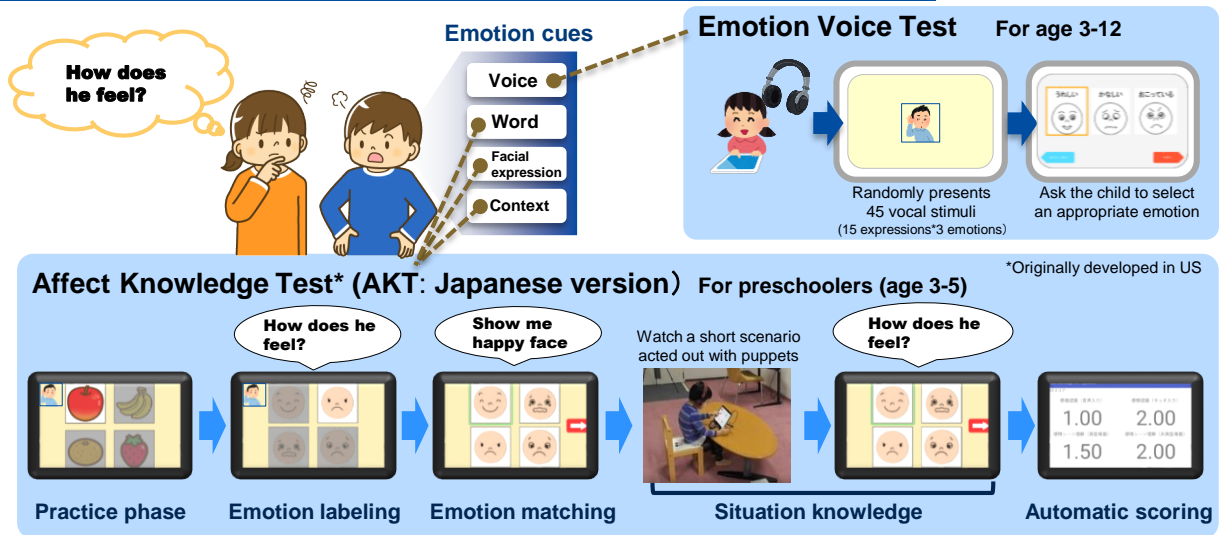# 10 Assessing children's emotional development

Investigating developmental changes via multiple cues

Abstract

Understanding one's own and others' emotions is an essetial skill in interpersonal communication. To investigate the development of emotion understanding in children, we computerized the Affect Knowledge Test (Japanese version) and developed an emotion voice test. These assessment tools allow us to examine how children percieve and process multiple emotion cues and to objectively quantify their development. Compared to the traditional method in which only trained experimenters can administer assessments to children, the computerized tests made it possible to assess children's emotion understanding in any setting without experts. Using the tests, researchers as well as teachers would be able to detect children with developmental delays and those who struggle with interpersonal communication, and to find which emotional cue is difficult for them to percieve. Obtaining this information would allow us to develop an appropriate intervention to facilitate their development.
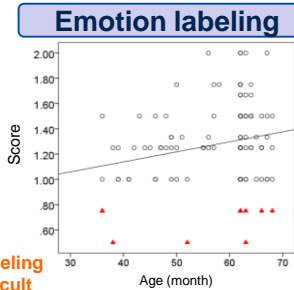
Developing assessment tools for children's emotion understanding

Emotion cues
- Voice
- Word
- Facial expression
- Context

Emotion Voice Test For age 3-12

Randomly presents 45 vocal stimuli (15 expressions*3 emotions)

Ask the child to select an appropriate emotion

Affect Knowledge Test* (AKT: Japanese version) For preschoolers (age 3-5) *Originally developed in US

How does he feel? — Show me happy face — Watch a short scenario acted out with puppets — How does he feel?

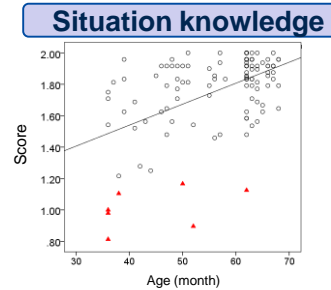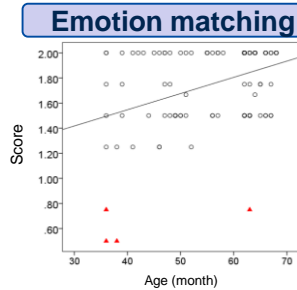| Practice phase | Emotion labeling | Emotion matching | Situation knowledge | Automatic scoring |

Emotion development in 3-5 years old

Participants: 116 Japanese 3 to 5-year-olds (65 boys)

○ Typically developing children
▲ Developmentally delayed children

Can detect children with developmental delays

Emotion labeling
Score vs Age (month)
Emotion labeling is more difficult then other tasks
$M = 1.27$, $SD = .33$

Emotion matching
Score vs Age (month)
$M = 1.76$, $SD = .33$

Situation knowledge
Score vs Age (month)
$M = 1.76$, $SD = .26$

References

[1] N. Watanabe, S. A. Denham, N. M. Jones, T. Kobayashi, H. H. Bassett, D. E. Ferrier, "Working toward cross-cultural adaptation: Preliminary psychometric evaluation of the Affect Knowledge Test in Japanese preschoolers," *SAGE Open*, 2019.

[2] N. Watanabe, T. Kobayashi, "Computerization of an emotion knowledge assessment for preschoolers: Supporting their school readiness," *Proc. International School Psychology Association 41st Annual Conference*, 2019.

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