Inclusive Health

Royal College of Art
THE HELEN HAMLYN CENTRE FOR DESIGN

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Physical health

Mental health

Emotional wellbeing

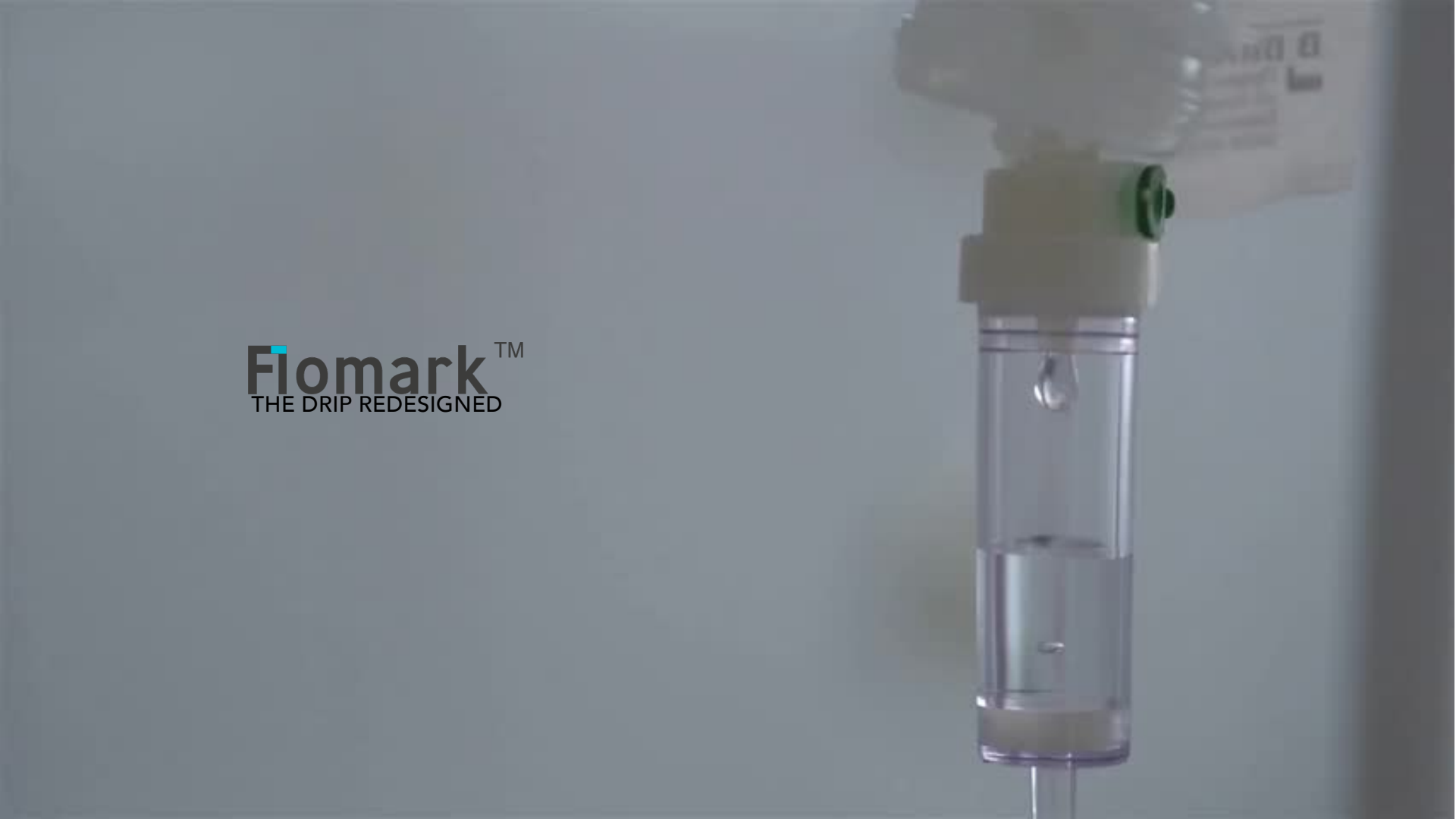
Conclusion

Physical health

Mental health

Emotional wellbeing

Conclusion


Flomark™
THE DRIP REDESIGNED

GRAVITY ADMINISTRATION SETS - THE PROBLEM

Design unchanged for decades
Count drops per minute
Inaccurate & inefficient

CLINICAL CASE

Less than 15% of infusions were within +/- 10% of desired rates, while only 21% of observations fell within +/- 20% of desired rates.[1]

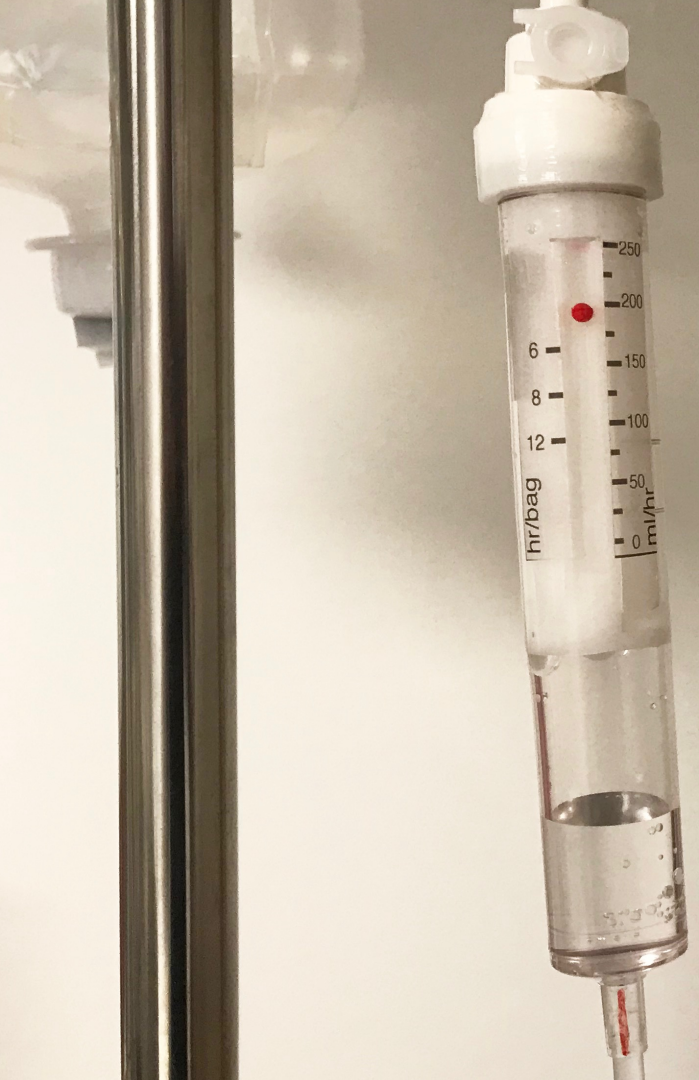
26% were correctly administered at the prescribed rate (percentage error 10% to -10%), 67% were infused too slowly and 8% were infused too fast.[2]

Only 7% of patients achieve a level of accuracy of 5% from the prescribed flow rate.[3]

1. In vivo accuracy of gravity-flow i.v. infusion systems, RE Crass and Vance JR, American Journal of Health-System Pharmacy February 1, 1985 vol. 42 no. 2 328-331

2. Errors of intravenous fluid infusion rates in medical inpatients. Rooker JC, Gorard DA, Clin Med. 2007 Oct;7(5):482-5

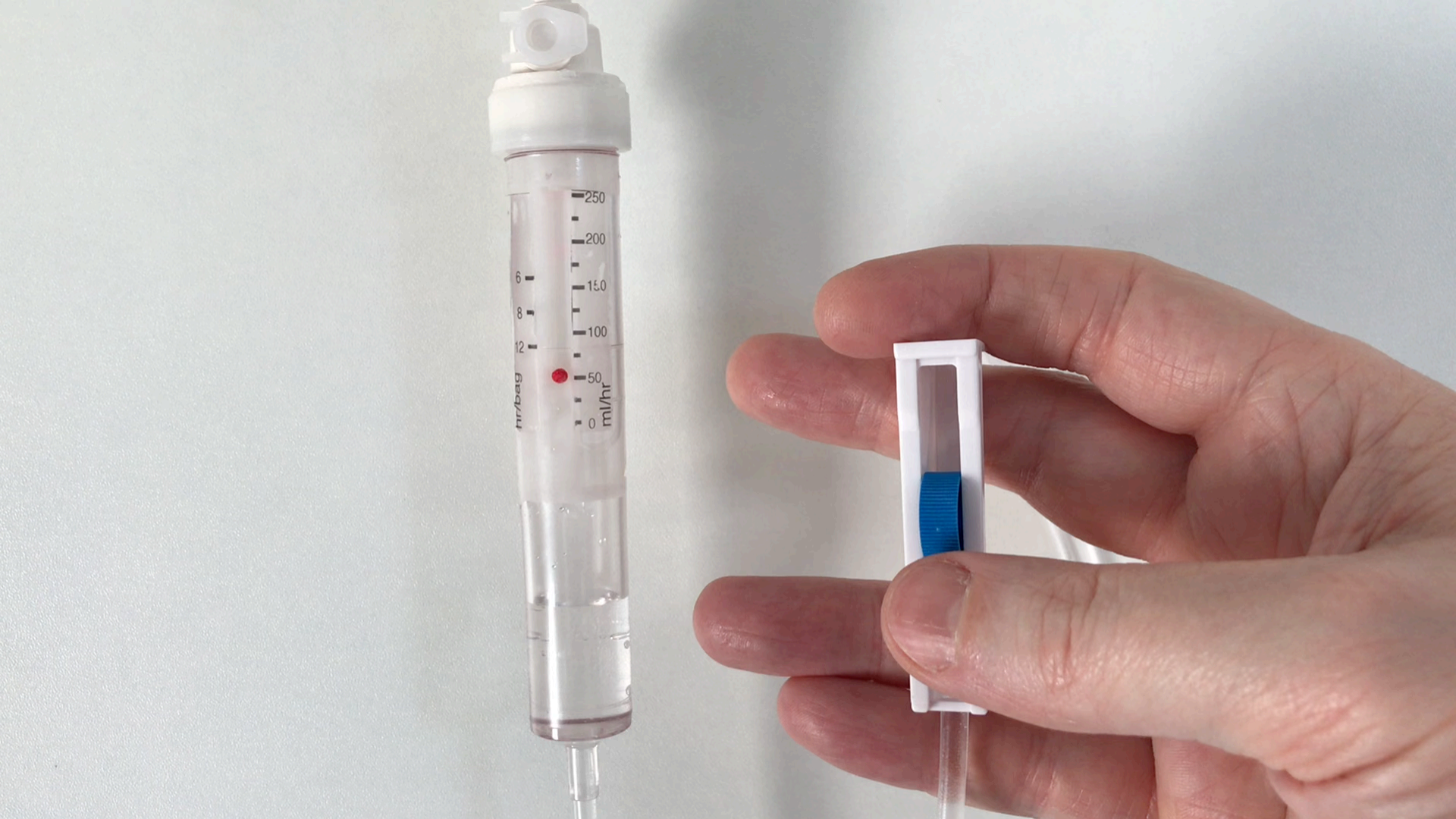
3. Fraser, N et al Data on File (Varori).



PROPOSITION

IV giving set that easily, intuitively and reliably shows flow rate.

OPEN
Glucose 5%
Sodium chloride 0.5%
ml/hr
hr/bag


250
200
150
100
50
0
ml/hr
6
8
12
hr/bag

Physical health

Mental health

Emotional wellbeing

Conclusion

gameChange

Improving lives through VR therapy

NIHR | National Institute for Health Research

UNIVERSITY OF OXFORD

A virtual reality therapy to help people feel more confident in everyday situations.

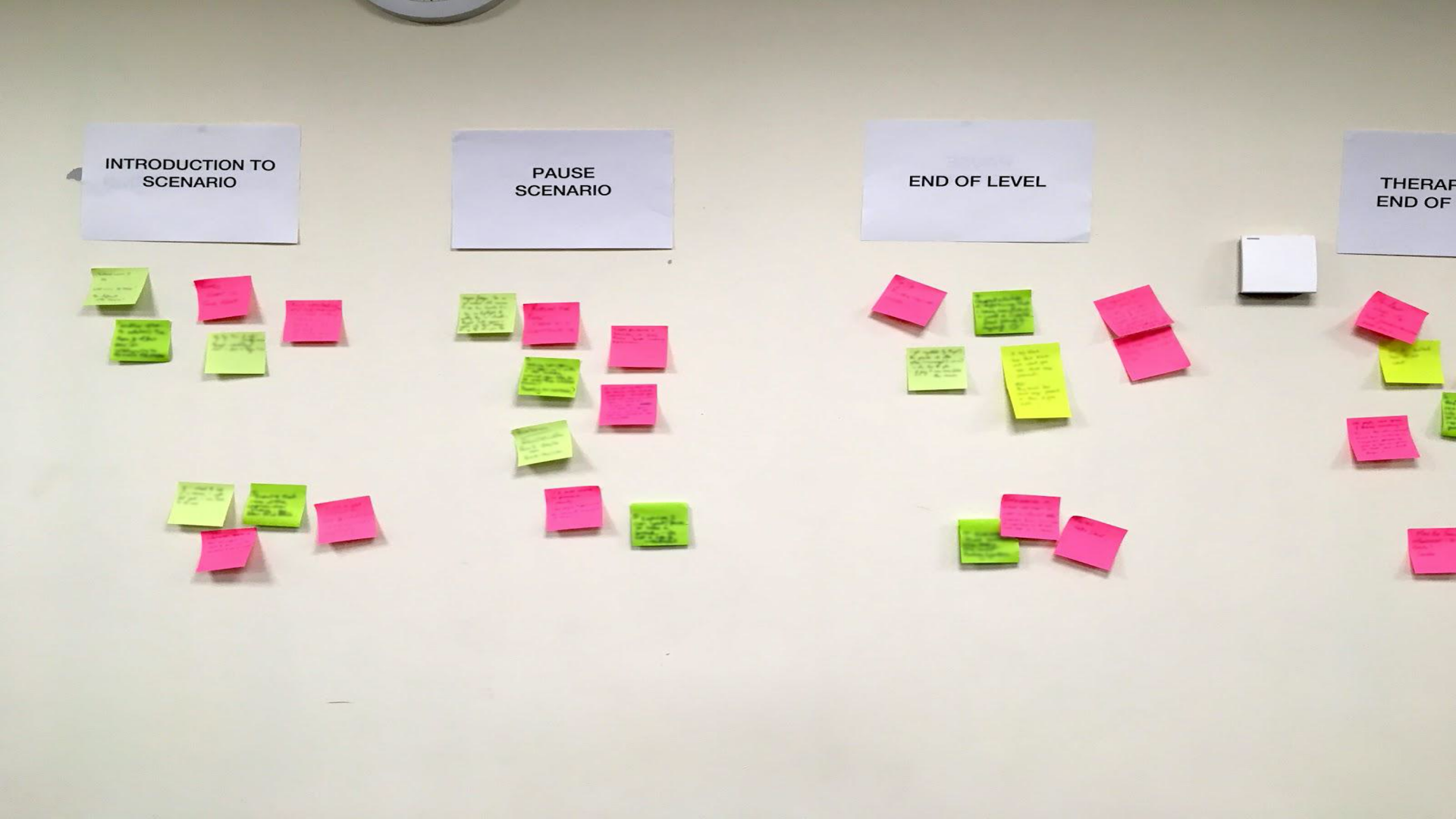
Initially for people seen in psychosis services

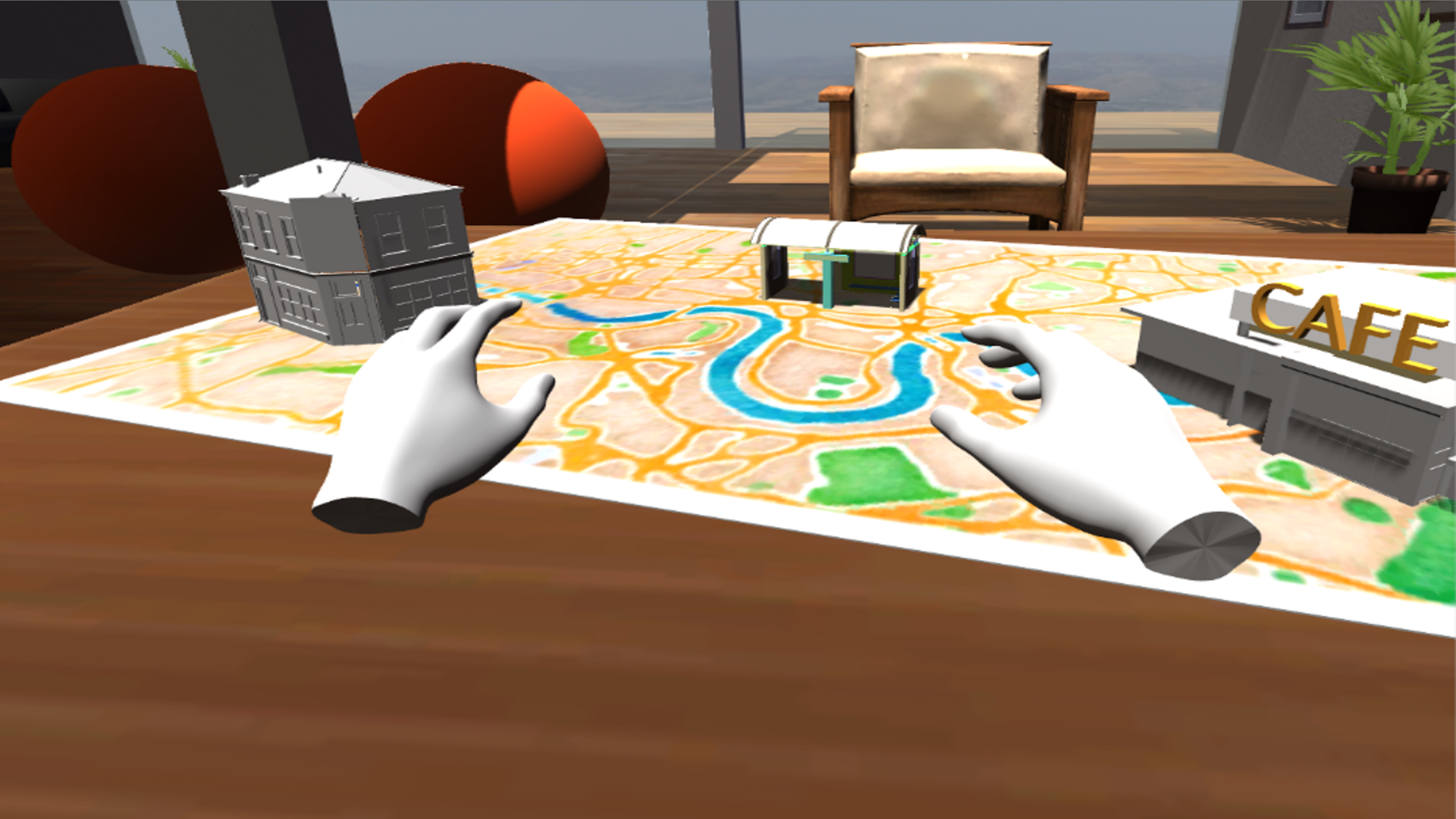
Designing the therapy

treatment targets **fears** about being around other people in everyday situations

aim is to **evaluate** the accuracy of the fears about a situation

this enables people to learn they are **safe enough** to do the things they want in day to day life


INTRODUCTION TO SCENARIO
PAUSE SCENARIO
END OF LEVEL
THERAP
END OF


CAFE

USER DOESN'T PICK ANYTHING FOR X SECONDS, OR CHOOSE RETURN TO GAMECHANGE ROOM:

COACH
OK. Let's go to the gameChange room. Make sure you're standing on the glowing footprints.

USER RESETS POSITION

Back to gamechange room

USER SELECTS REPEAT

User transitions to level intro

TASK NOT COMPLETED:

COACH
It's hard being the centre of attention, isn't it? We imagine that other people will think we're being silly.

The trick though is to find out what happens when we push through the barriers we put up around ourselves.

That takes practice. Building confidence is a gradual process. But you're doing exactly the right thing: you're keeping going and actually accomplishing a huge amount.

COACH
What would you like to do now?

You can have another go at catching the bubbles or head back to the gameChange room.

USER DOESN'T PICK ANYTHING FOR X SECONDS, OR CHOOSE RETURN TO GAMECHANGE ROOM:

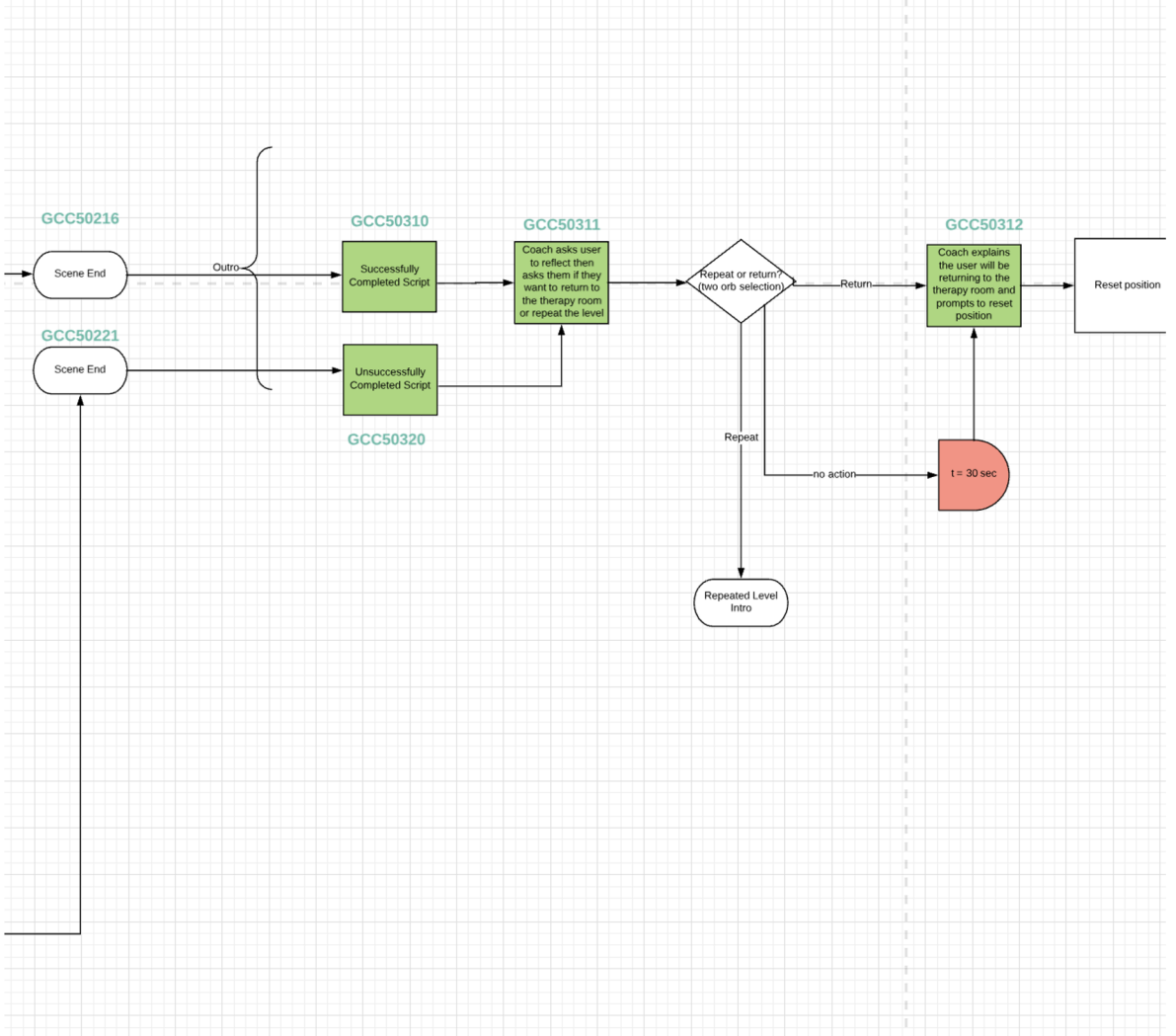
COACH
OK. Let's go to the gameChange room. Make sure you're standing on the glowing footprints.

USER RESETS POSITION

Back to gamechange room

USER SELECTS REPEAT

User transitions to level intro



A GOOD IDEA
A GOOD IDEA
COFFEE

COFFEE
Coffee!

Espresso
Macchiato
COFFEE
Latte
Coffee!
COFFEE
IS ALWAYS
A GOOD IDEA

NHS
Oxford Health
NHS Foundation Trust

UNIVERSITY OF
OXFORD

MindTech Healthcare
Technology Co-operative

oxfordvr

Royal College of Art

McPin
Foundation
Transforming mental health research

NHS
Avon and Wiltshire
Mental Health Partnership
NHS Trust

NHS
Greater Manchester
Mental Health
NHS Foundation Trust

MANCHESTER
1824
The University of Manchester

Northumberland
Tyne and Wear
NHS
NHS Foundation Trust

Newcastle
University

NHS
Nottinghamshire Healthcare
NHS Foundation Trust

The University of
Nottingham
UNITED KINGDOM • CHINA • MALAYSIA

Physical health

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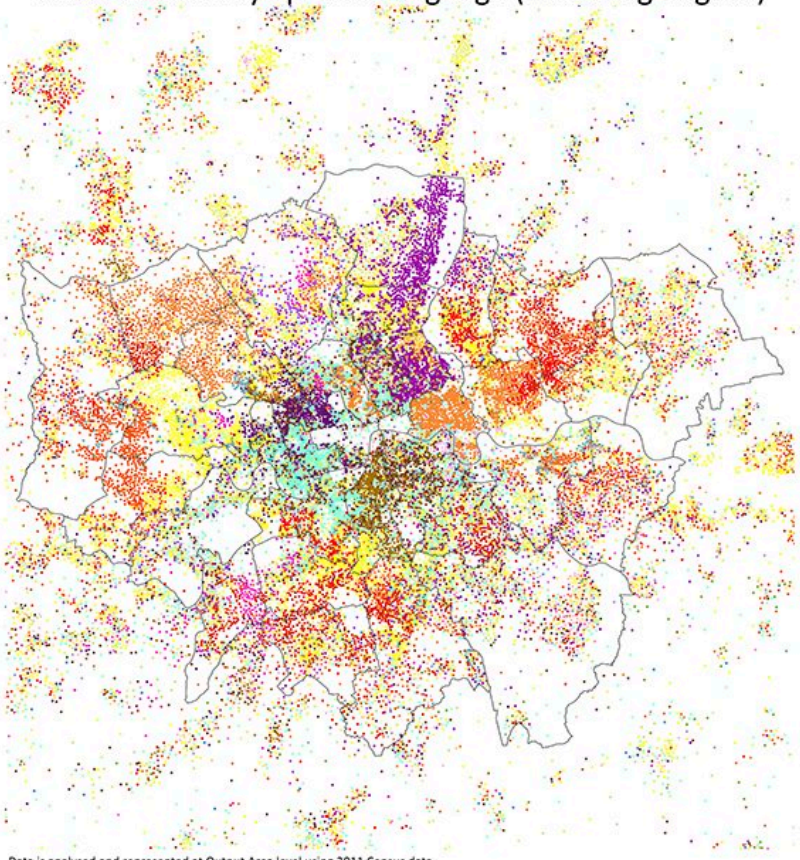
KITCHEN ANCHOR

ARTHRITIS RESEARCH UK

Most Commonly Spoken Language (Excluding English)



- French
- German
- Portuguese
- Spanish
- Polish
- Russian
- Albanian
- Bulgarian
- Czech
- Danish
- Dutch
- Estonian
- Finnish
- Greek
- Hungarian
- Italian
- Latvian
- Lithuanian
- Maltese
- Romanian
- Slovak
- Slovenian
- Swedish
- Serbian, Croatian or Bosnian
- Ukrainian
- Other Eastern European (Non EU)
- Northern European(Non EU)
- Other European (Non-National)
- Other European (EU)

- Cornish
- Gaelic (Irish)
- Gaelic (Not Otherwise Specified)
- Gaelic (Scottish)
- Gypsy/Traveller
- Manx Gaelic
- Scots
- Welsh/Cymraeg (In England Only)

- Arabic
- Turkish
- Hebrew
- Kurdish
- Pashto
- Persian/Farsi
- Other West/Central Asian

- Afrikaans
- Akan
- Amharic
- Other Nigerian
- Igbo
- Krio
- Lingala
- Luganda
- Shona
- Somali
- Swahili/Kiswahili
- Tigrinya
- Other West African
- Yoruba
- Other African

- Cantonese Chinese
- Mandarin Chinese
- All Other Chinese
- Japanese
- Korean
- Malay
- Tagalog/Filipino
- Thai
- Vietnamese
- Other East Asian

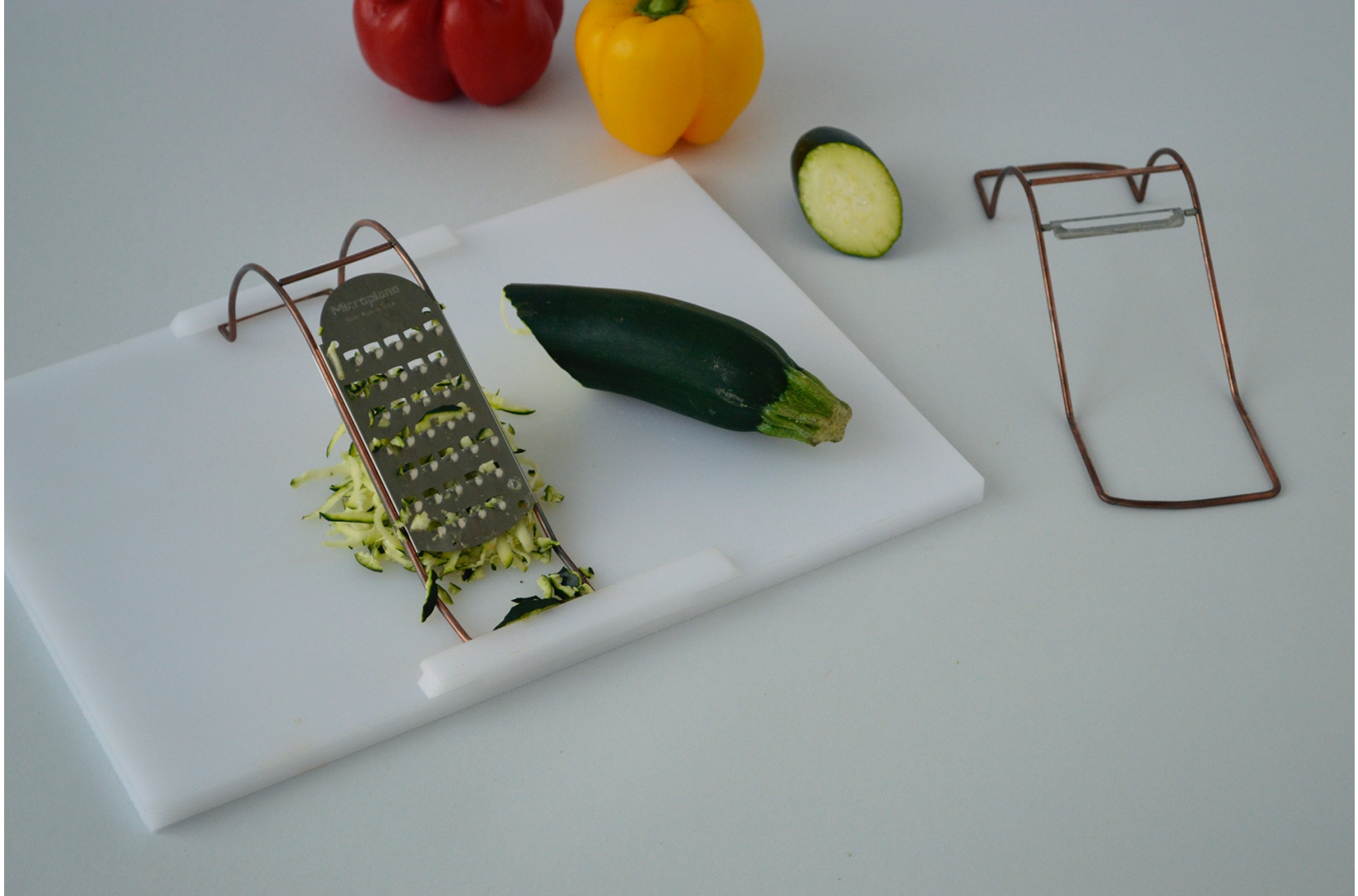
- Bengali*
- Gujarati
- Hindi
- Malayalam
- Marathi
- Nepalese
- Pakistani Pahari*
- Panjabi
- Sinhala
- Tamil
- Telugu
- Urdu
- Other South Asian

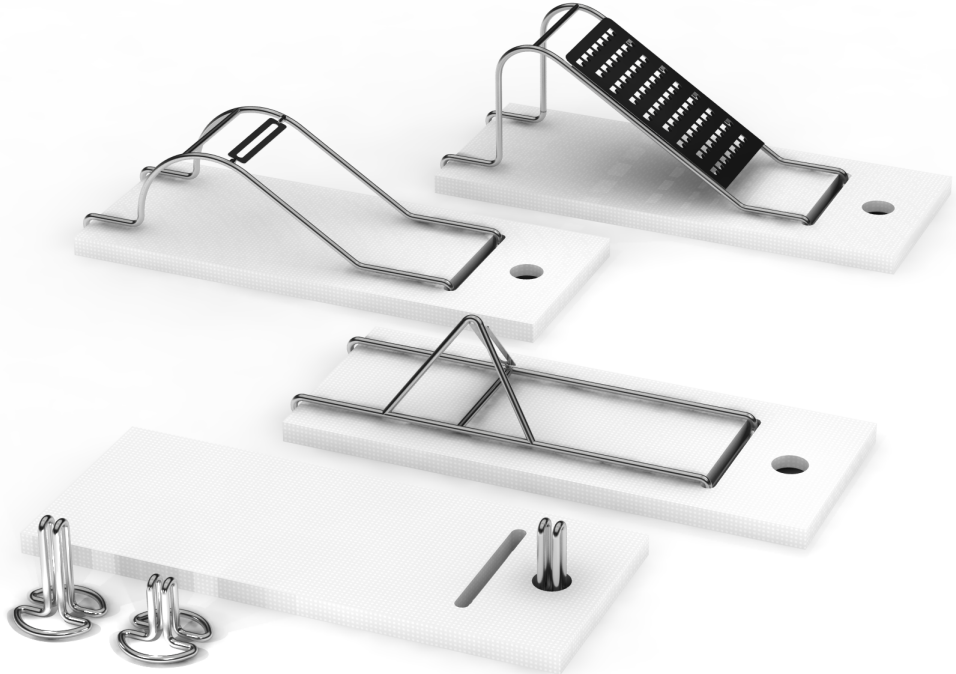
- Caribbean Creole
- Any American
- Oceanic/Australian
- Other

Data is analysed and represented at Output Area level using 2011 Census data.

Produced by Guy Lansley, Department of Geography, UCL. 2011 Census, Office for National Statistics © Crown copyright 2013

Interventions
Insights
Evidence





Hand Healthy Recipe Book

Pounded Yam is the most rigurous of recipes in this series, stirring the Pounded Yam gets stiffer and stiffer. It is a versatile side dish though similar to polenta or mash potatoe.

Fish Stew
Chopping, Boiling
●●●● 40 minutes
Juliana, Nigeria

Ingredients: Fish fillet, Red onion, Red Pepper, Spinach, 3 fresh tomatoes, Tomatoe Puree, Chilli

Stages:

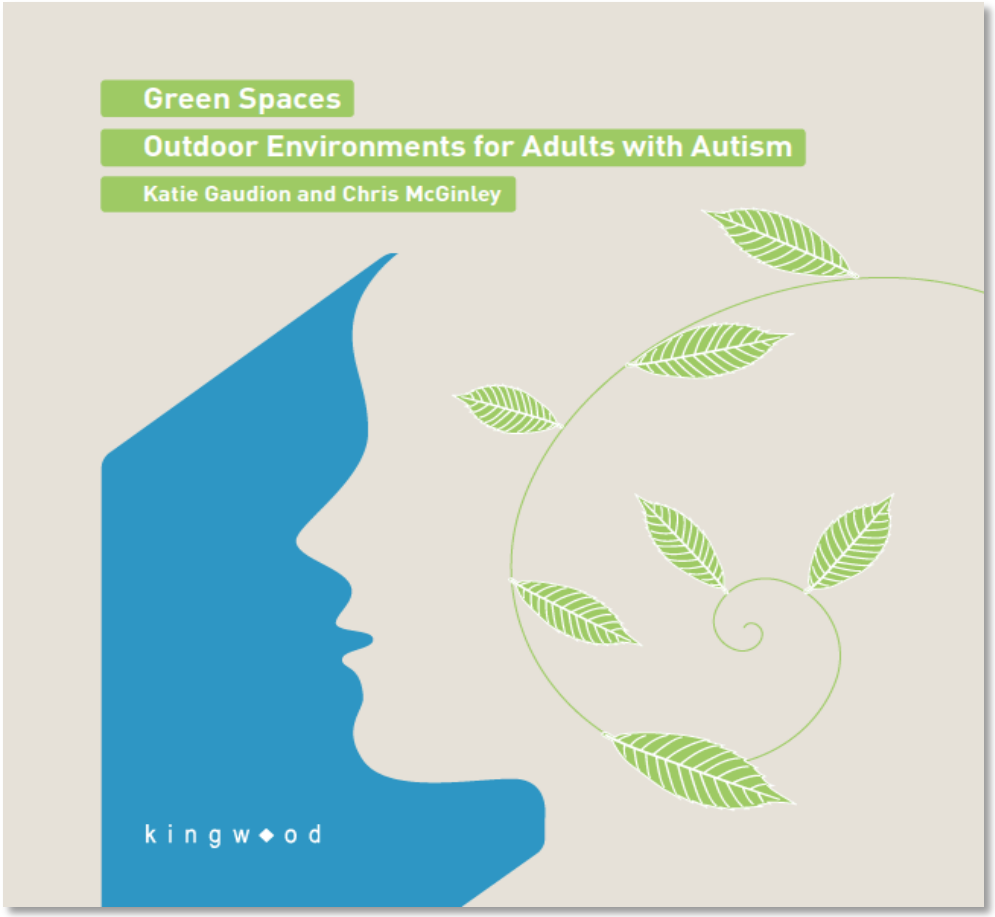
1.1 Prepare: Dice the red onion, red pepper and tomatoes. Wash the fish. Then rest your hands

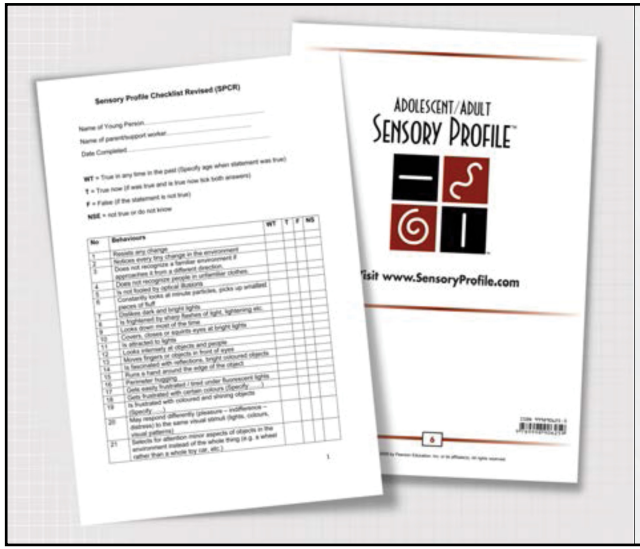
—

2.1 Fry the tomatoe purée in olive oil for one minute, then add the red onion and stir until soft. Add the pepper and then the chopped tomatoes. Simmer for five minutes whilst the sauce boils down.

—

3.1 Place the fish fillets and spinach on top of the sauce. Try to keep the fish as whole pieces.


Green Spaces
Outdoor Environments for Adults with Autism
Katie Gaudion and Chris McGinley
kingwood



		WT	T	F	NS
57	Dislikes haircut			X	
58	Avoids sounds and noises			X	
59	Makes repetitive noises to block out other sounds			X	
60	Bangs objects, doors		X		
61	Likes vibration				X
62	Likes kitchen and bathroom				X
63	Likes traffic, crowds	X			
64	Is attracted by sounds, noises	X			
65	Tears paper, crumples paper in hand	X		X	
66	Makes loud rhythmic noises	X		X	
67	Gets frustrated with certain sounds (Specify:)			X	
68	Tries to destroy/break objects producing sounds (clock, telephone, musical toy, etc.)			X	
69	Is fascinated with certain sounds (Specify:)			X	
70	May respond differently (pleasure-indifference-distress) to the same auditory stimuli (sounds, noises)			X	
71	Hears a few words instead of the whole sentence	X			
72	Pronunciation problems	X			
73	Unable to distinguish between some sounds			X	
74	Hits ears when distressed			X	
75	Feels/acts deaf			X	
76	Response to sounds, questions, instructions is delayed		X		
77	Echolalia in monotonous, high-pitched, parrot-like voice			X	
78	Sudden outbursts of self-abuse/tantrums or withdrawal in response to auditory stimuli			X	
79	Does not seem to hear if looking at something			X	
80	Reacts to instructions better when they are addressed to the wall			X	
81	Looks for the source of the sound		X		
82	Seems to be absorbed (merged) with sounds			X	
83	Seems to be able to 'read' thoughts, feelings, etc. Of others		X		
84	Complains about 'non-existent' conversations, sounds			X	
85	Covers/hits ears in response to lights, colours/touch, textures/smell/taste/movement			X	
86	Complains about (is frustrated with) a sound in response to colours/textures/touch/scent/flavour/movement			X	
87	Displays a good auditory memory (for nursery rhymes, songs, etc.)			X	
88	Reactions are triggered by sounds/words		X		
89	Uses idiosyncratic routinized responses		X		
90	Uses songs, commercials, etc. to respond			X	
91	Cannot keep track of conversation		X		
92	Composes musical pieces, songs			X	
93	Unable to distinguish between tactile stimuli of different			X	

3

		WT	T	F	NS
133	Cannot tolerate certain smells (Specify)			X	
134	Is fascinated with some smells (Specify)			X	
135	May respond differently (pleasure – indifference – distress) to the same smells			X	
136	Complains about smells of some pieces of food while ignoring the rest			X	
137	Hits nose when distressed			X	
138	Has difficulty in interpreting smells				X
139	Response to smells is delayed				X
140	Sudden outbursts of self-abuse/tantrums or withdrawal in response to smells			X	
141	Does not seem to feel smell when looking. Listening, etc.			X	
142	Avoids direct smells			X	
143	Sometimes does not react to any smell		X		
144	Inspects food before eating			X	
145	Seems to be absorbed (merged) with smells			X	
146	Complains/talks about 'non-existent' smells			X	
147	Covers/rubs/hits nose in response to a visual/ auditory stimuls/touch/ taste/movement			X	
148	Complains about (is frustrated with) the smell in response to a visual/auditory stimuls/touch/taste/movement			X	
149	Displays a good memory for smells			X	
150	Reactions are triggered by smells			X	
151	Unable to distinguish between strong and weak tastes				X
152	Poor eater			X	
153	Uses the tip of the tongue for tasting			X	
154	Gags/vomits easily		X		
155	Craves certain (plain) foods			X	
156	Eats anything (pica)			X	
157	Mouths and licks objects			X	
158	Eats mixed food (e.g. sweet and sour)			X	
159	Regurgitates			X	
160	Cannot tolerate certain foods			X	
161	Is fascinated with certain food (Specify)			X	
162	May respond differently (pleasure – indifference-distress) to the sae food			X	
163	Is confused with (complains about) the food he uses to like			X	
164	Has difficulty in interpreting tastes			X	
165	Response to tastes is delayed			X	
166	Sudden outbursts of self-abuse/tantrums or withdrawal in response to taste			X	
167	Dos not feel any taste while eating something and looking at/listening to something			X	
168	A very careful eater			X	
169	Sometimes does not react to any taste		X		
170	Seems to be absorbed (merged) with certain food			X	

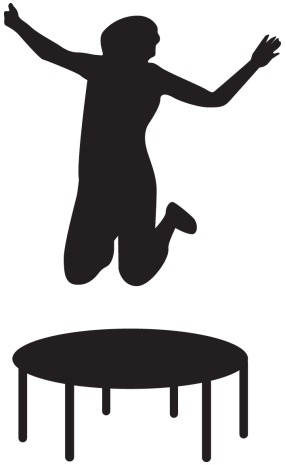
5

Leisure

Refreshment of mind and body through activity and play

Exercise

Activity that requires physical or mental exertion



Occupation

Activity as source of livelihood/ passing time

Growth

Bright natural light

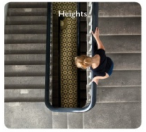
Tidiness and order

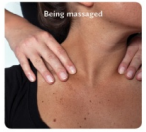
Listening to music

Touching warm surfaces

Touching hair or fur

Touching grass


Heights


Being massaged

Floral smells

Darkness

Being untidy

Household noises

Touching cool surfaces

Touching stone surfaces

Interacting with water

Spinning around & dancing

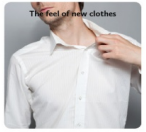
Lifting objects

Spicy, aromatic smells

Looking at twinkling lights

Books & magazines

Tapping surfaces


The feel of new clothes

Touching silky fabrics

Passive touch

Jumping

Being held firmly

Earthy smells

Looking at small details

Watching TV & films

Making sounds & music

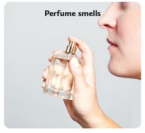
Squeezing spongy objects

Touching wooden surfaces

Active touch

Walking

Pushing & pulling


Perfume smells

Looking at shadows

Flicking pages

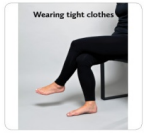
Wind and rain noise

Touching feathery objects

Touching gooey surfaces

Spending time alone

Running


Wearing tight clothes

Discos

Looking at shiny surfaces

Changes in your home

Getting messy

Touching wooly surfaces

Touching sand

Spending time in groups

Balancing

Confined spaces

Looking at spinning objects

Looking at spinning objects may appeal to people, who are under-sensitive to or seek visual stimulation. Be mindful that this form of stimulation can become the focus of obsessional behaviour.

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Household noises

Some people can be particularly sensitive to sound or be unable to filter out sounds; especially background noises which can be distracting or even distressing.

Noise transmission can be reduced by separating floors and walls, adding sound absorption materials in cavities, installing sound resistant plasterboard or acoustic tiles. Soft furnishings such as rugs and wall or ceiling fabrics will also reduce background noise.

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Interacting with water

Interacting with water can be therapeutic. Be mindful that interacting with water can become the focus of obsessional behaviour.

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Perfume smells

People for whom perfume smells are too intense and overpowering may benefit from using unscented detergents and shampoos and making their home as fragrance-free a possible. Natural fabrics such as cotton absorb odours better than synthetic materials.

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Balancing

People who like balancing may enjoy activities that further develop their vestibular (balance) system such as such as catching a ball or walking along curbs.

Confined spaces

People who like positioning themselves in confined spaces may be more satisfied with home environments that incorporate spaces under, behind and above things to which they can withdraw.

Sensory Preference Cards (back)

avoid / dislike
ok
seek / like
Household noises
Watching TV
Hugging

1950s
I-SPY
books

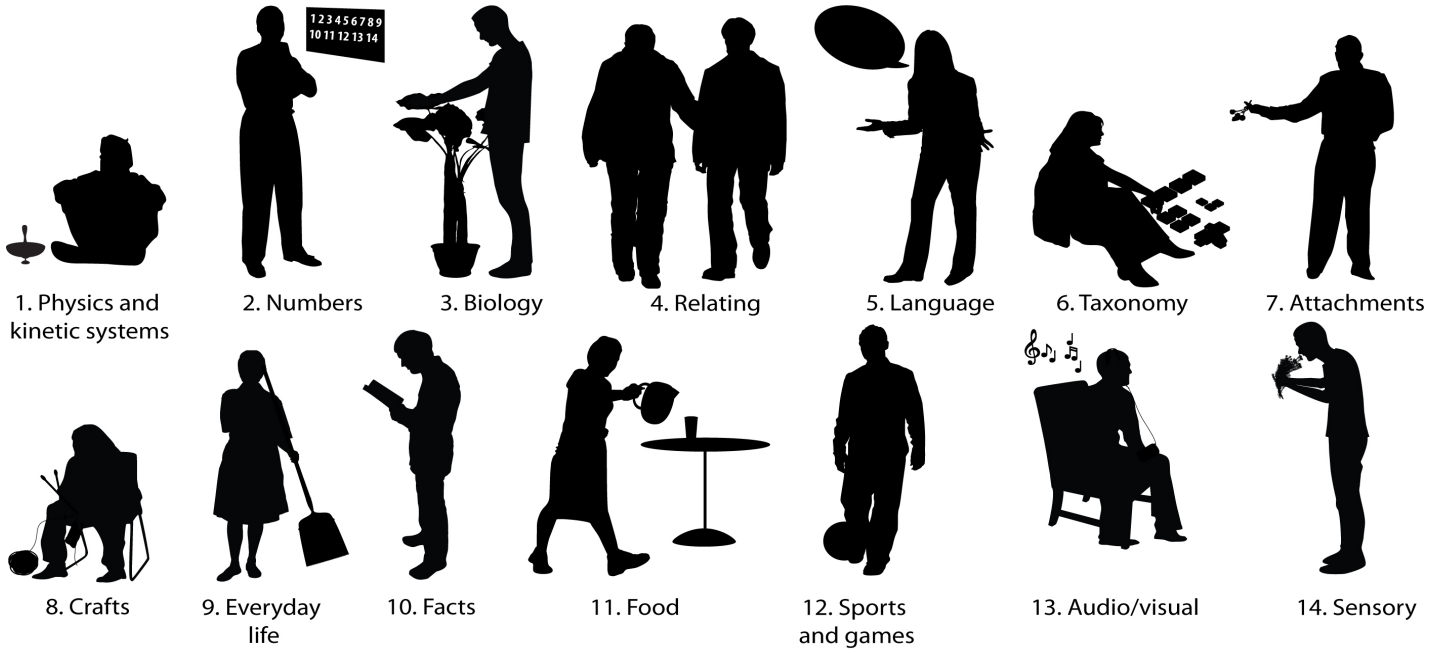
STRONGLY ATTACHED TO ITEMS

e.g. an article of clothing, a rag, a bottle top, etc.,

YES [√] **NO [ ]**

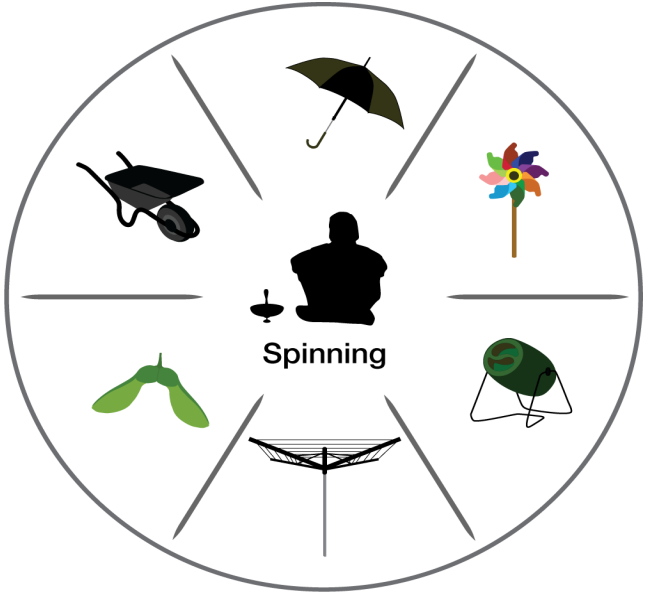
If **YES,** please specify... LIGHT SWITCHES VENT-AXIA FAN CONTROLLERS SPUR SWITCH

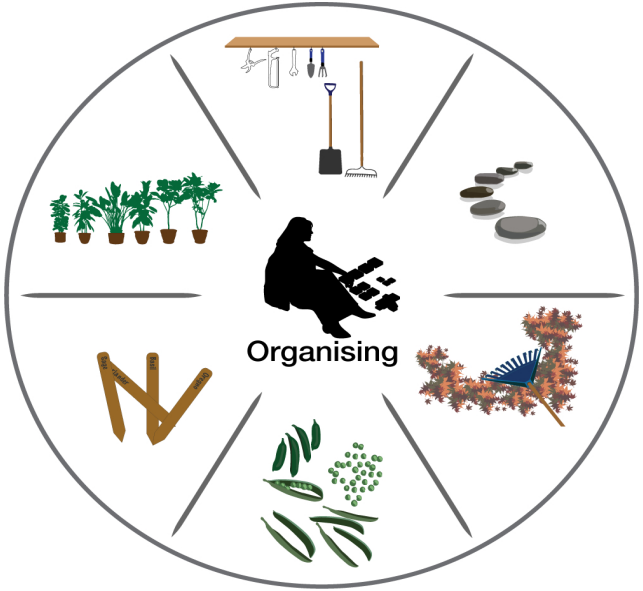
Special interests



Baron-Cohen, S., Wheelwright,S. (1999)

Passion to action





Seven Spaces

1. Escape

2. Exercise

3. Sensory

4. Social

5. Transition

6. Occupation

7. Wilderness

Kingwood College Garden

Green Spaces

Outdoor Environments for Adults with Autism

Physical health

Mental health

Emotional wellbeing

Conclusion

Design is often seen as being about... problem-solving!

A significant part of our process is about... problem-framing

It’s about widening perspectives…

Ensuring design is centred around real people and experiences.

Thanks for listening.