

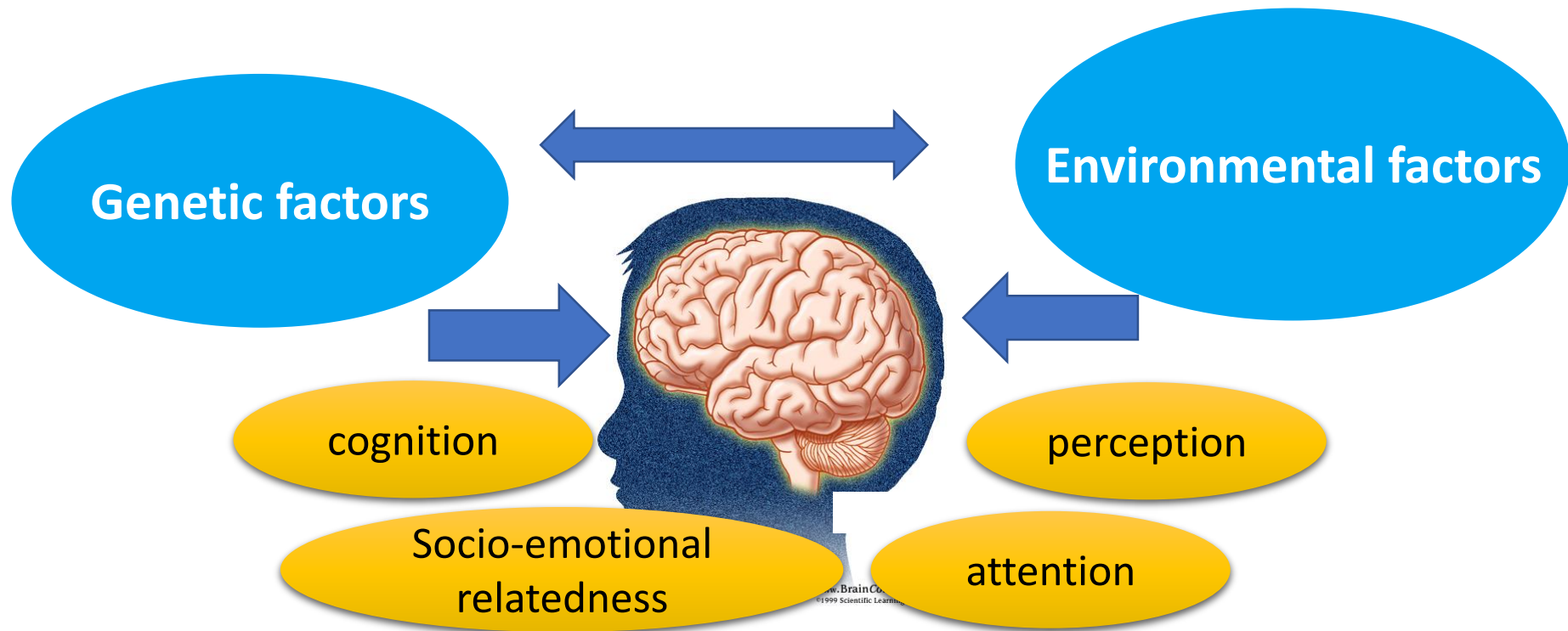
The 18th ASEAN-Japan  
High Level Officials Meeting on Caring Societies  
30 October 2020 via Video Conference

# **Towards Social Implementation of Evidence-Based Management for Children with Autism Spectrum Disorders (ASD) and Their Families**

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# Causes of ASD and developmental disorders



**goal of support = promotion of wellness, quality of life (QOL)**

**WHA67.8      Comprehensive and coordinated efforts for the management of autism spectrum disorders<sup>1</sup>**

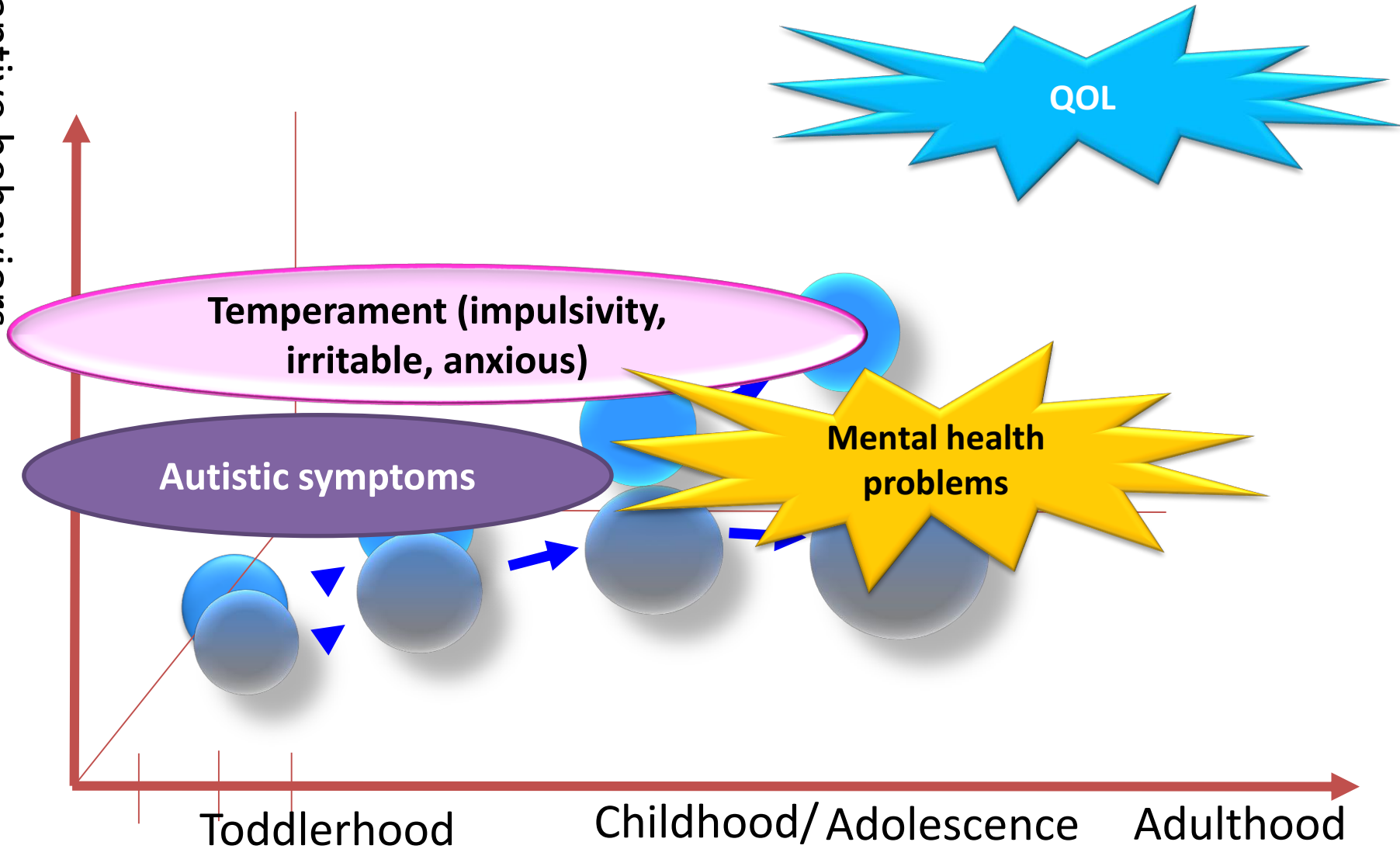
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**GENEVA, 19–24 MAY 2014**

- ✓ to strengthen countries' leadership by engaging stakeholders
- ✓ to provide comprehensive health and social care services in community-based settings
- ✓ to implement multi-sectoral strategies for promotion of well-being
- ✓ to strengthen research capacity

# Life course of individuals with ASD

Adaptive behaviors



# QOL of adults with ASD: From nationwide survey in Japan

(Kamio et al., 2013)

- Lower QOL in adults with ASD

Males > females

- Associated factors with lower QOL in adults with ASD  
comorbid mental disorders
- Associated factors with higher QOL in adults with ASD  
early diagnosis before 4 years of age

# Today's topics

- Toddlers: early identification and intervention in Japan
- School children: school-based support in Japan

# Routes in the community from early identification to early intervention

Early identification

Specialized clinic/center

Early diagnosis

Pre-diagnostic  
early intervention

**Child developmental  
support office**



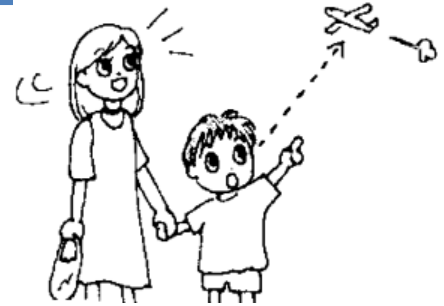
**Early intervention-  
Multidisciplinary team**  
(psychologist, speech therapist,  
occupational therapist,  
Pediatrician)

# Early identification of ASD

routine health check-up system at 18 months (visit rate >90%)

General developmental screening  
(traditional)

Motor development  
Cognitive development  
Language development



ASD screening (e.g. M-CHAT)  
Social development

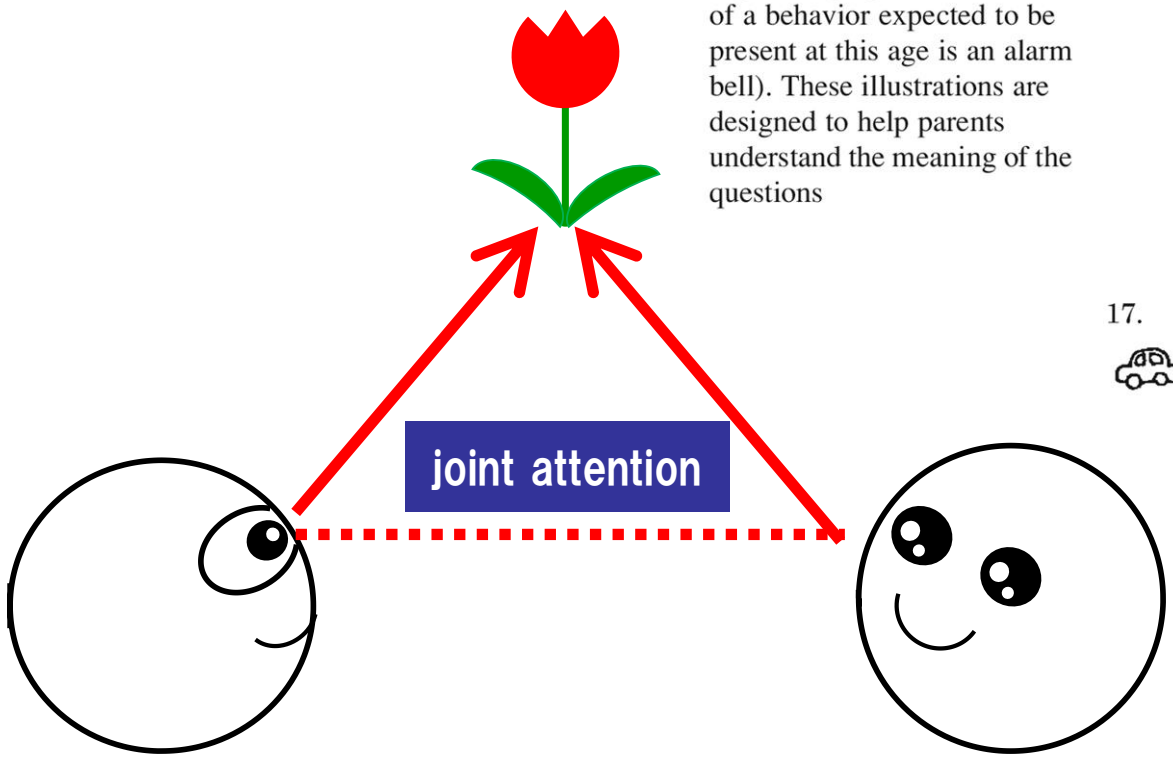
<https://mchatscreen.com/> by Dr. Robins

- ✓ cultural adaptation (M-CHAT-JV) (Inada et al., RASD 2011)
- ✓ Enhancement of community-based active surveillance after detection (Kamio et al. JADD 2014)



The M-CHAT asks parents about social development (joint attention) at this age.

23 questions  
illustrations



**Fig. 1** Illustrations for items 7, 9, 17, and 23 are added to the Japanese version of the Modified Checklist for Autism in Toddlers (M-CHAT-JV). Illustrations for four items (7, *declarative pointing*; 9, *brings to show*; 17, *gaze following*; and 23, *social reference*) are added to the Japanese translation by Yoko Kamio. These items which are related to *joint attention* or social reference behaviors ask parents about negative symptoms (absence of a behavior expected to be present at this age is an alarm bell). These illustrations are designed to help parents understand the meaning of the questions





# Early detection process at 18-month child health check-ups in Japan

Step 1 at 18 months

M-CHAT  
questionnaires

Fail case

Step 2 at 19-20 months

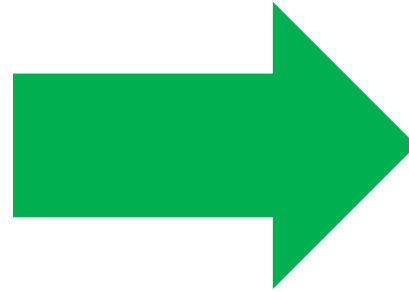


Fail case

Detailed assessment  
Referral to specialized center  
Follow-up in collaboration with other division  
(kindergarten, nursery school, welfare services)

# Shorten the time lag from identification to intervention

Early identification

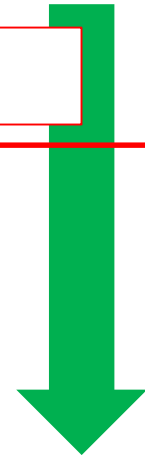
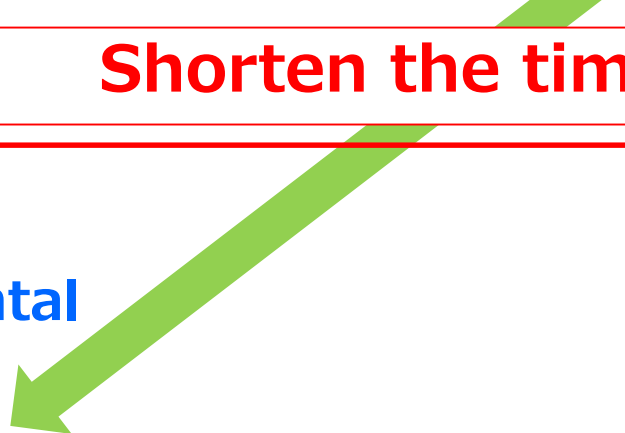


Specialized clinic/center

Early diagnosis

**Shorten the time lag**

**Child developmental  
support office**



**Early intervention-  
Multidisciplinary team**

## **DEVELOPMENT**

cultural adaptaion of the scale  
validation, calibration  
funding



## **IMPLEMENTATION**

academia-public partnership  
collect data, surveillance  
analyze data



## **DISSEMINATION**

# Barriers to implementing early detection and intervention in the community

## Cultural variations in child rearing

- ✓ expectation for early development
- ✓ perception of children's autistic symptoms



- **Respect the parental sense of value**
- **Empower parents of children with ASD and developmental disorders with evidence-based practices**
- **Support the whole needs of vulnerable families**
- **Make intervention accessible and affordable**  
(school-based, online, et al.)

# Early intervention of ASD



- Evidence-based practices for optimal outcomes  
intervention type (behavioral (ABA)),  
intensity (hours/week) (intensive 30 h/w)



shortage of qualified therapists, high costs →  
difficult to be disseminated

- Other options

low-intensity ABA (10 h/w) combined with parent-mediated  
training

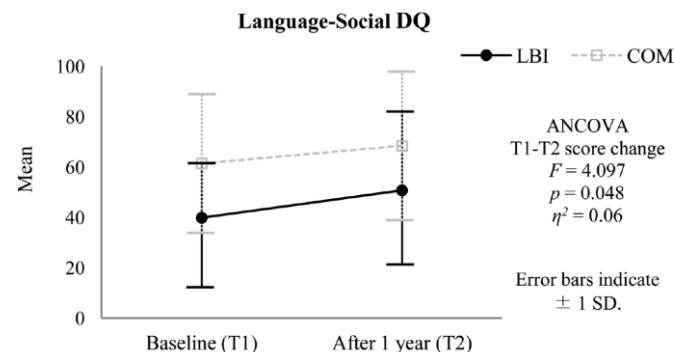
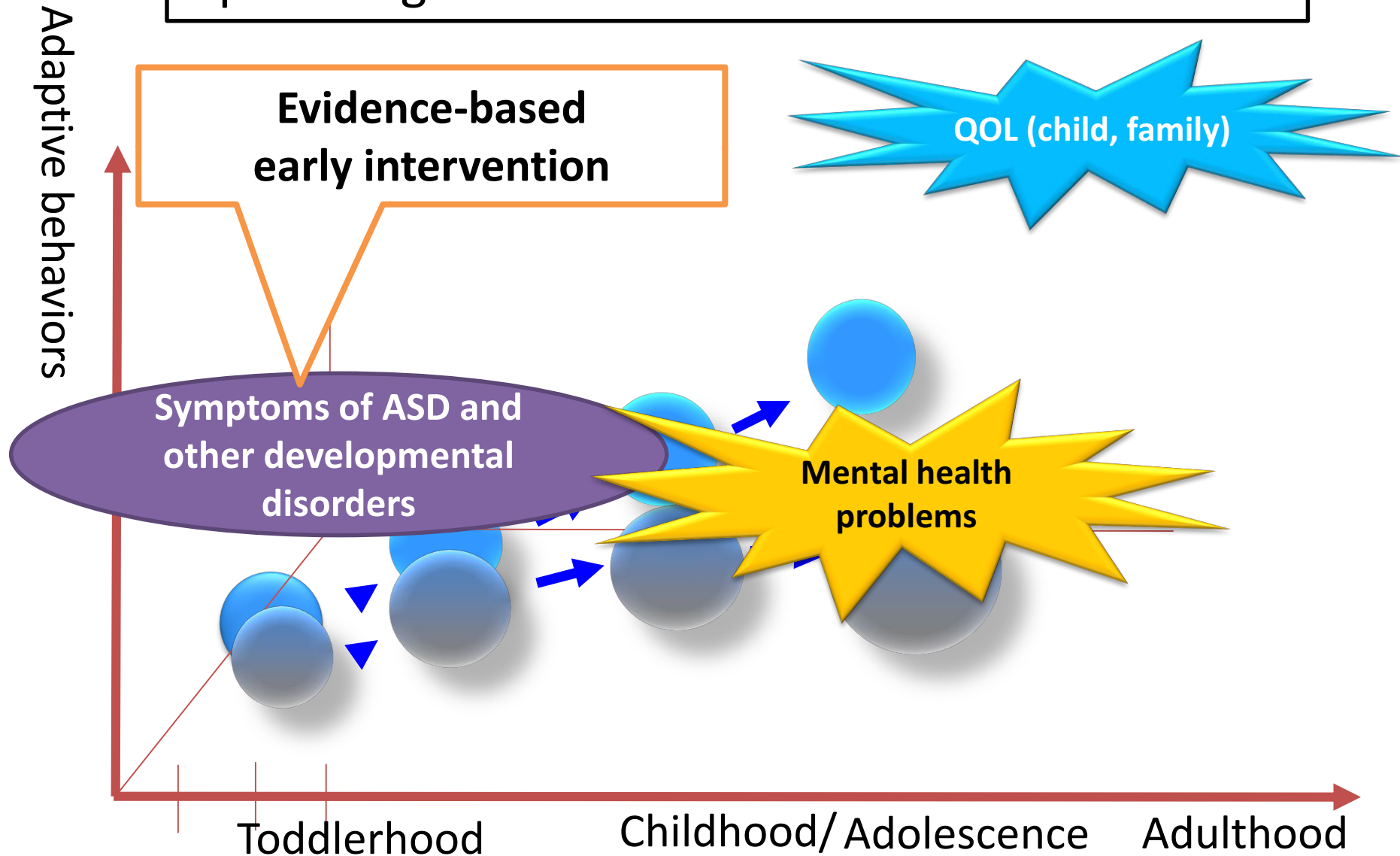


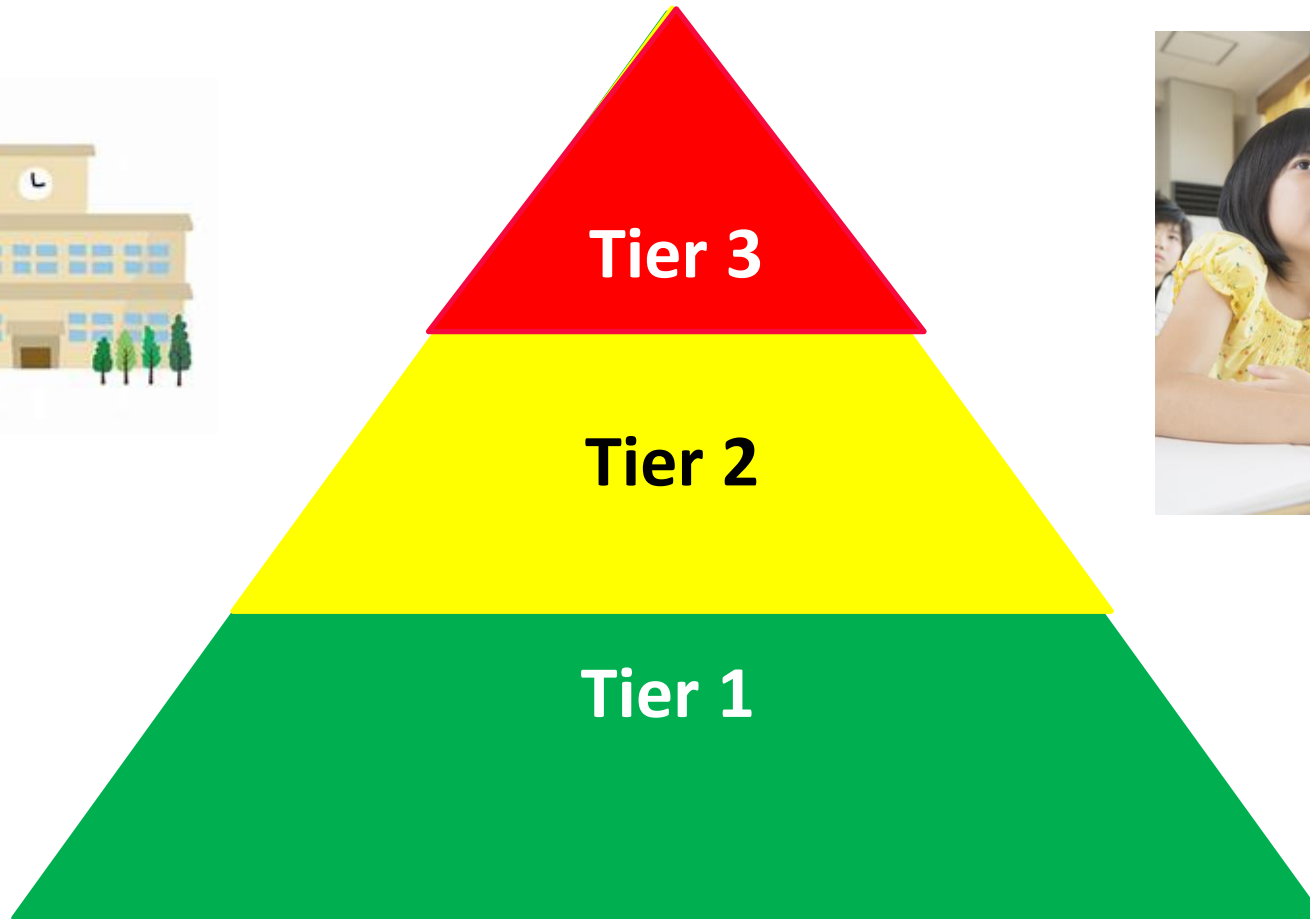
Fig. 1. Score changes between T1 and T2 in the Language-Social DQ for the LBI and COM groups.

(Haraguchi et al., 2020)

# Optimizing the outcomes of individuals with ASD



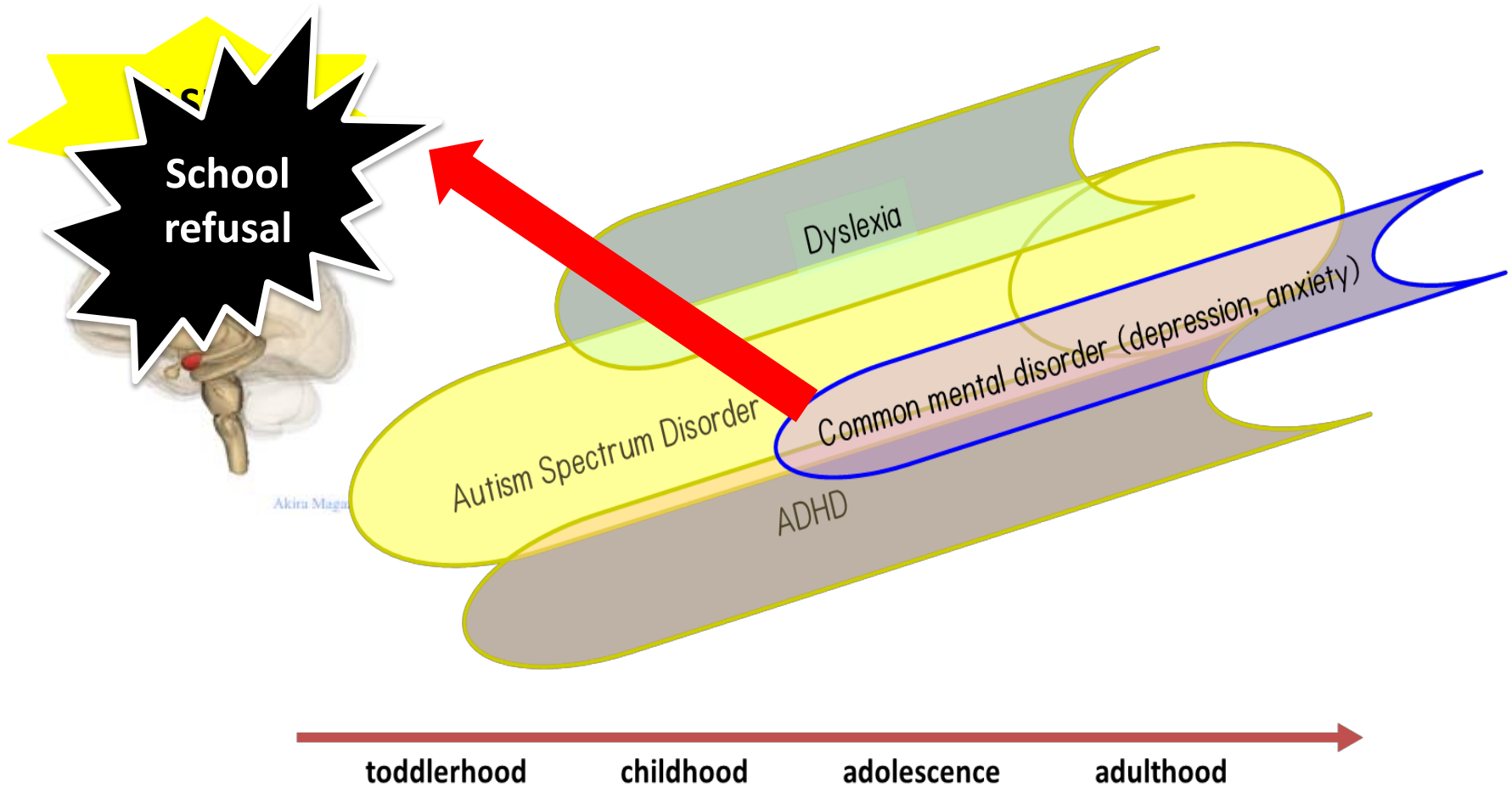
School is the most appropriate place where the program can be done systematically (WHO, 2005)



School-based Support for Children' Development and Wellbeing: the Multi-tiered System of Support (MTSS)

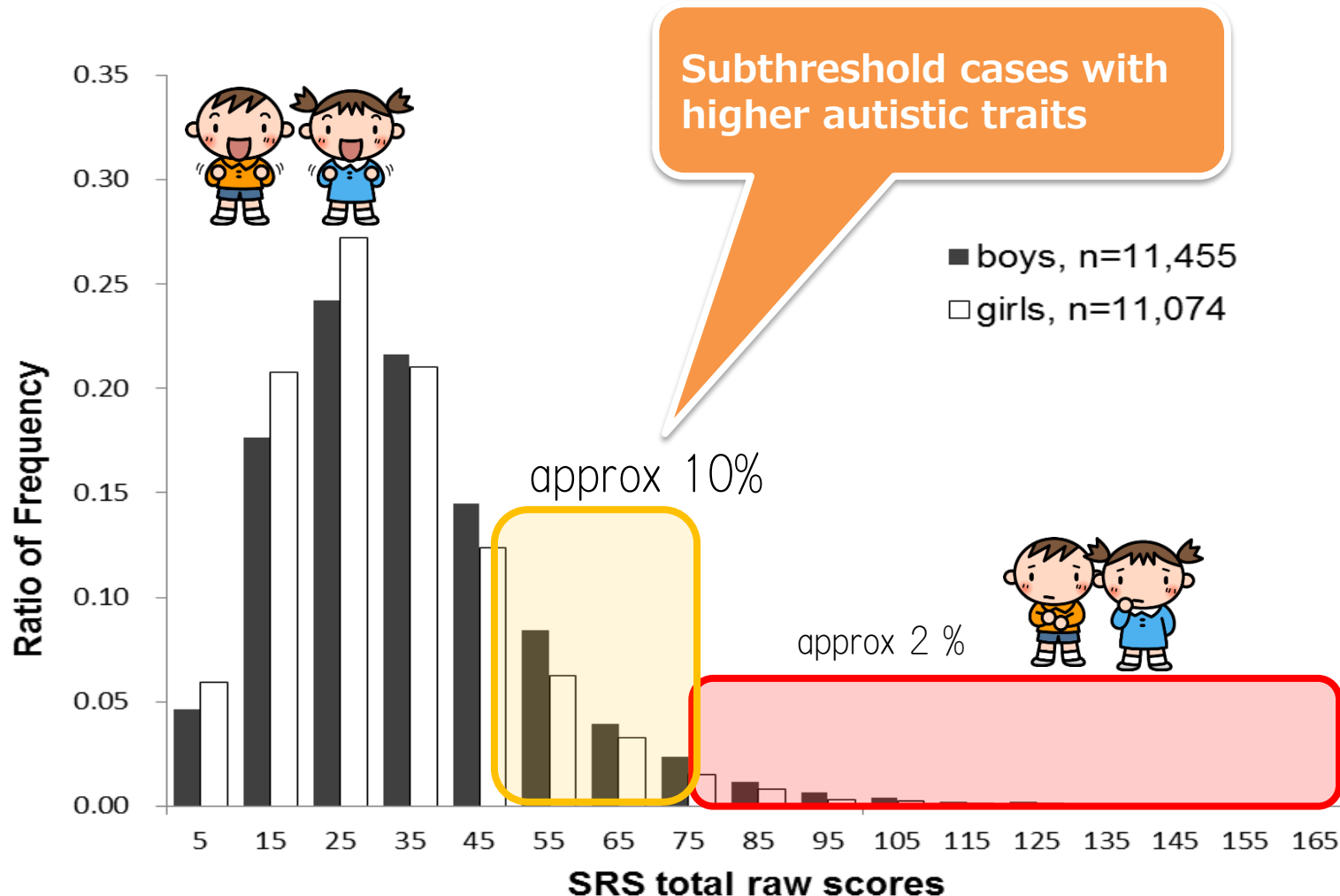


# Co-occurrence of mental health problems in ASD and developmental disorders

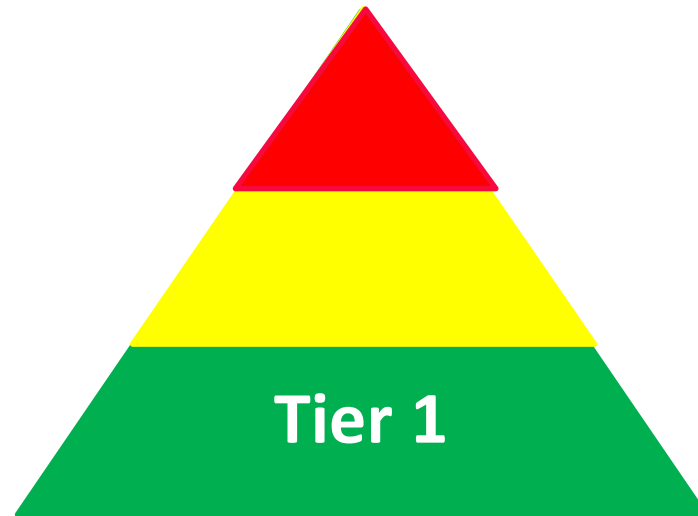


# Autistic traits are continuously distributed in regular classes

(Kamio et al., 2013)



# Tier 1 Support: universal approach



The goal is to promote resilience of all students



Ishikawa et al.  
*Child Adolesc Psychiatry Ment Health* (2019) 13:44  
<https://doi.org/10.1186/s13034-019-0303-2>


Child and Adolescent Psychiatry  
and Mental Health

RESEARCH ARTICLE

Open Access

# Developing the universal unified prevention program for diverse disorders for school-aged children



Shin-ichi Ishikawa<sup>1\*</sup> , Kohei Kishida<sup>2,3</sup>, Takuya Oka<sup>4</sup>, Aya Saito<sup>4,8</sup>, Sakie Shimotsu<sup>5</sup>, Norio Watanabe<sup>6</sup>, Hiroki Sasamori<sup>7</sup> and Yoko Kamio<sup>4,9</sup>

Up2-D2



Up2-D2



Thought Light

you can find successfully  
your thought by using it!

How to use though light...

あかま  
赤丸くん



なまえ あかまる  
おれの名前は 赤丸だ。  
しょうがく ねん  
う 小学校6年だ。  
す た もの  
好きな食べ物 はカ  
レーとコーラだ。苦手  
いぬ  
なものは犬だ。

あおや  
青山くん



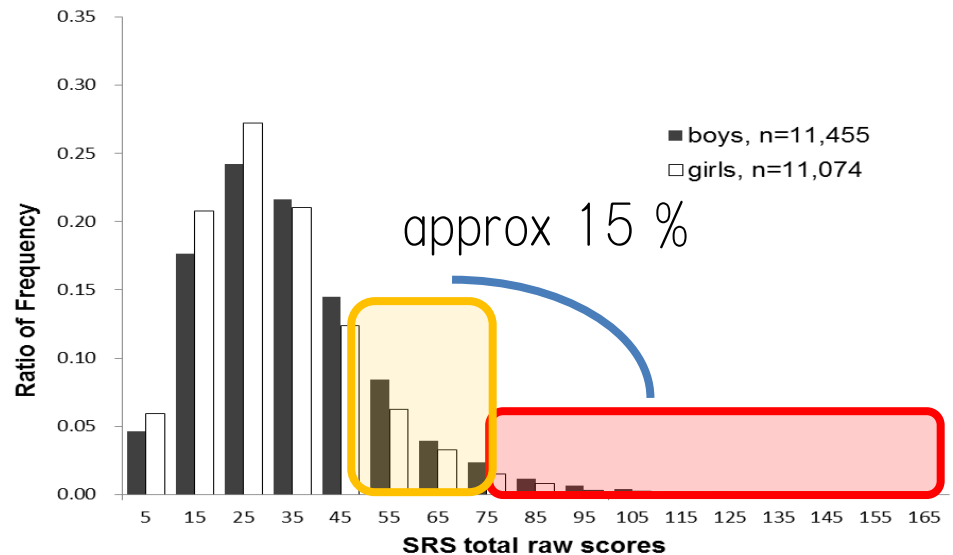
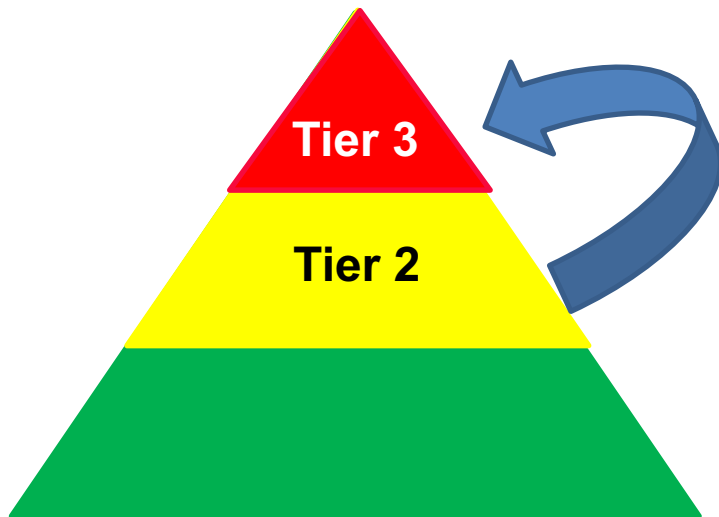
なま あおや  
ぼくの名前は 青山です。  
しょうがく ねんせい  
う 小学校6年生です。  
す  
好きなものは テレビ。  
べんきょう  
勉強もスポーツも あん  
とくい  
まり得意じゃないんだ。

キミちゃん



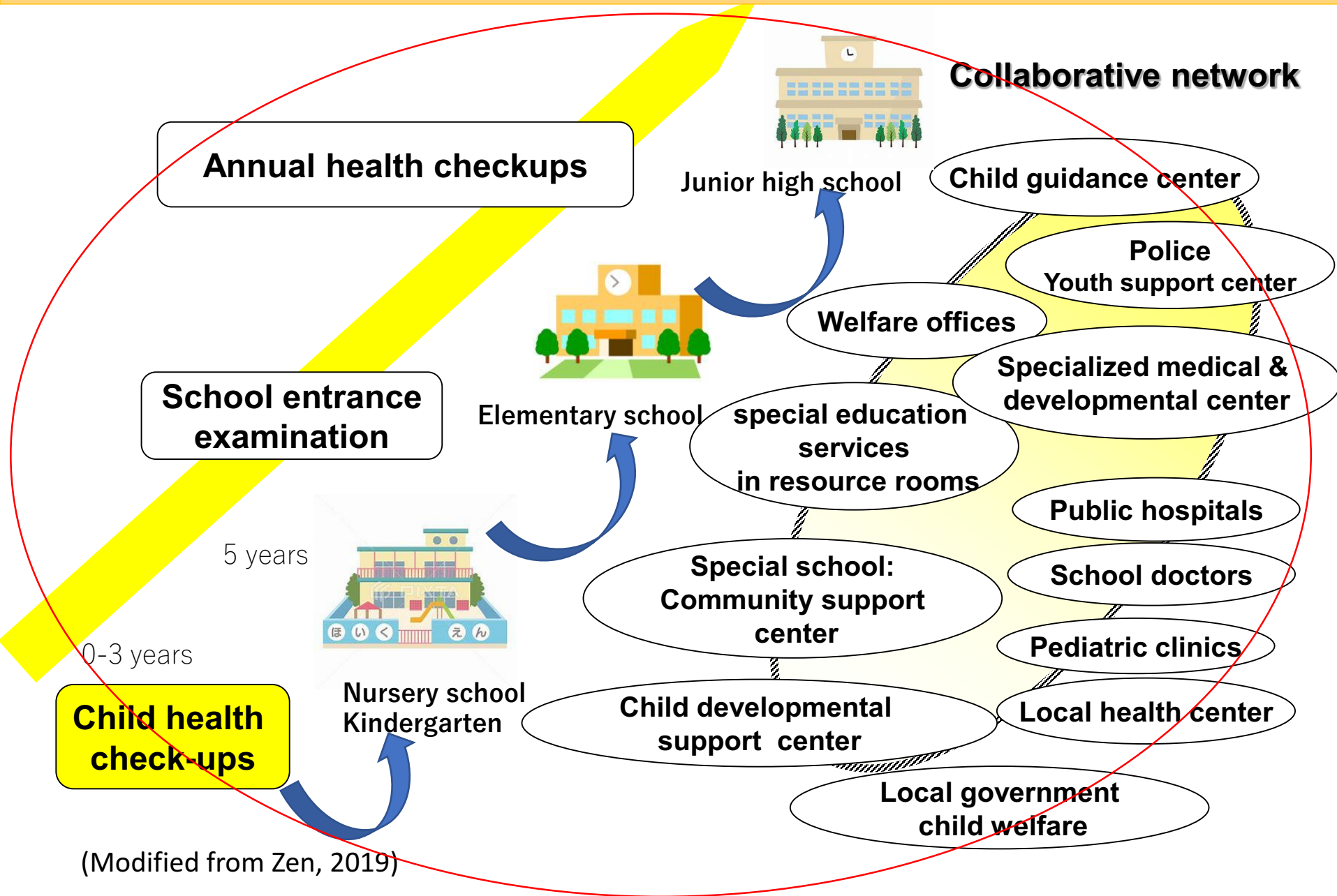
なまえ  
わたしの名前は キミです。  
しょうがく ねん  
う 小学6年生です。  
す  
好きなものは チョコレート  
ひとまえ はな  
です。人前で話すことが  
にがて  
とても苦手です。

## Tier 2 & 3 Support: selective & indicated approach



- Tier 3 refers to individualized support, targeting students who continue to struggle even when they receive Tier 2 support.

# A collaborative network across life course in the community





Thank you for your attention.