

# Factor structure of the ASQ:SE-2: Cross-Cultural Similarities and Differences

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## Significance: Social-Emotional Well-being in the Post-Pandemic Era

- UK: Pandemic has disproportionately harmed more children than adults in their mental health, where an 81% increase of referral among children and 11% increase among adults were reported (BMJ, 2022).
- US: In a 2020 survey, 71% of parent participants reported that the pandemic had taken a toll on their child's mental health and 69% (Ann & Robert H. Lurie Children's Hospital of Chicago, 2021). Mental health emergency visits increased by 24% for children ages 5-11 (Leeb, R. T., et al., 2020).
- Asia: Child protection emergency calls increased by 50% in India (PTI, April, 2020). Family violence emergency calls increased by 33% in Singapore (CNA, 2020).

# Agenda

- Culture in early childhood social-emotional development and screening
- Exploring the factor structure of the ASQ:SE and ASQ:SE-2
- Findings from China, Taiwan, Brazil, and the US
- Future directions

# Definition of Culture in Social-Emotional Development

Culture is defined as attitudes, values, beliefs, and behaviors that are shared by a group and passed on from generation to generation

Matsumoto, 1997



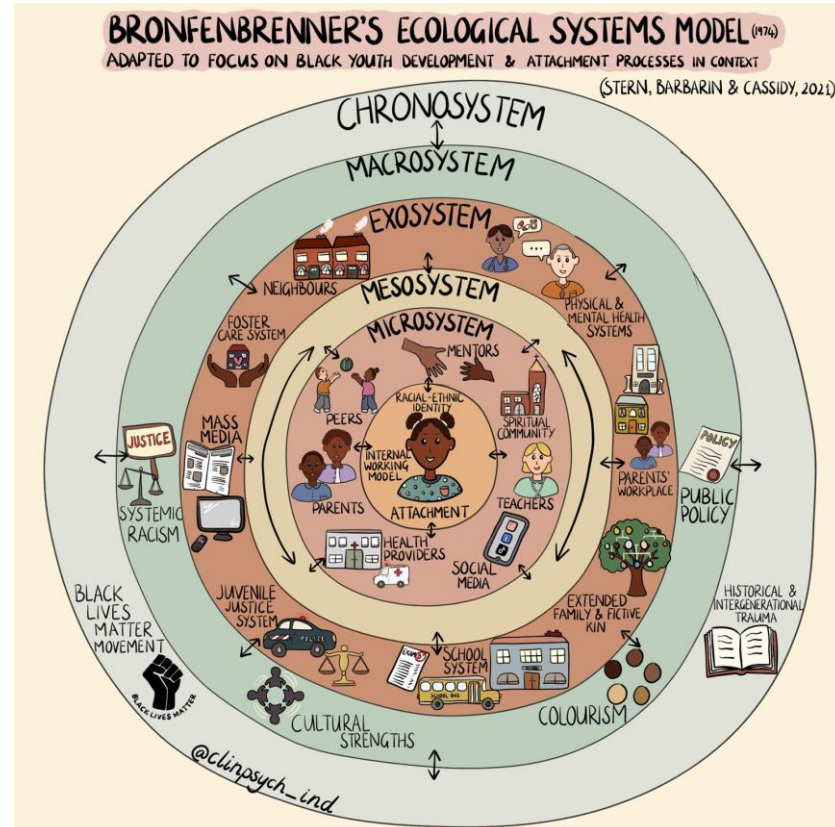
Culture is passed down via “unconscious transmission of adaptive childrearing mechanisms”.

Lieberman, 1990, p.103

# Role of Culture in Social-Emotional Development

It is essential to treat young children's mental health problems within the context of their families, homes, and communities.

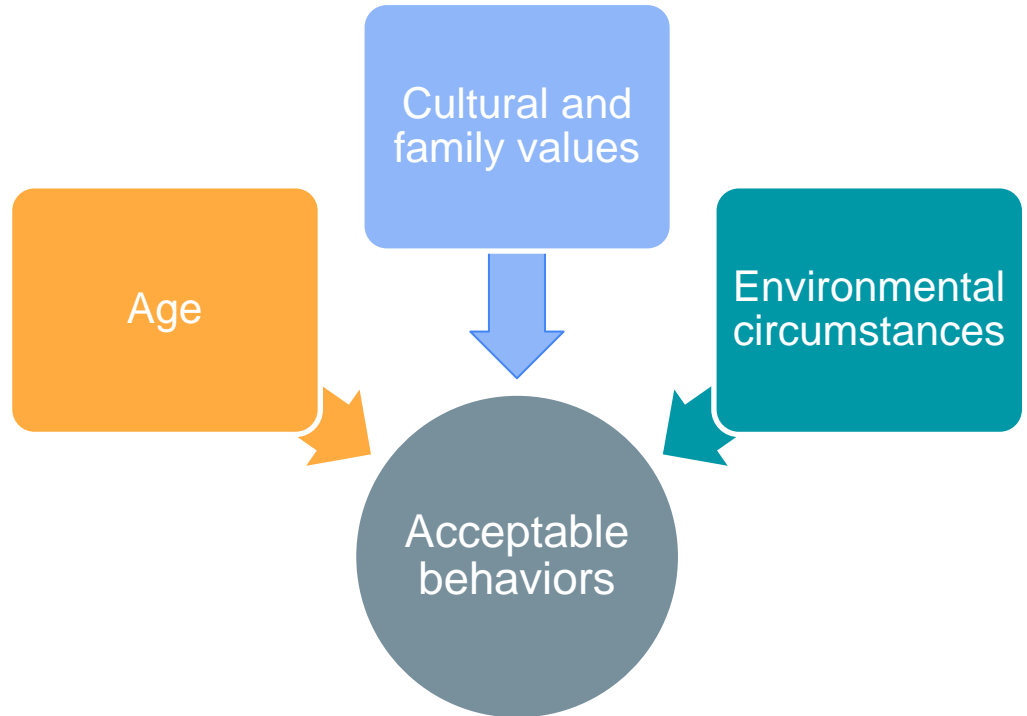
Center on the Developing Child, retrieved in 2022



# Role of Culture in Social-Emotional Assessment

Cultural and family values shape the development and expectations of infants and young children.

Squires et al., 2015

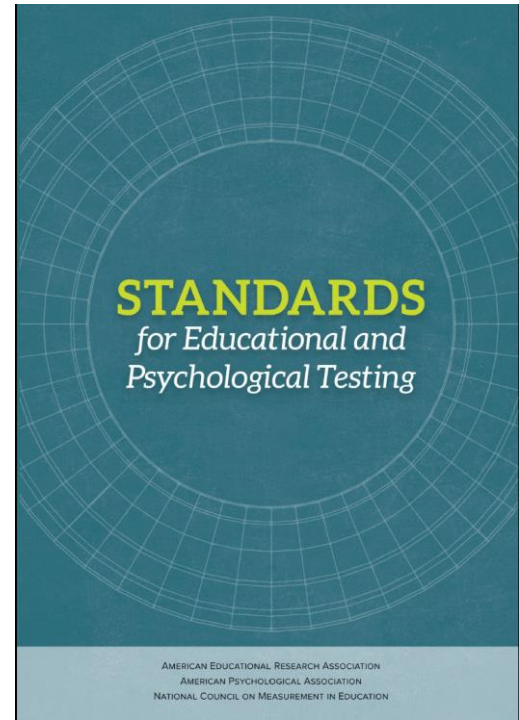


# Fairness in Assessment

- Fairness in assessment: A test that is fair reflects the same construct(s) for all test takers and the scores from it have the same meaning for all individuals in the intended population.
- Evaluation of the underlying construct of the test within one country or culture may not generalize across borders or cultures.

APA, 2014

Standards 3.0-3.20



# Factor Structure of ASQ:SE: How consistent across cultures?





# Factor Structure of ASQ:SE: A scoping review



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# Major Findings

|  | Brazil  | China   | Taiwan   | United States   |
|--|---|---|--|---|
| ASQ:SE version                                     | ASQ:SE  | ASQ:SE-2  | ASQ:SE-2   | ASQ:SE  |
| Age intervals                                      | All 8 intervals   | All 9 intervals   | 48 months  | 6, 12, 18, 24, 30, 36, 48, and 60-month   |
| Sample size  | N = 2830<br>Interval n = 309-323  | N = 2830<br>Interval n = 309-323  | N = 1455   | 20,862  |
| Evidence for social-emotional two factor structure | Adequate to good fit (2 factor solution but also unidimensional structure for certain ages) | Adequate to good fit except for 2-month   | Adequate to good fit for 48-month                          | Adequate to good fit for 48-month 6, 12, 18, 24, 30, 36, 48, and 60-month (2 months data was too small to test) |
| Items with poor fit                                |   | <i>“Does your child seem too friendly with strangers?”</i><br>changed to load on emotional factor | <i>“Does your child seem too friendly with strangers?”</i> | <i>“Does your child cling to you more than expected?”</i><br>(Item 2)   |

# Differentiated Item Functioning: Taiwan vs. U.S.

Items that TW data indicated lower probability of scoring:

- Does your child do what you ask her to do? - reversed
- Does your child use words to tell you what she wants or needs? - reversed
- Does your child use words to describe her feelings and the feelings of others? - reversed

Items that US data indicated lower probability of scoring:

- Does your child cling to you more than you expect?
- Do you and your child enjoy mealtimes together? - reversed

# Discussion of Implications

- ASQ:SE and ASQ:SE-2 are widely recognized across different countries (and cultures)
- Both tools showed consistency in factor structure across cultures, with nuances in some items
- Both tools help practitioners in their daily lives

## Future Directions:

- Examining parental understanding and functionality of the “concern” option across cultures
- Developing resources for family-professional communication and collaboration

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