Graphic Design and Graphic Symbols: bridging the gap, exploring preferences

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Introduction

- Augmentative and Alternative Communication (AAC)
  - Complex communication needs (CCN)
  - Graphic Symbols

- Adults who use pictures to augment communication
  - Developmental CCN
  - CCN Acquired in adulthood

- Age appropriate design & graphic symbols

RCSLT (2009), Light & McNaughton (2012), Beukelman & Mirenda (2005)

Commercially available graphic symbols

Figure 1.
Widgit symbol

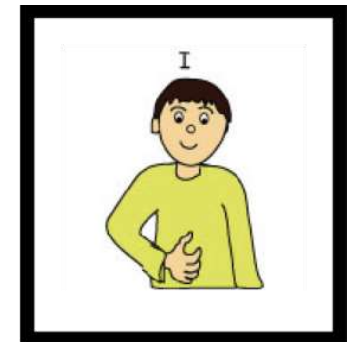Figure 2.
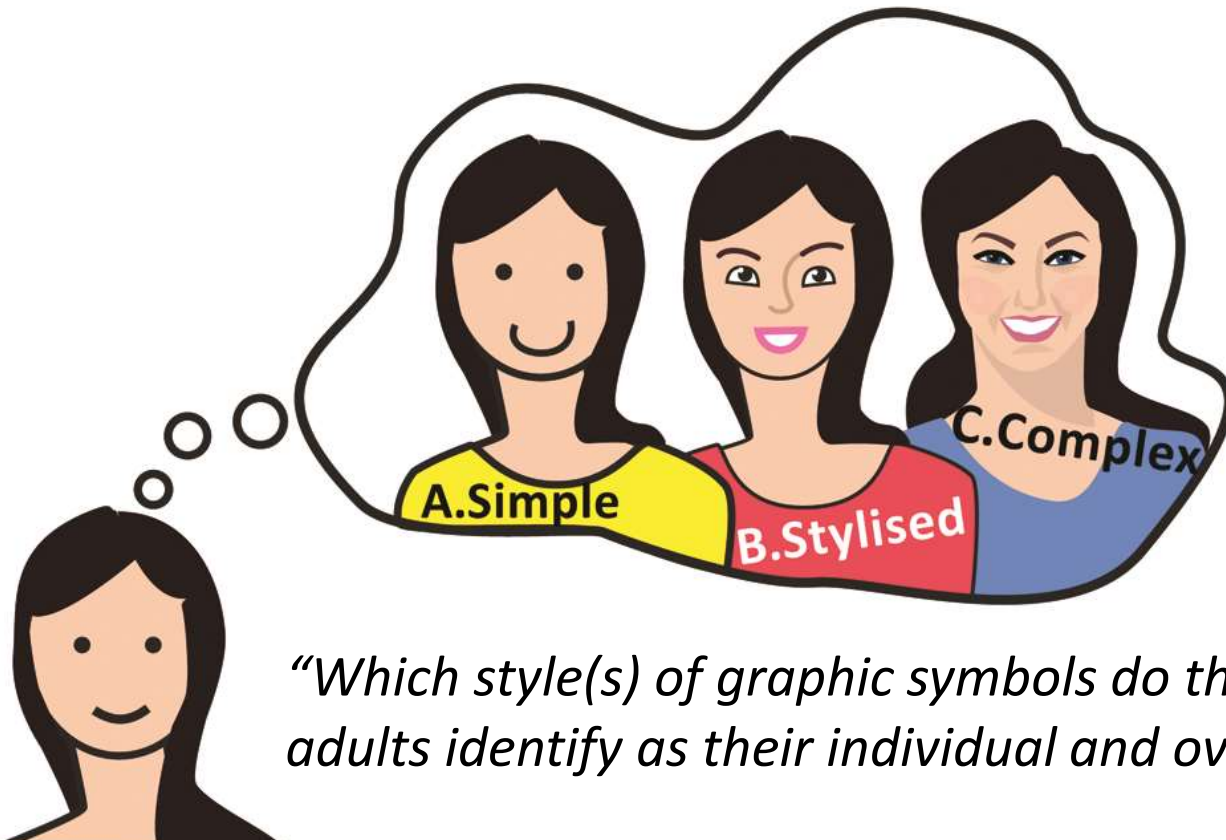Dynasyms

Figure 3.
PCS Boardmaker

Figure 4.
PECS

- Critically appraised graphic symbols
  - Readability
  - Aesthetics
  - Age appropriateness for adult AAC users

Aim of Study

To investigate the aesthetic preferences of adults who use pictures to augment their communication

"Which style(s) of graphic symbols do the sample population of adults identify as their individual and overall group favourites?"
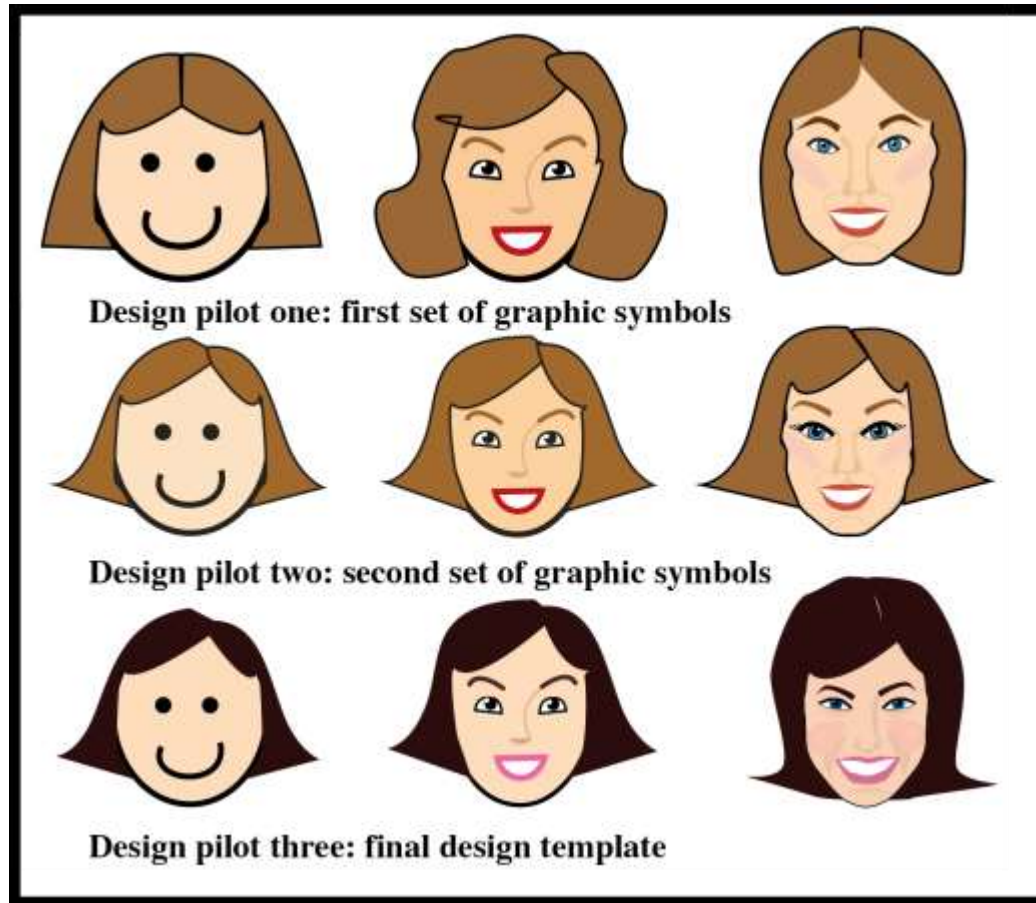
Methodology

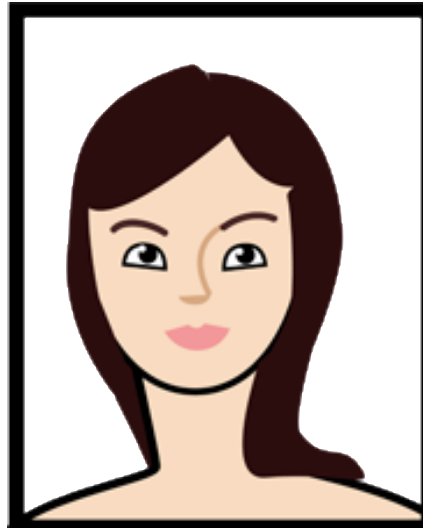Figure 5. Refining the design

Methodology

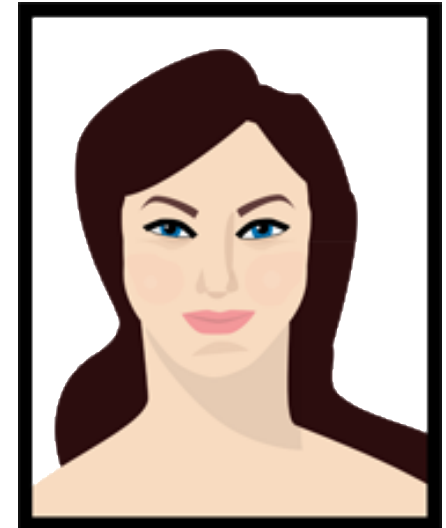Figure 6.

A: Simple

Figure 7.

B: Stylized

Figure 8.

C: Complex

3 new graphic symbol styles
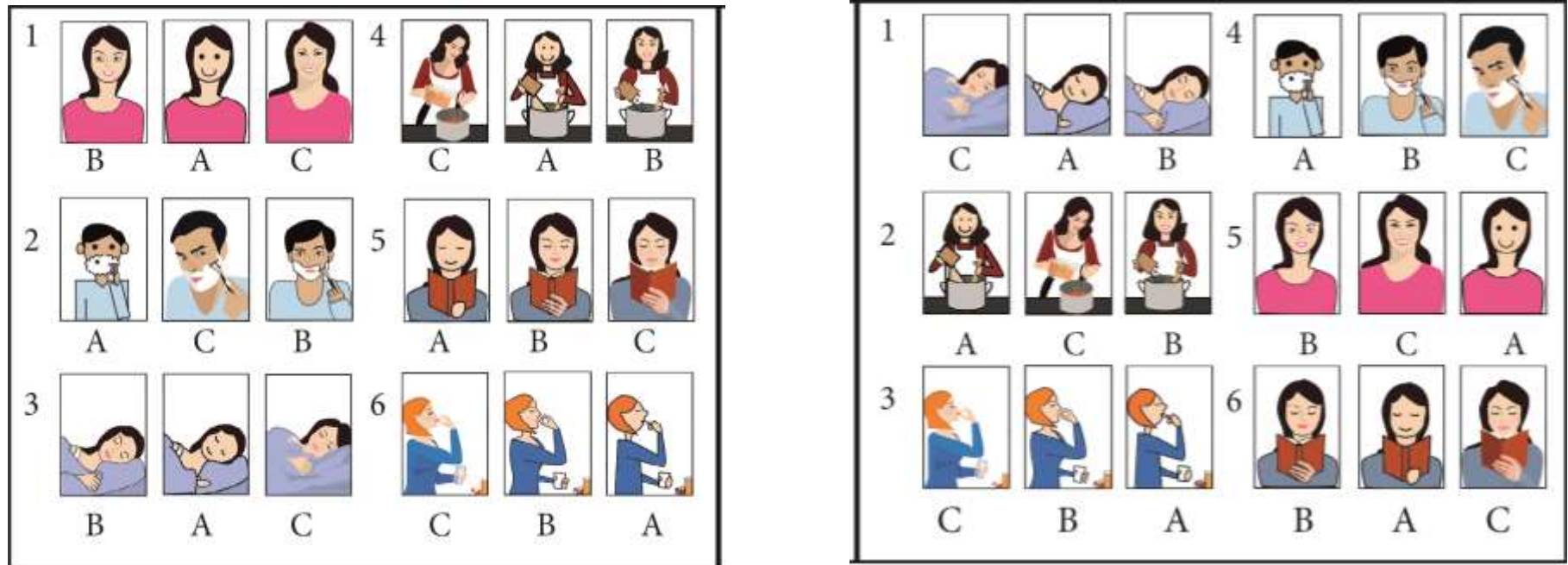varied only by their level of complexity.

Methodology

Figure 9. Randomised record sheets

Created a unique record sheet for each participant

– Randomised the order of presentation

to counterbalance order and fatigue effects.

Methodology

- Ethically approved by Ability West and Brothers of Charity.

- Recruited **30** adults to participate in the study.

- Participants picked their favourite pictures individually
  - 20 sets of 3

- **24** participants were included in the final analyses.

- Individual and group analyses were performed using Friedman test.

Results: Individual analyses
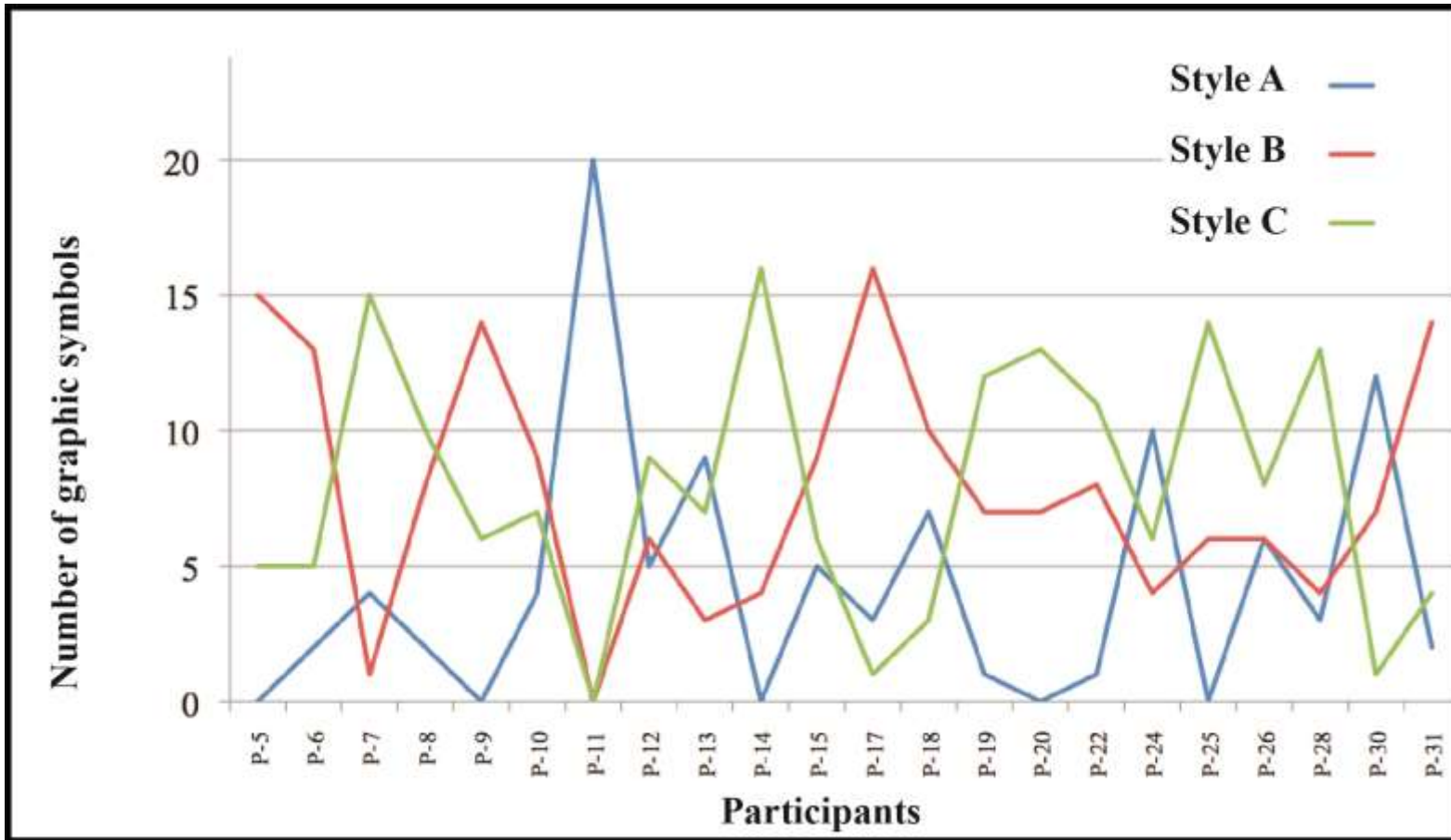
Figure 10. Variation in distribution of preferences

Results: Group analyses

Table 1.
Results of Friedman rank test across group

Style A	1.52
Style B	2.18
Style C	2.30

Table 2.
Average number of times across the group styles A, B and C were selected as favourite.

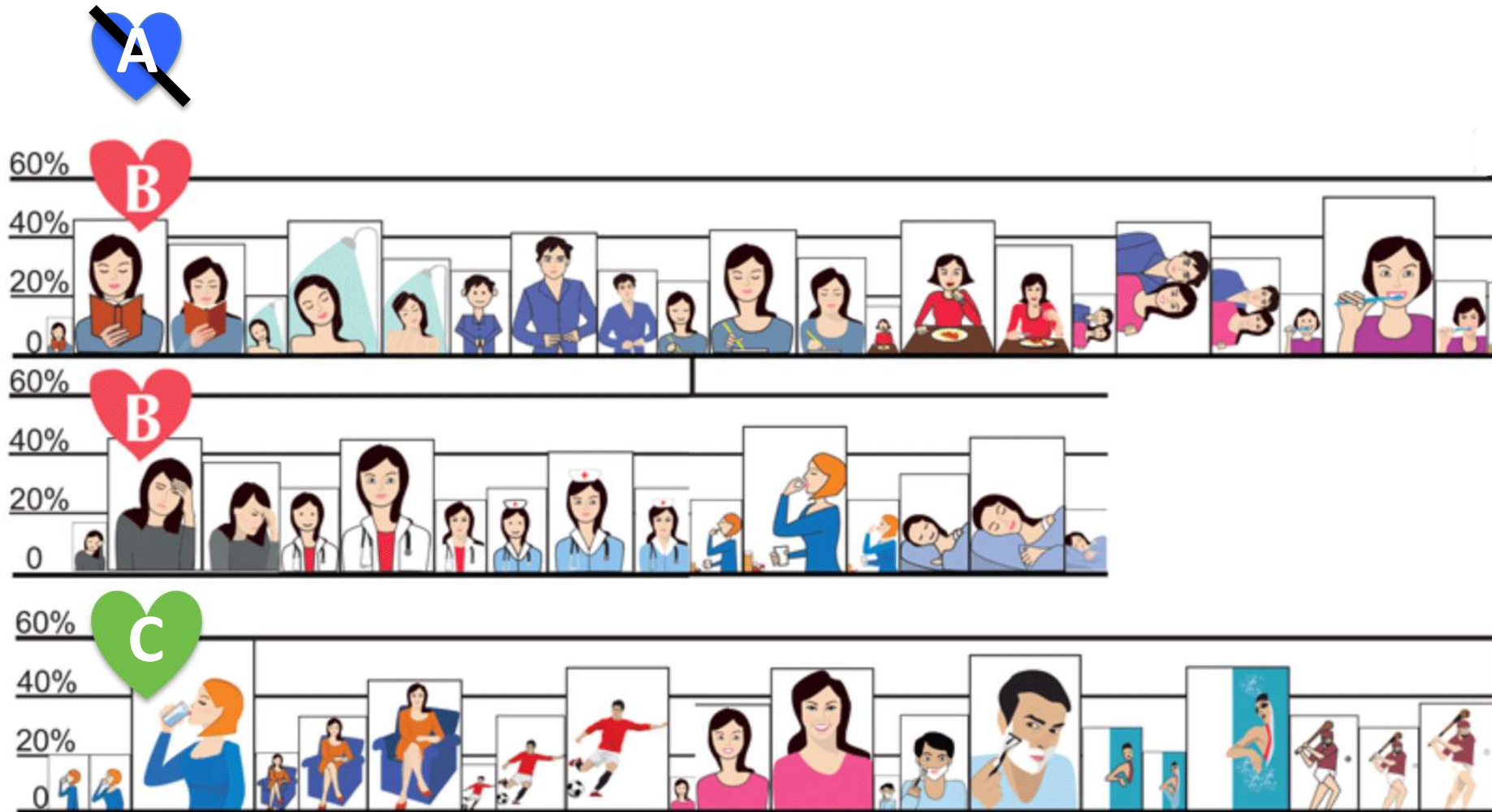|	Style A	Style B	Style C
Mean	4.4	7.8	7.8
Standard Deviation	4.9	4.5	4.7

Results: Group analyses

Figure 11. distribution of preferences across the group within each set

Aim of Study

To investigate the aesthetic preferences of adults who use pictures to augment their communication
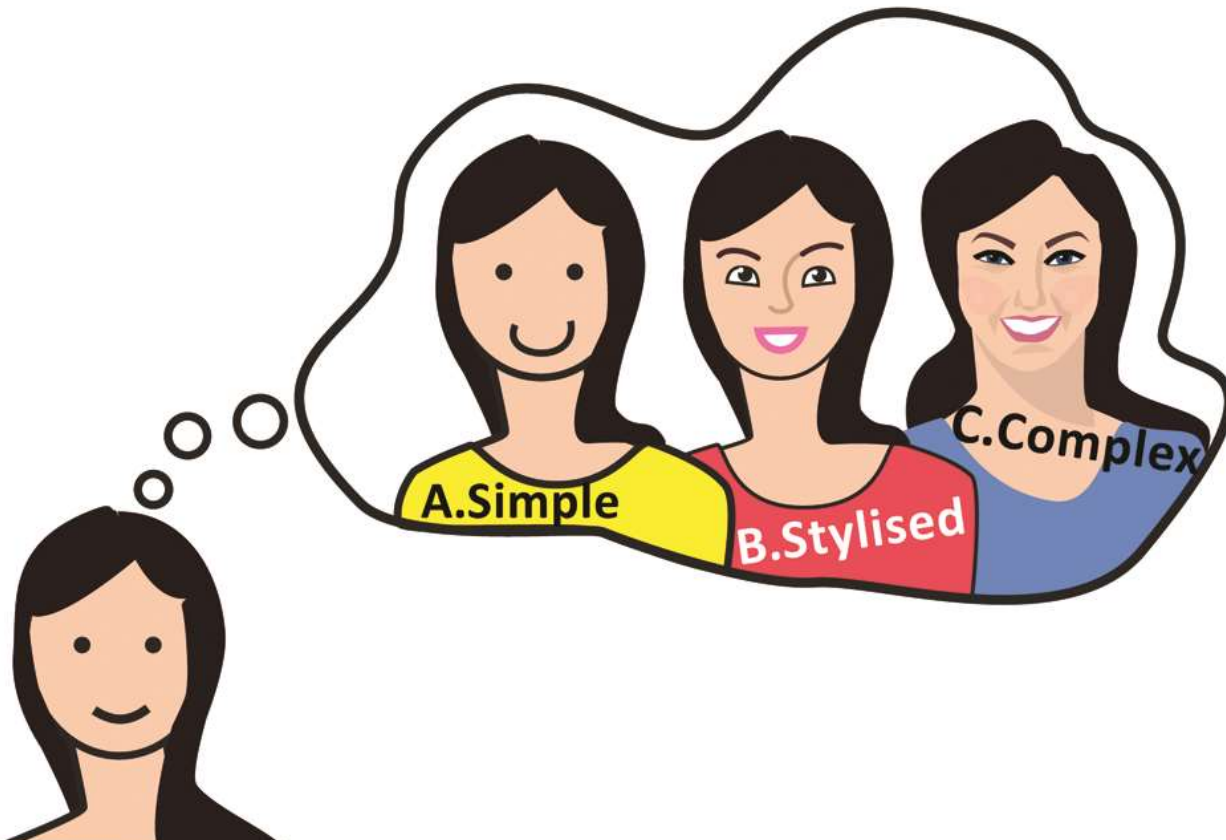
Discussion: Style A

- 1 participant had statistically significant preference for style A
- Least favoured style across group.
- Simplicity relevant for some AAC users *"cleaner…easier to look at"*
    - ASD: difficulty processing complex info
        - Thick black outline helps
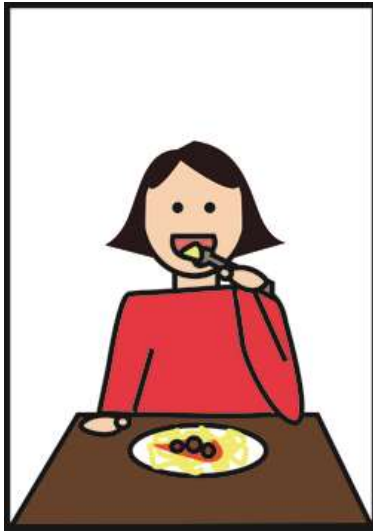
(Bondy and Frost 1998)

Discussion: Style B

- 4 participants had statistically significant preference for style B
- Equally favoured style across group.
- Visual simplicity of style A combined with maturity of style C
    - Thinner black outline
- *"She looks like me"*
- *"Looks more grown up than her"*
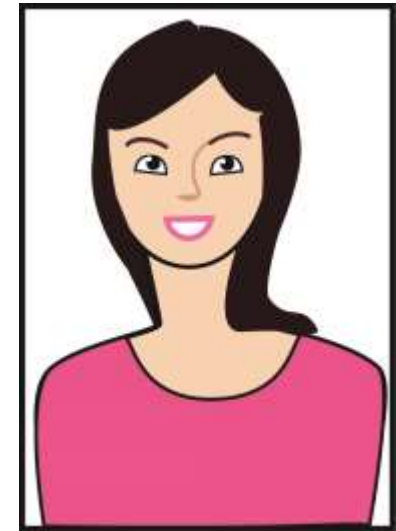
Discussion: Style C

- 4 participants had statistically significant preference for style C
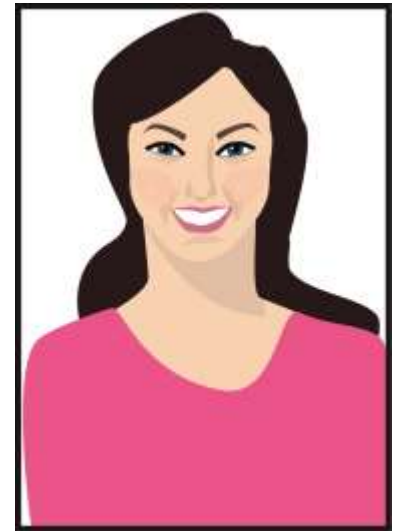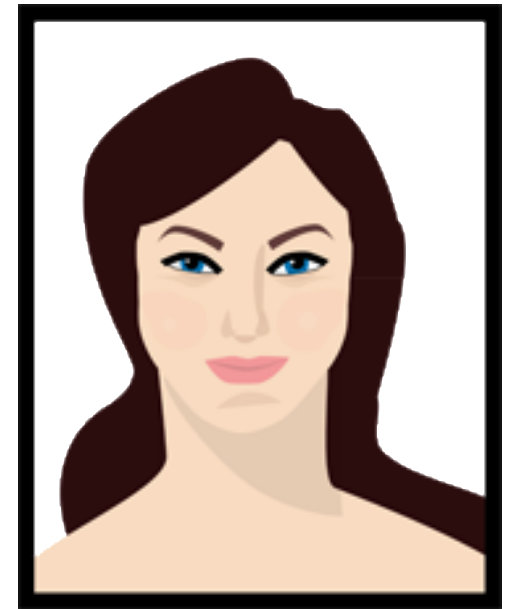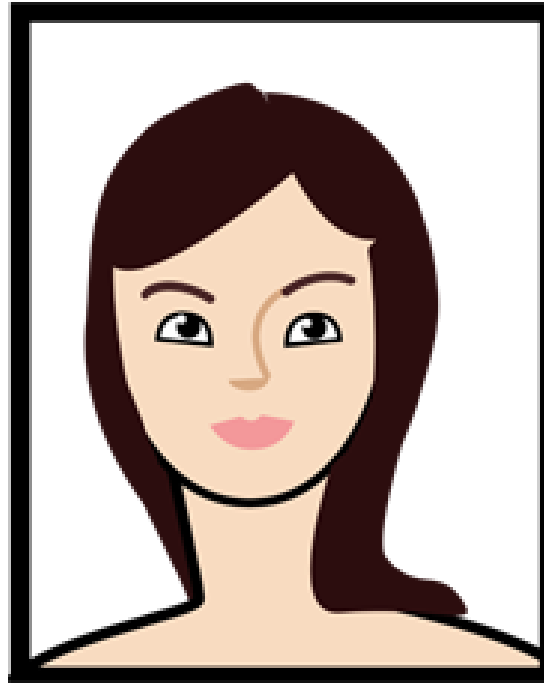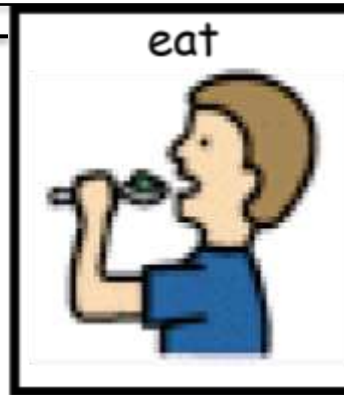- Equally favoured style across group
- Most complex style
- Aesthetically appealing faces
    - *"She is the prettiest"*
    - *"He's cute" "Hello!"*

Future directions

Suitable for Adults?

Or
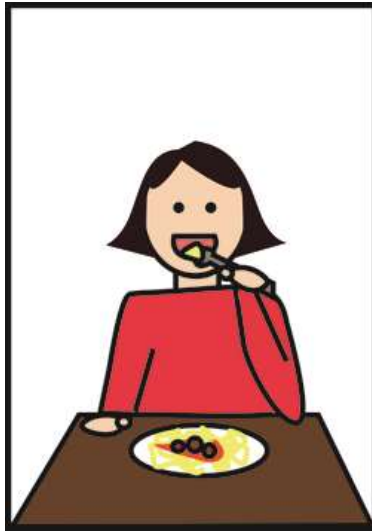
Choice, respect & a more nuanced approach?

(Alant, 2005)

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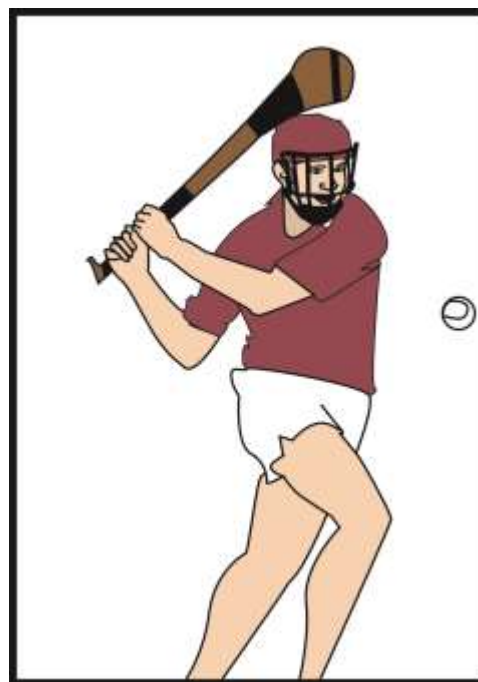
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Thank you

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