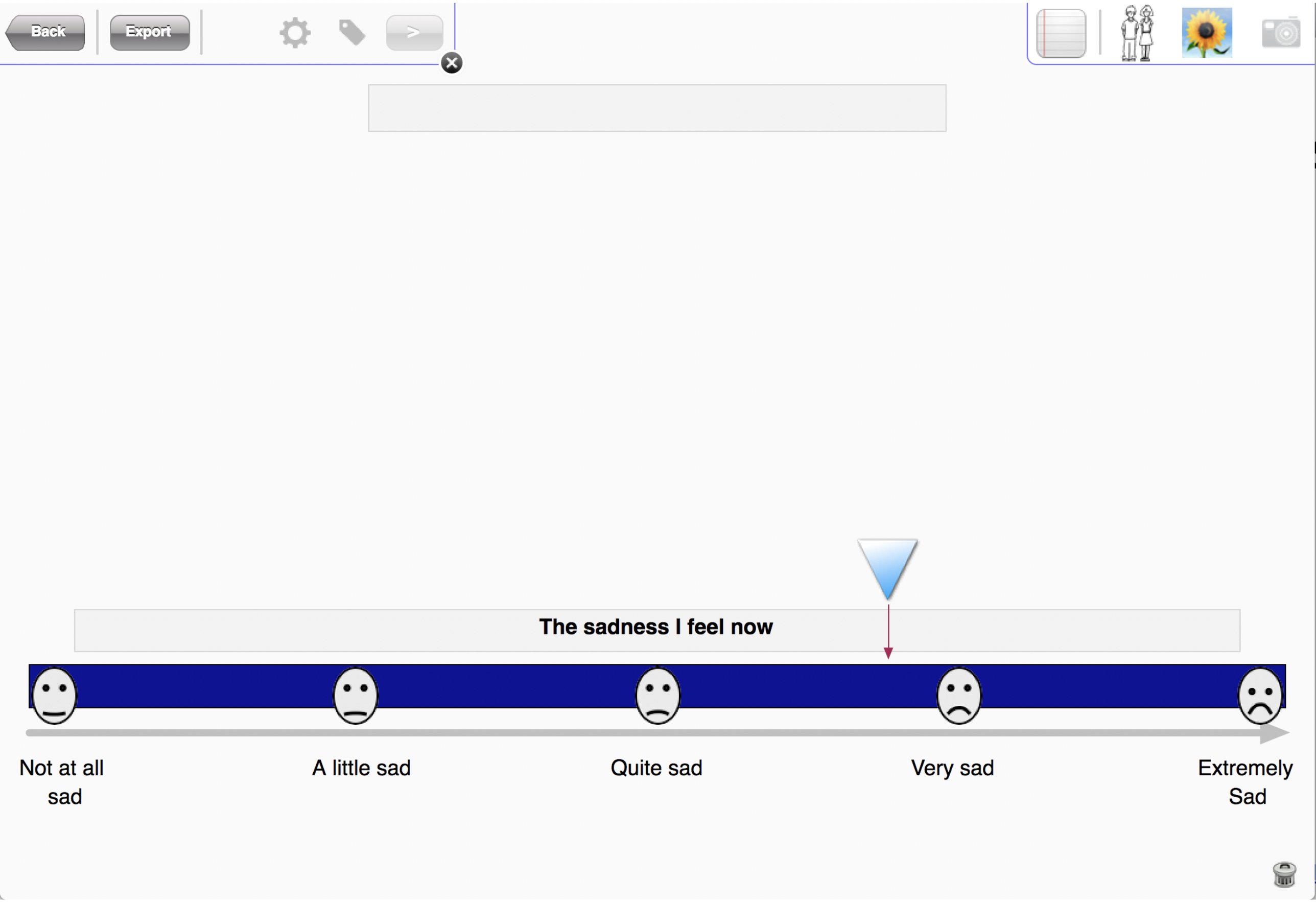
Not at all sad

A little sad

Quite sad

Very sad

Extremely Sad


Back
Export
The sadness I feel now
Not at all sad
A little sad
Quite sad
Very sad
Extremely Sad

Back Export

With Teachers

With My friends

When I was living with my mum

Where I live now

With family friends

When [redacted] visits

[redacted]hen my mum [redacted]its

How I feel about things...

Not happy at all

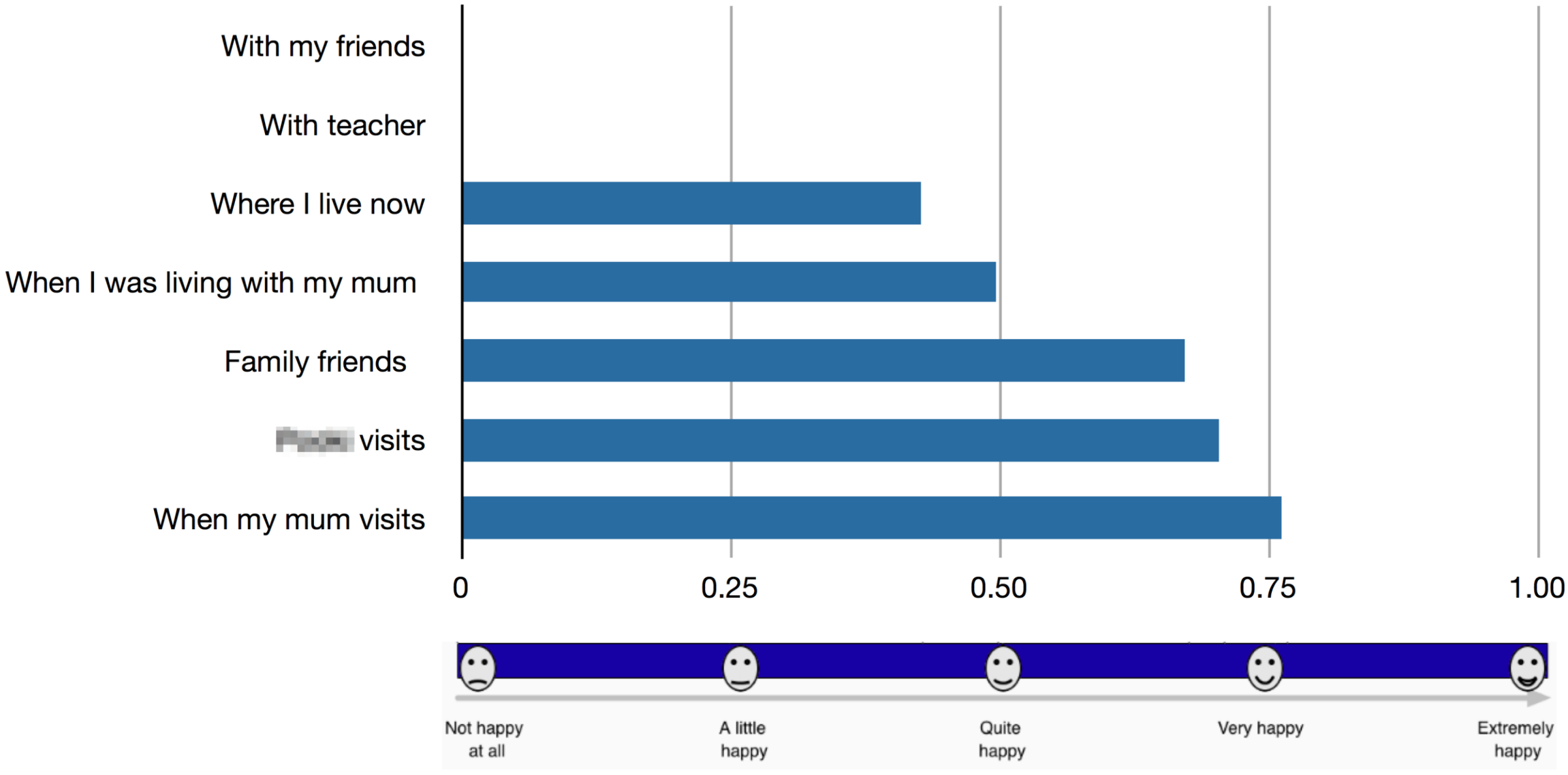
A little happy

Quite happy

Very happy

Extremely happy

How I feel about things



Dad

Happiness

Not happy at all

A little happy

Quite happy

Very happy

Extremely happy

Configure...

Preferences

use application keyboard

enable sensitive scales

OK

is a...

child and family training

...assessment tool.

Designed by David Glasgow
Developed by Phil Jimmieson.

Start a new session

Session Fri, 6 Jun 2014 14.25.34

Resume the session

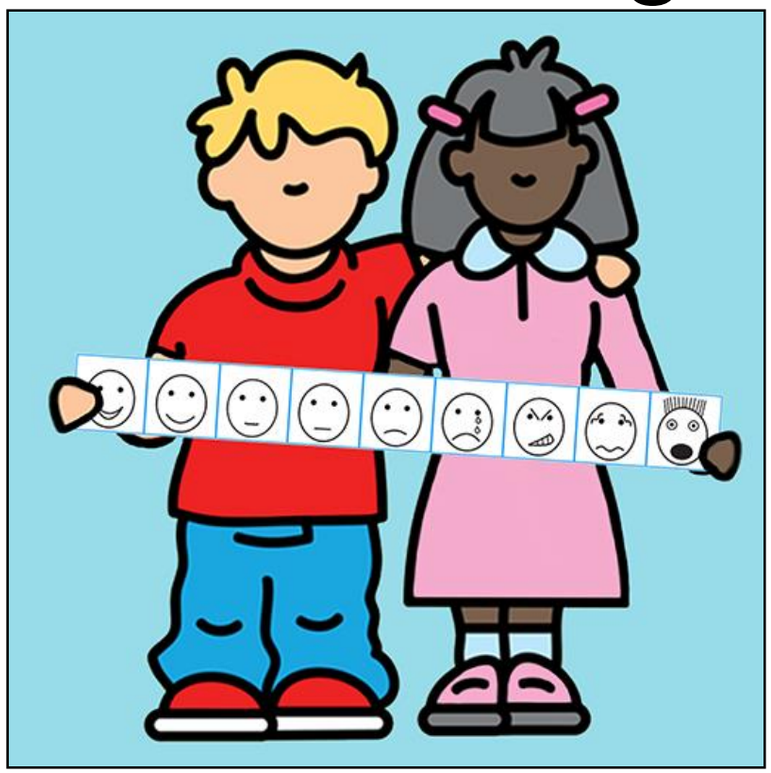
Session Fri, 6 Jun 2014 12.47.20

Browse old sessions

Browse templates

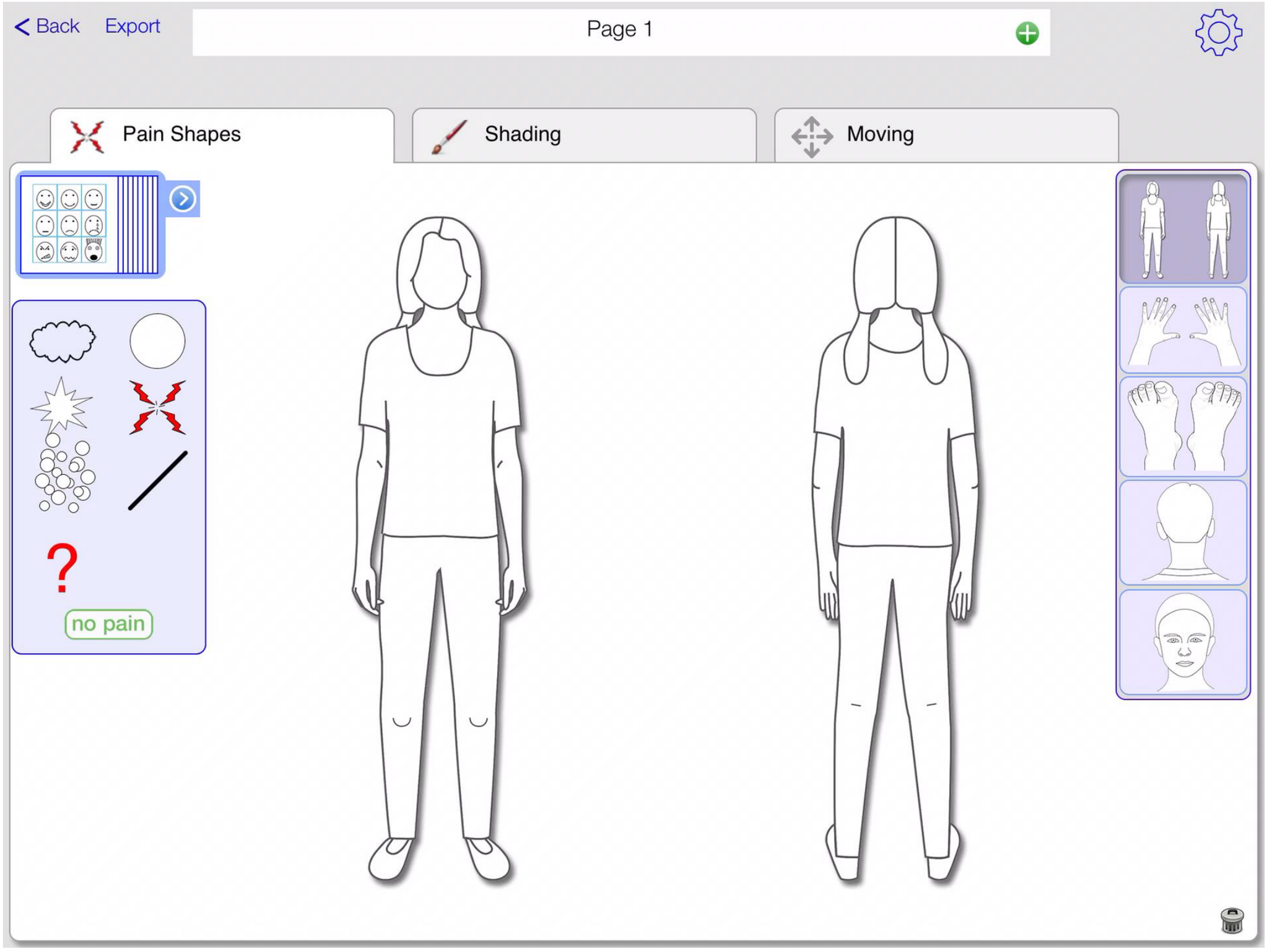
Quit

This feeling

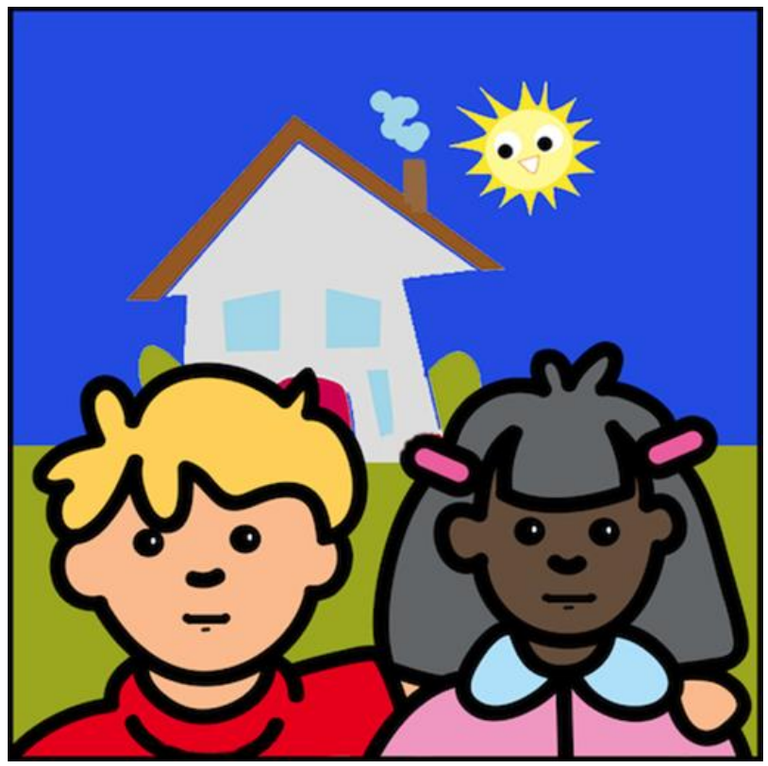


A feelings (emotions & sensations) tool

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


Back
Export
Page 1
Pain Shapes
Shading
Moving
no pain

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

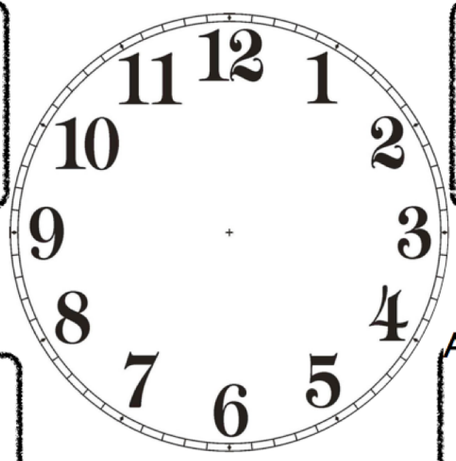
What I want to say

my letter to the judge

A perfect day...

Bedtime

Morning



Evening

Afternoon

What I think about ...

About...

3 good things

1

2

3

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

Watson, et al. (2002)

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

Tapping et al (2015)

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.

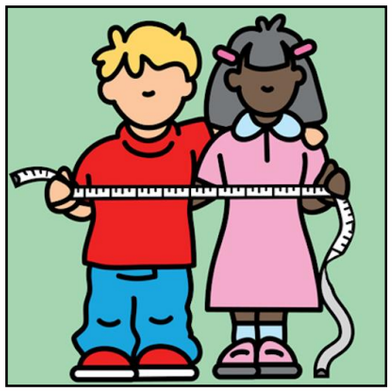
"*… The results showed that for the shy children in the In My Shoes group their talkativeness increased and their answer latency decreased, including the amount of encouragement the child needed to talk, while no changes were observed for the shy children in the Standard verbal interview group.*."

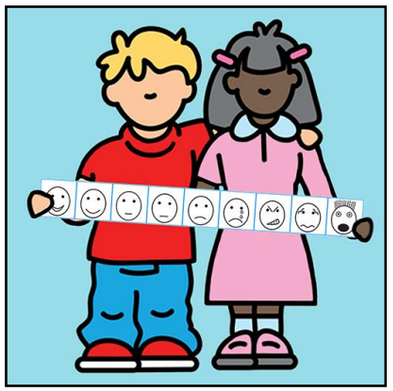
Properties of the apps toolkit 1

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





www.childandfamilytraining.org.uk

www.inmyshoes.org.uk

DVGlasgow@Gmail.com

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