

# Age Changes in Agentive Perception to the Day Care Center Situation

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# Our Team

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# Research Framework

## Reunamo's Agentive Perception

Agency

Environment changes

**Agentive  
Assimilative**

**Agentive  
Accommodative**

**Adaptive  
Assimilative**

**Adaptive  
Accommodative**

Adaptation

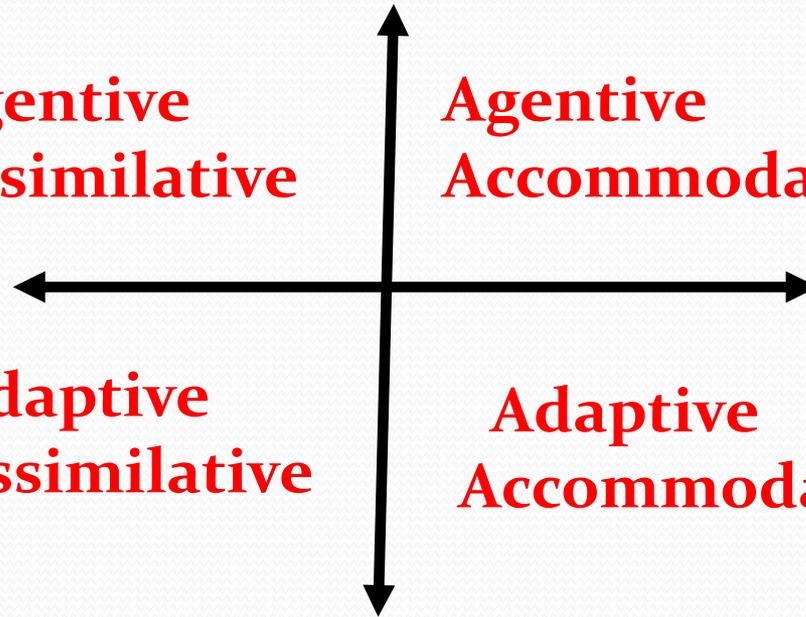
No change in environment

Assimilation

Idea differs  
from action

Accommodation

Idea influenced  
by action



# Research Questions

- 1. What are the age differences in agentive perception?**
- 2. How do children in Taiwan and Finland response differ in the development of agentive perception?**

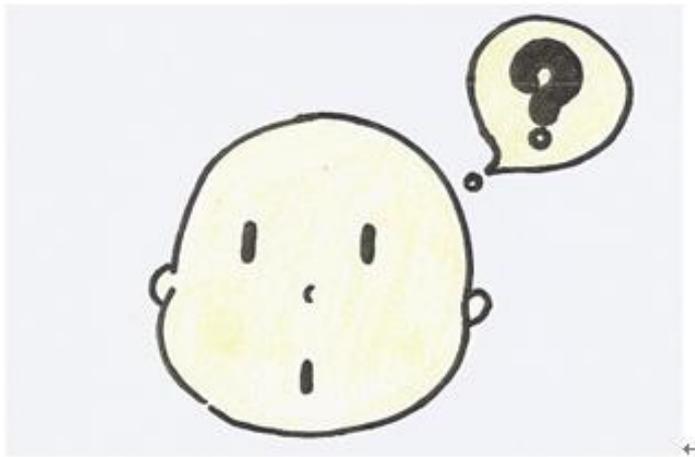
# Research Method

- **366 Taiwanese and 698 Finnish children**
- **Age 3-6**
- **Interview with 16 items about situations in day care setting**
- **Items concern adult-child or child-child interaction**

# Interview Story (English Version)

Tell your story

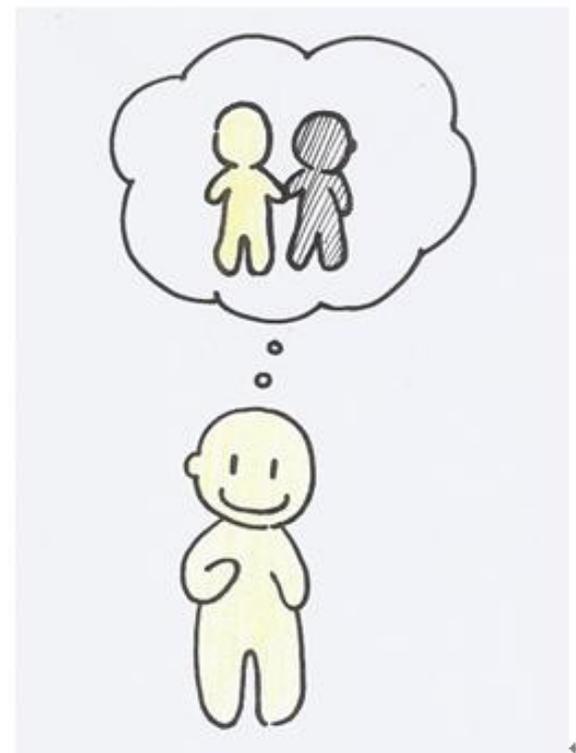
What would I do?



By Jyrki Reunamo

Pictures: Tzung Ying Li

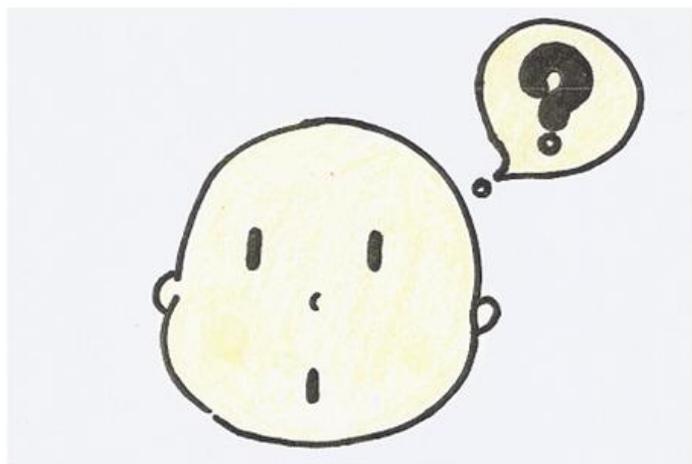
Jan. 2010



1. With whom do you want to play most?

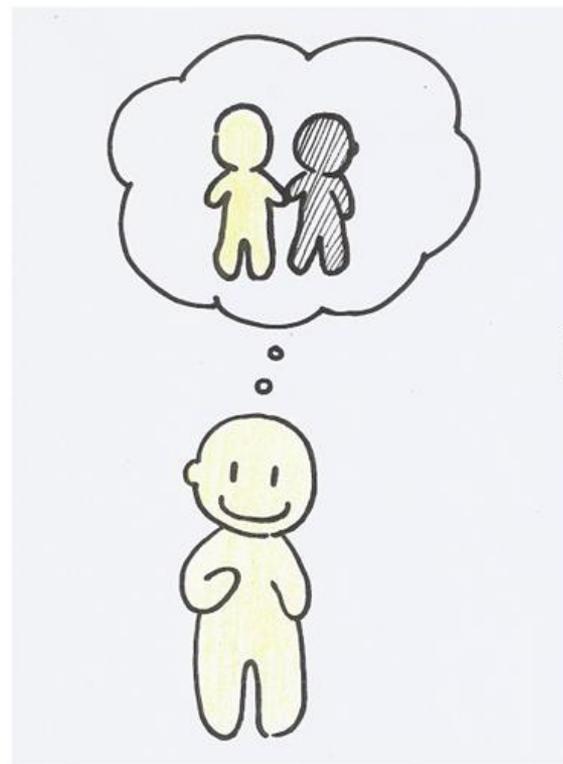
# Interview Story (Chinese Version)

說你的故事  
我會怎麼做？



文：Jyrki Reunamo

圖：李宗穎



1. 你最想要和班上的哪一位小朋友玩？

# Interview Items (Adult-Child Interaction)



10. A teacher comes to stop your play, What do you do then?

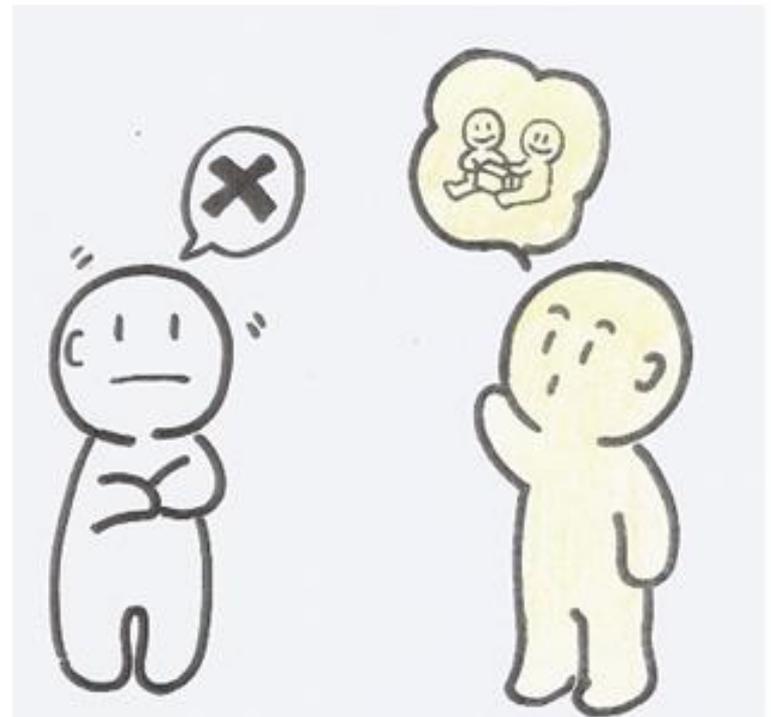


11. What if you don't like the activity arranged by the teacher? What do you do then?

# Interview Items (Child-Child Interaction)



6. Let's think you are playing with someone and your friend wants to change play. What do you do?



7. What if a friend will not play with you? What do you do?

# Data Coding

- Each response from each child was individually coded into the 4 categories suggested by Reunamo
- Sometimes the child's meaning was not clear, and those responses were coded "uncertain"
- The 3 year olds gave the most "uncertain" responses, and there were very few unclear responses for the older children
- For the sake of simplicity, the "uncertain" responses are not included in the figures presented today

# You are playing a game with somebody and the other does not follow the rules. What do you do then?

## Agentive-Assimilative

- I play with somebody else.
- I play with the one who follows rules.
- We quit playing.
- I can take a friend who knows the rules.
- I stop the whole game.
- It has happened in the yard, I don't take her with me.
- I take a friend who wants to play with me.

Changes the environment  
**Agency**

## Agentive-Accommodative

- I tell him/her the rules.
- I tell a teacher.
- I say to him/her to follow the rules.
- I tell him.
- I stop them.
- I ask the teacher to come over, we obey the teacher.
- I ask the teacher.

No change in idea  
**Assimilation**

Changes idea  
**Accommodation**

## Adaptive-Assimilative

- I play alone.
- No. I don't know. I go away.
- I can not play with him.
- I go into rules, I leave the game.
- Then I don't play with her.
- I go to another room.
- I play with Johnny.
- I can play ice hockey.

Environment  
**Adaptation**

## Adaptive-Accommodative

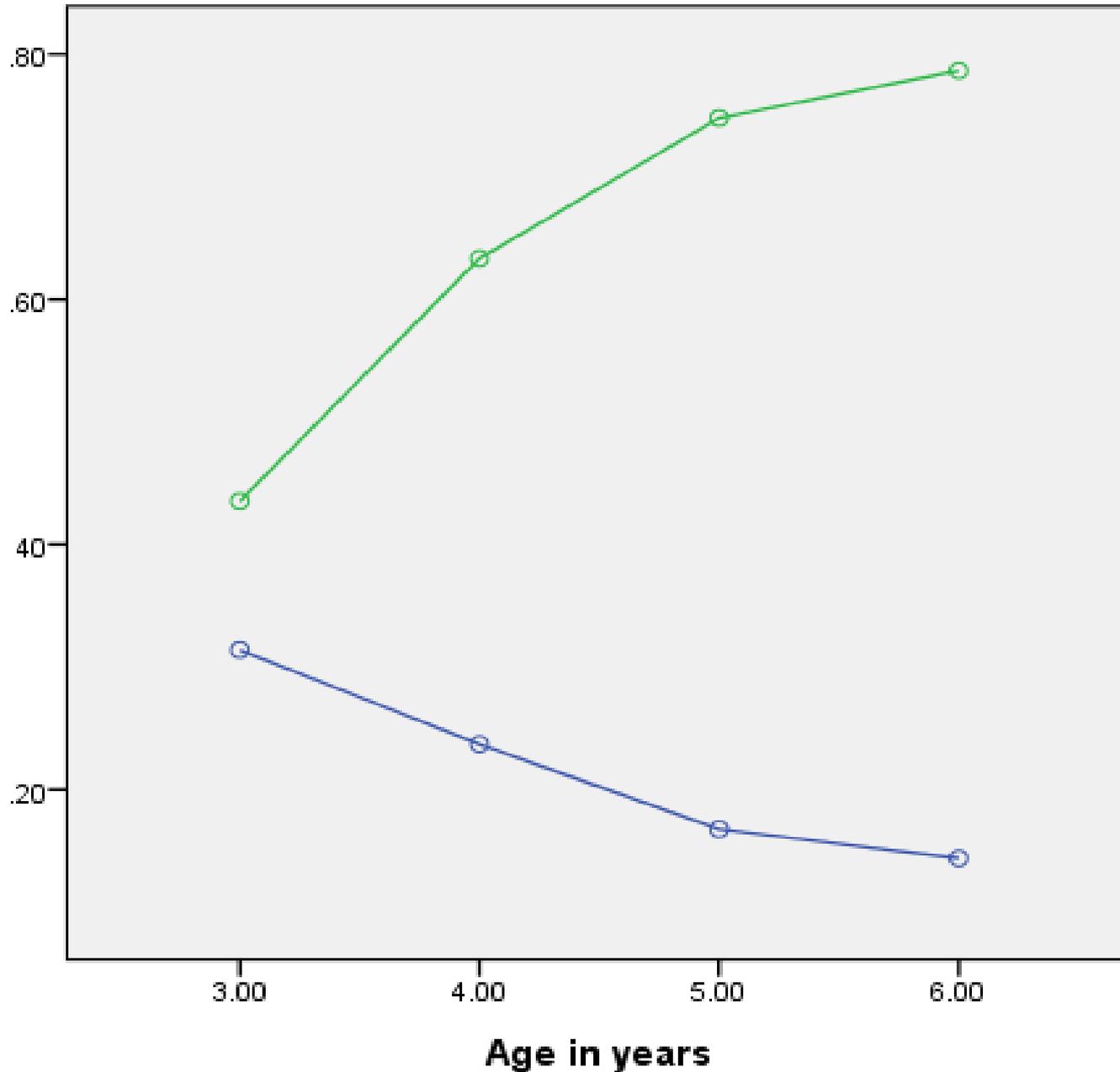
- I do what he says (the one who does not follow the rules).
- We can play without rules.
- We play another way, I don't care.
- Then I just play.
- I play along, we don't have to follow the rules.
- I play with him/her.
- Then I play, first one game and then another.

# Results 1

## First

We look at the data in terms of Piaget's view

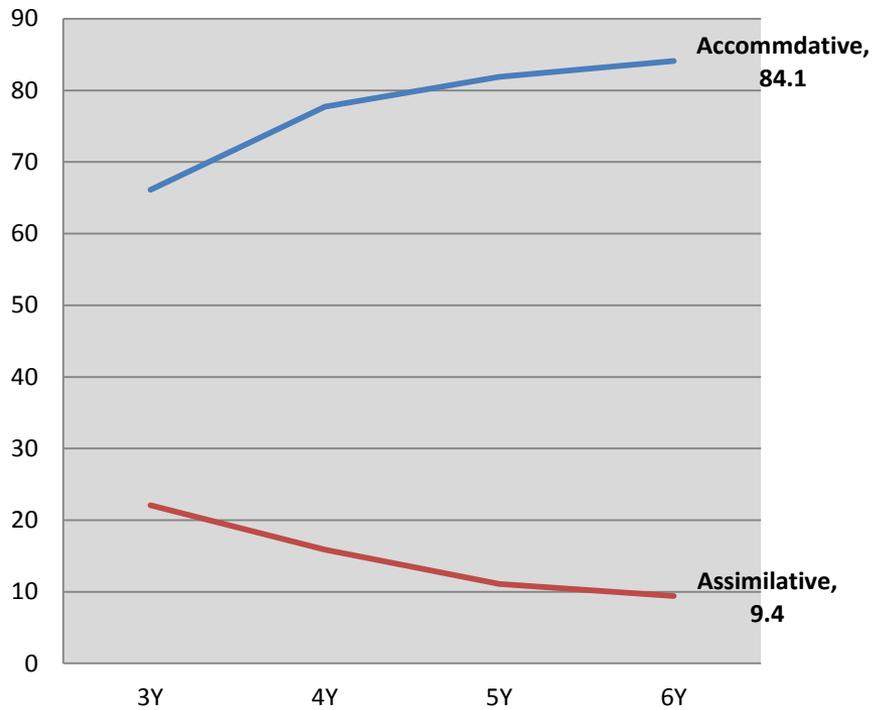
1. Assimilation vs Accommodation
2. Year 3-6 Age Trends
3. Taiwan vs Finland



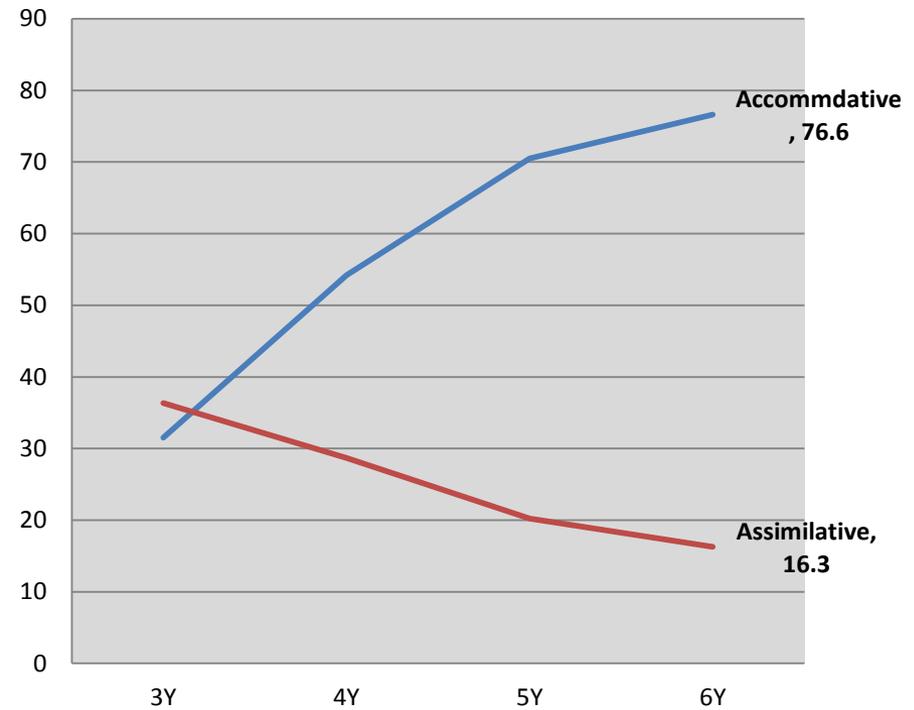
**Piaget View**  
**accommodative**  
**assimilative**

**As children grow  
older they  
become more  
accommodative**

### Taiwan



### Finland



**1. In general, Taiwan children's responses are more accommodative**

**2. In both countries, something is happening between age 3-4**

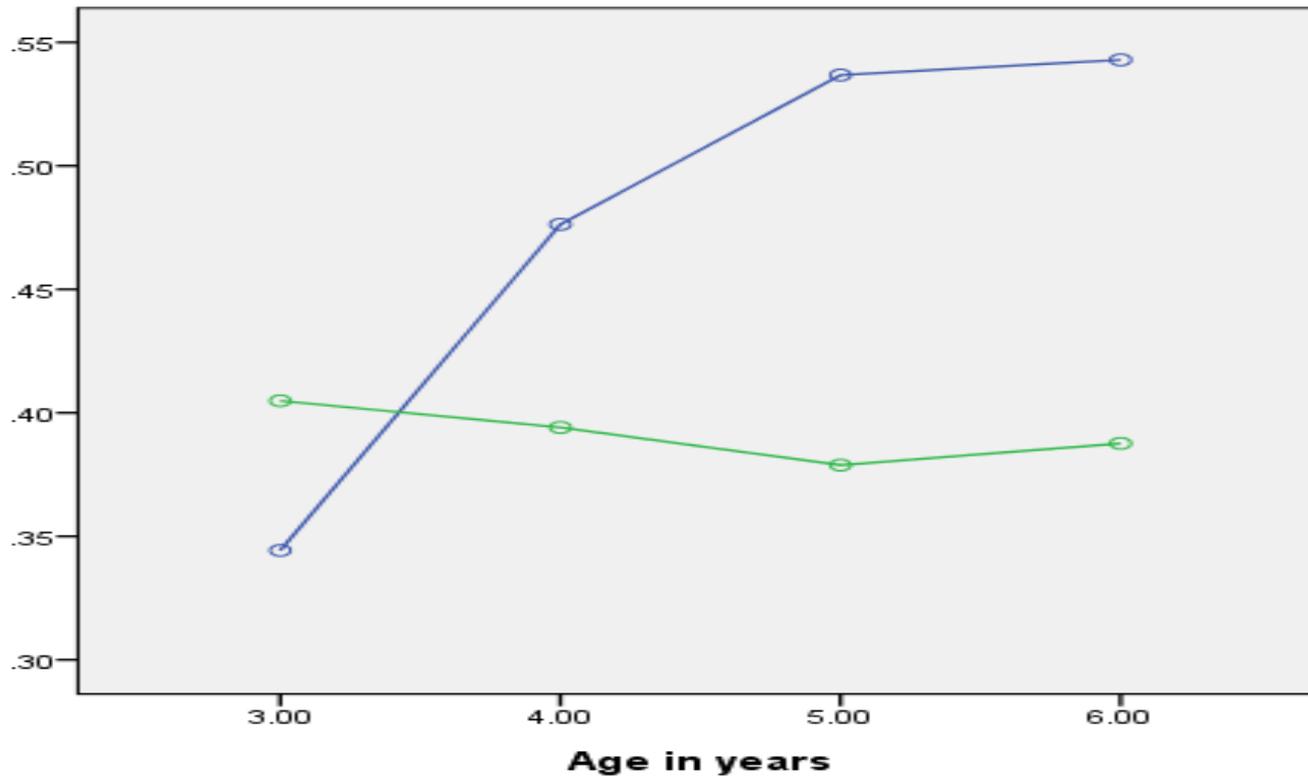
**3. Finnish children seem to make a large shift towards accommodative responses**

# Results 2

## Second

We look at the data in terms of Vygotsky's view

1. Adaptation vs Agency
2. Year 3-7 Age Trends
3. Taiwan vs Finland



## Vygotsky View

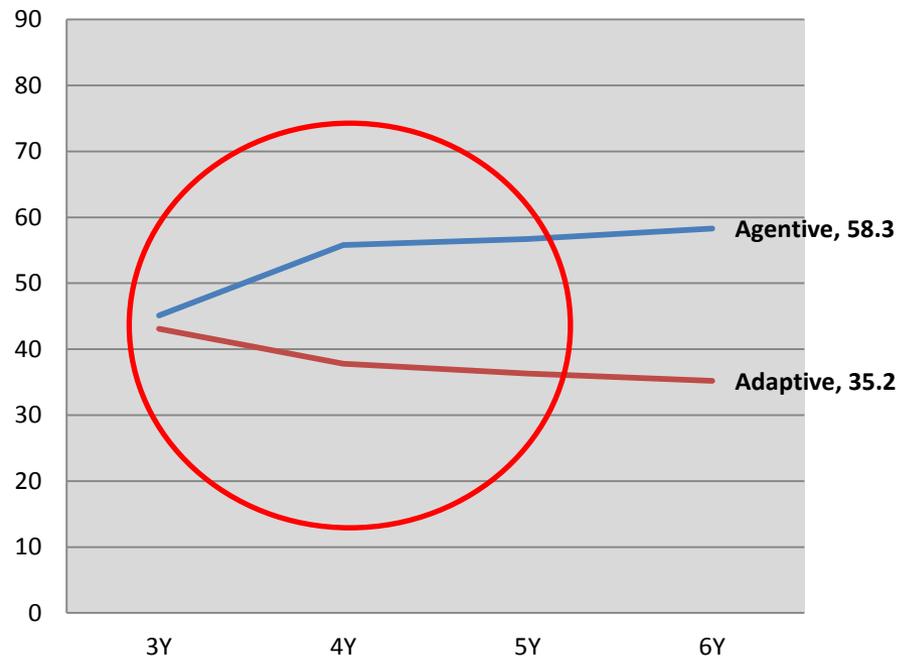
agentic

adaptive

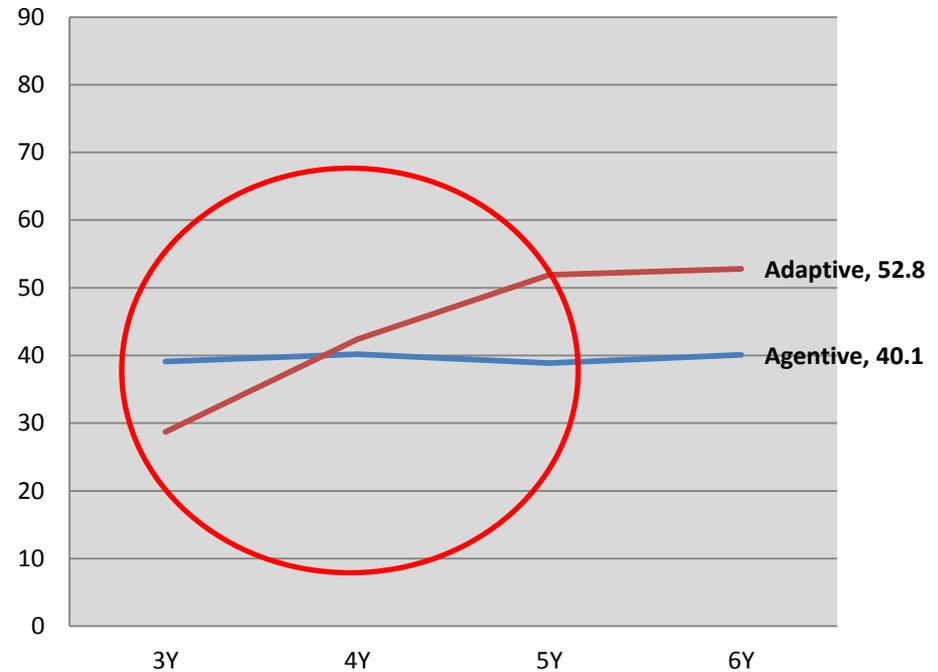
At Age 3, children  
make more  
adaptive  
responses

After Age 3,  
children  
gradually  
become more  
agentic

## Taiwan



## Finland



## Taiwan

1. Between 3 and 4, children's adaptive responses drop, and agentive response rise most significantly.
2. After age 4, the trend continues.

## Finland

3. Finnish children generally give more adaptive responses than Taiwan children.
4. The proportion of adaptive responses remain stable with age
5. The rise in agency is more significant between age 3-5.

**Reunamo View**

**Agentive-Accom.**

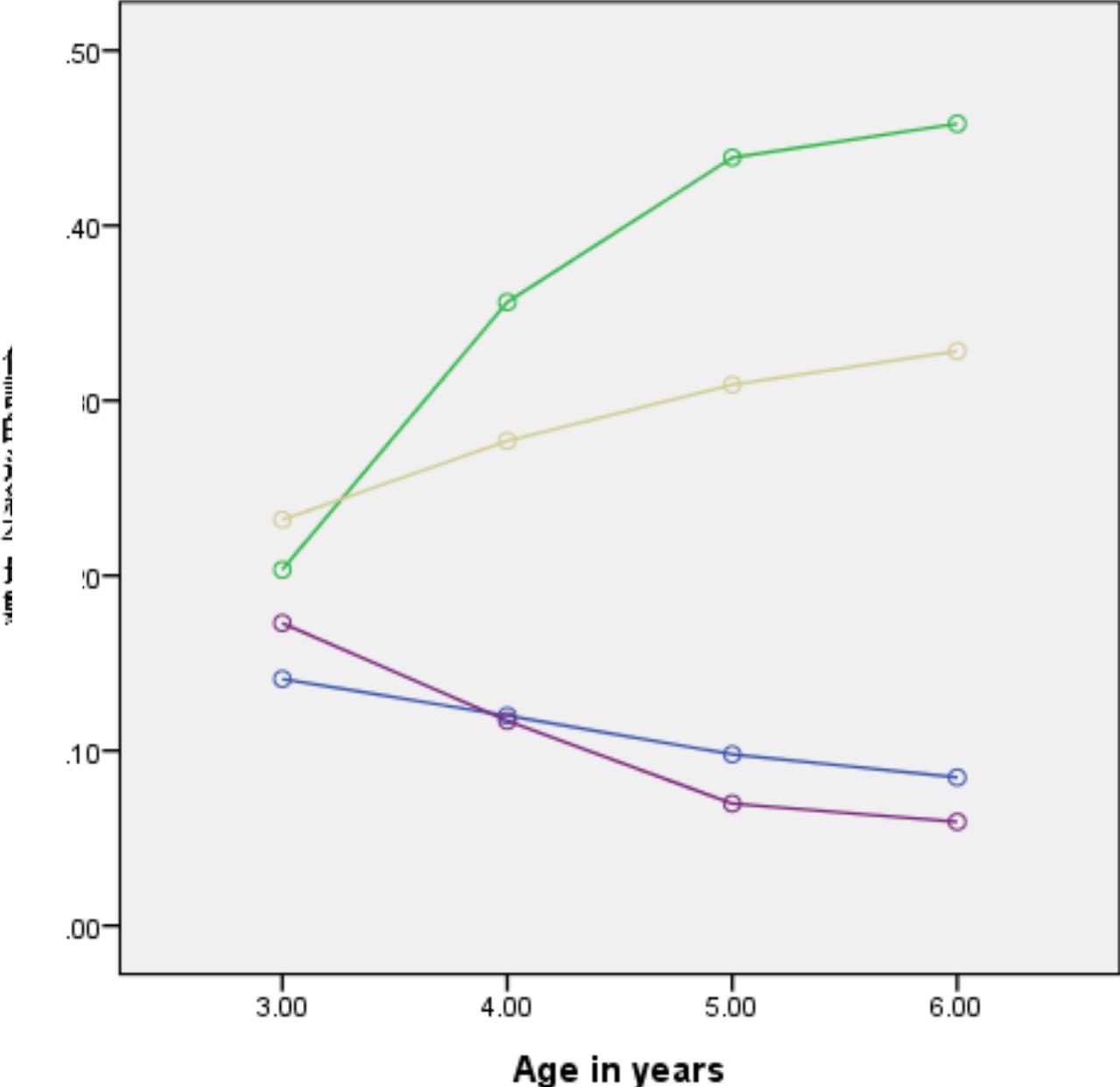
**Adaptive-Accom**

increase with age

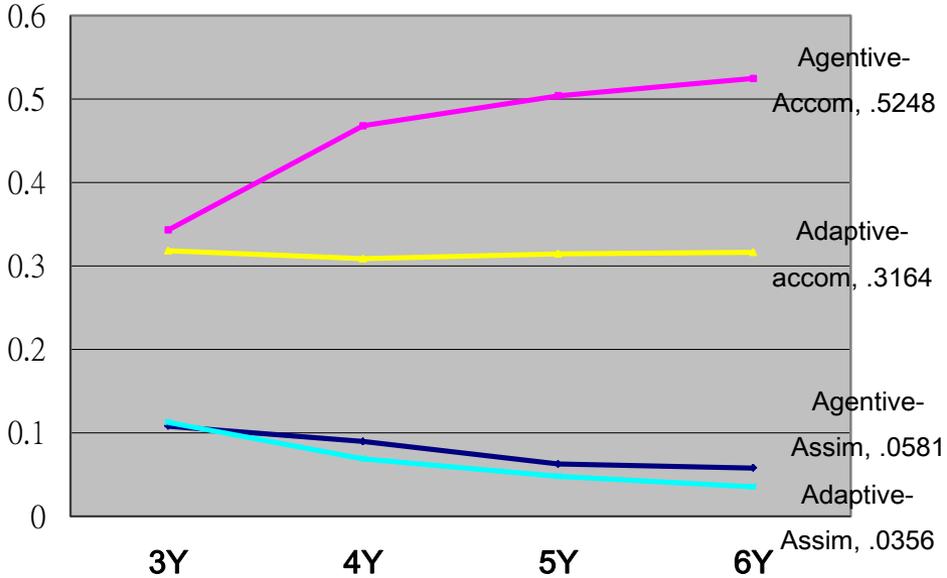
**Agentive- Assim**

**Adaptive-Assim**

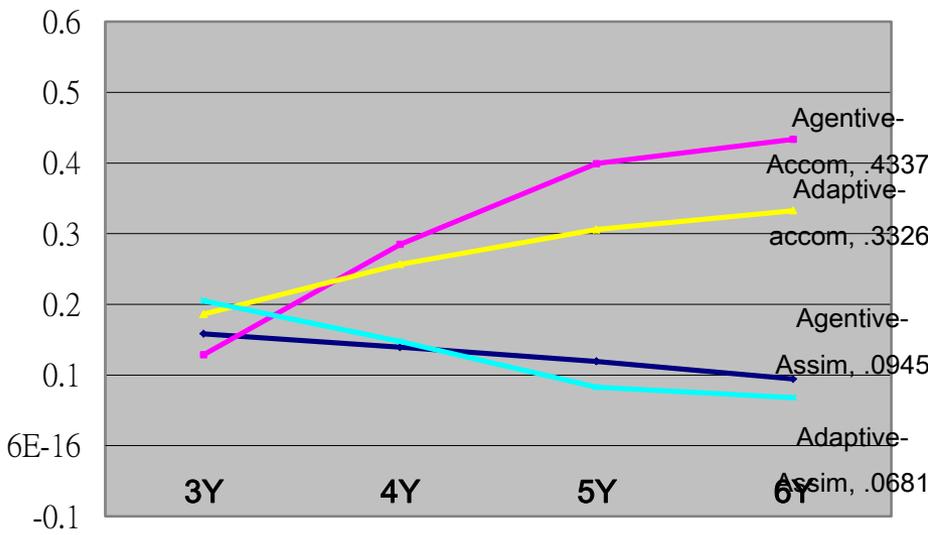
decrease with age



Taiwan



Finland



1. **Agentic-Accom** Finland responses go from the lowest proportion at age 3, and makes a steep rise, but does not reach as high as Taiwan. Taiwan start higher and reach higher.
2. **Adaptive-Accom** Taiwan remains around the same. Finland start lower and reach about the same level as Taiwan
3. **Assimilative** responses: Taiwan starts lower than Finland and go even lower than Finland.
4. Finland data shows an age x category interaction.

# Discussion

## For theory

- 1. Finnish and Taiwanese children interact with the environment in similar ways. They recognize that they can have an effect on the environment, and may negotiate with others in that environment.**
- 2. Age 4 appears to be an important turning point in the development of agency . We see changes in the children's responses in both countries. In Taiwan, children begin to stabilize in agentive responses starting at about 4 years.**



**3. There are differences in developmental trends between children in the two countries. Apart from the effects of smaller sample size in Taiwan, the role of cultural effects is worthy of further exploration.**

## **Practical Applications**

- 1. Teachers may review their curriculum and individualize their teaching according to children's agentive perception; and also acknowledge that children may participate in changing their environment.**
- 2. Teachers should understand developmental trends in agentive perception and increase opportunities for discussion, communication, and negotiation with children.**

## **Suggestions for Further Research**

- 1. Increase representativeness of sample – a stratified sampling design would be most effective in including different kinds of day care centres.**
- 2. Look at the relationship between children’s agentive behaviour, teachers’ assessment, and social interaction between peers, etc. in relation to the interview responses in the current study.**
- 3. Examine the effects of historical, social and cultural factors on the development of agency.**



**4. Explore the effects of agentive development on learning -- Further explore the relationship between agentive development and children's learning experiences in day care, their language skills, their socialization. In addition, longitudinal studies would strengthen our knowledge of these relationships.**



# Thank You!

For further information

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