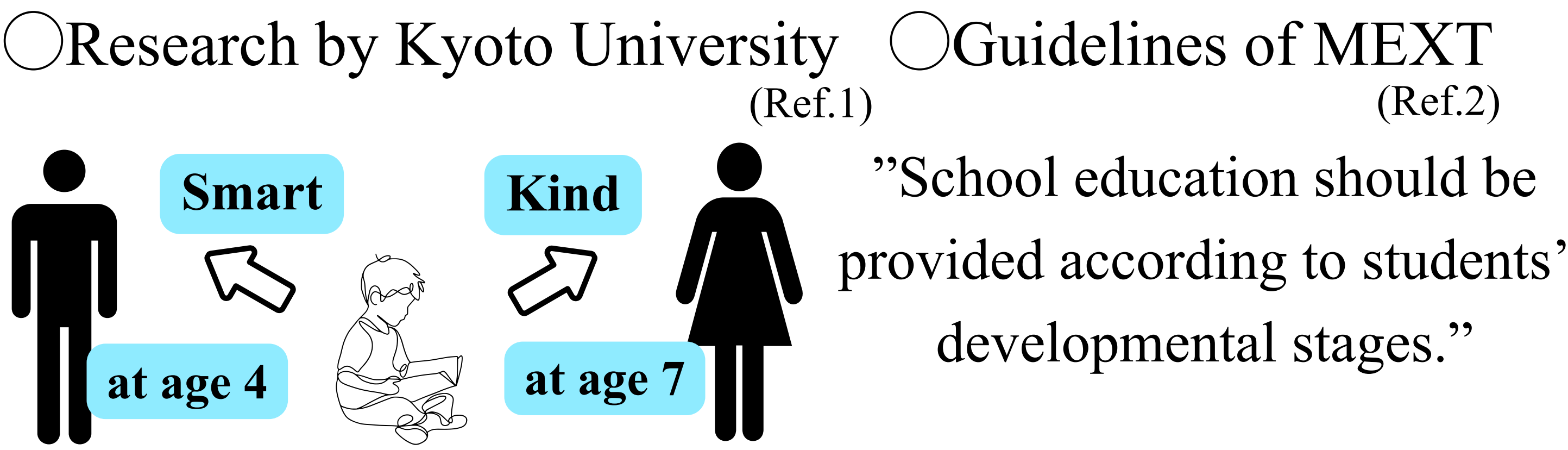


# A Generational Analysis of the Causes of Gender Bias and Insights for Improving Current Education

Ikeda Senior High School Attached to Osaka Kyoiku University

## Background and Motivation

To reduce gender bias and promote fair evaluation of individual ability.



Clear timing and target groups are needed in education.

## Research Objective

To find where children’s gender bias comes from in order to consider effective gender education

It is extremely difficult to analyze all factors.

## Research Method

Defining Factors of Gender Bias

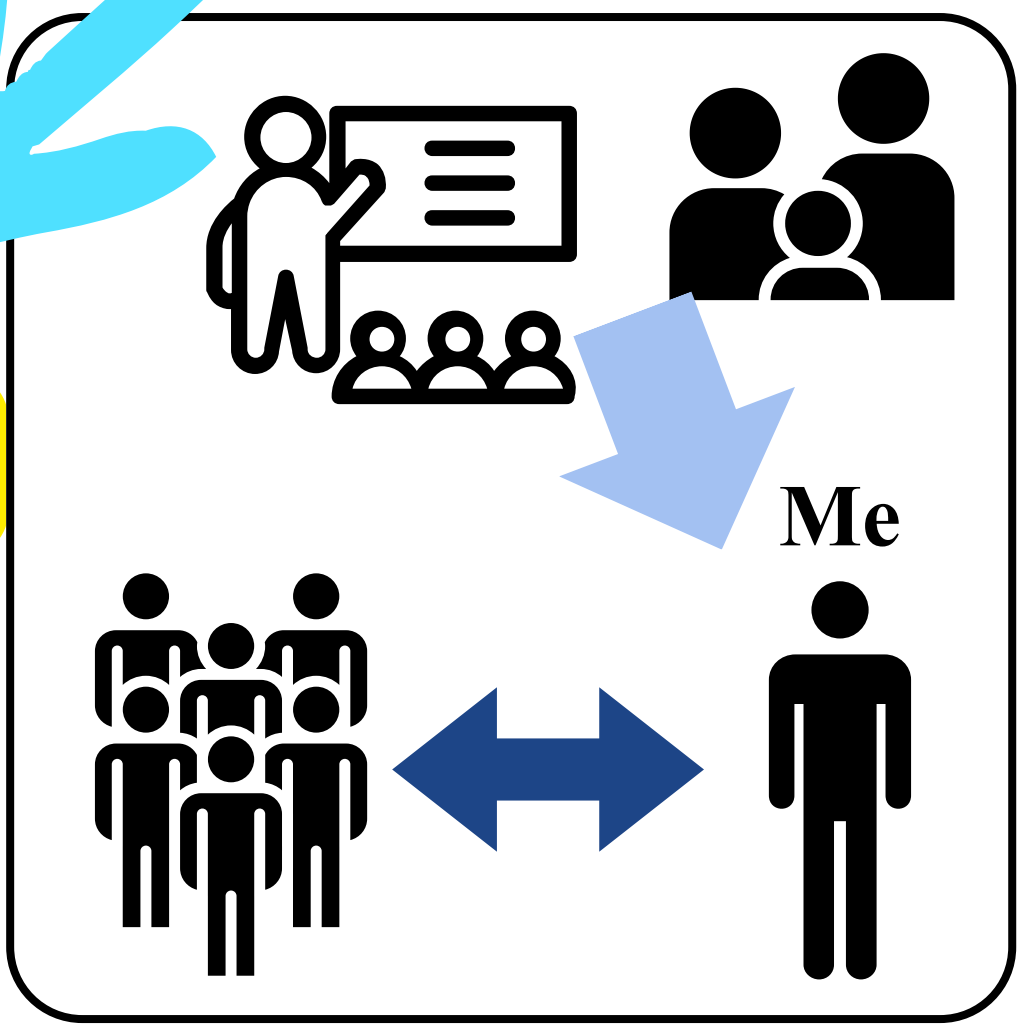
1.Vertical Influence

→ One-way influence from parents or teachers

2.Horizontal Influence

→ Mutual influence among peers, such as friends.

By examining when vertical and horizontal influences most affect students, we can provide education suited to each generation.



## Survey Conducted

- Period: Late October 2025
- Target: High school students in Ikeda city, Osaka
- Responses: 480 (Male: 238, Female: 242)
- Note: Gender based on biological sex
- Question Items: Extent of experiences related to gender roles
- Response Format: 6-point Likert scale (1 = Strongly disagree, 6 = Strongly agree) (Ref.3)
- Classification: Questions were grouped into six categories based on the type of influence (vertical or horizontal) and the period of influence.

vert. Infl.



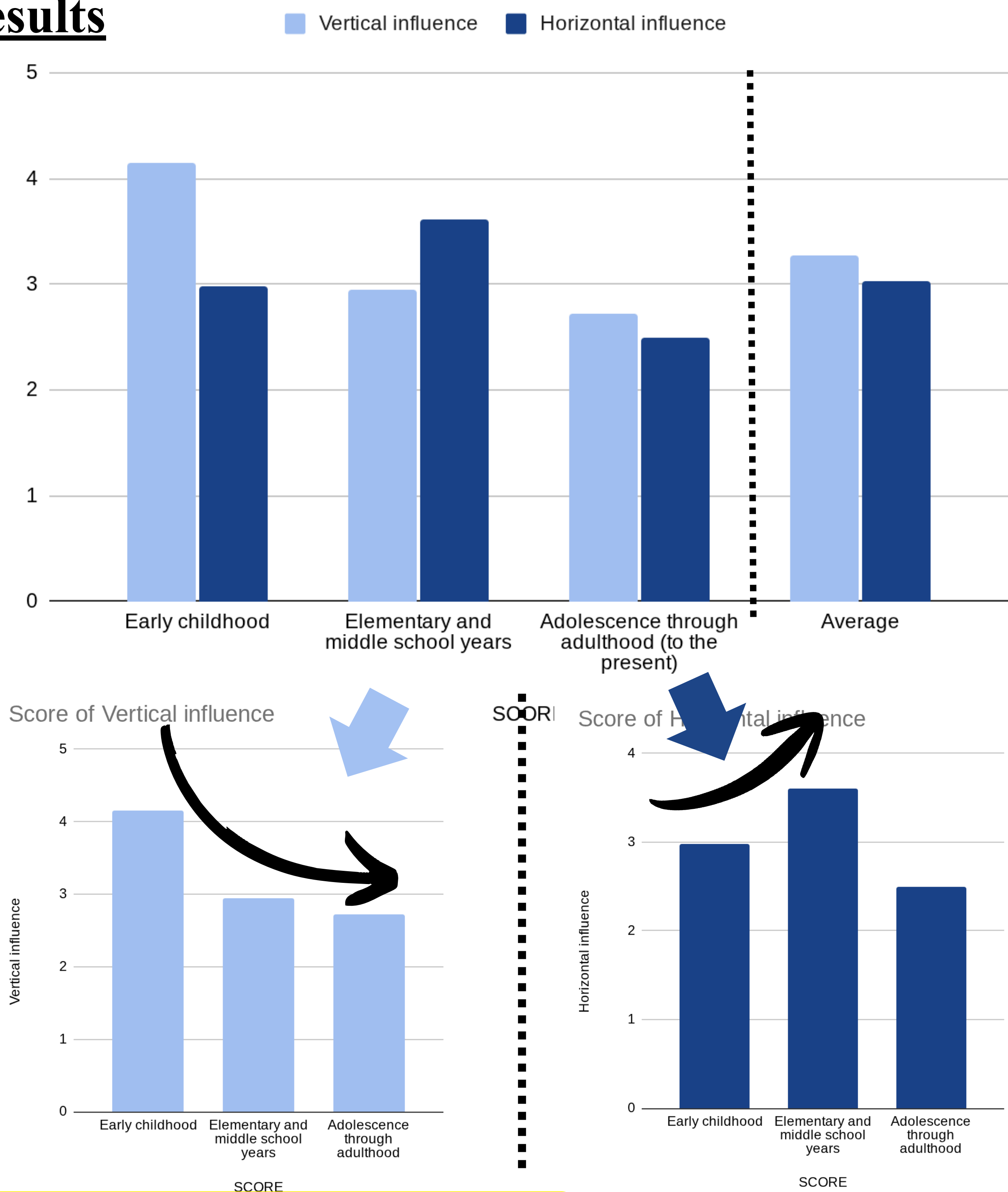
Early childhood

Primary & Lower Secondary

Adolescence–Present

Divided into six category.

## Results



- Vert. Infl. decreases with age.
- Hor. Infl. peaks in elementary and junior high school.
- Vert. Infl. is strongest in early childhood; horizontal influence is strongest in middle and high school.

SCORE	Vertical influence	Horizontal influence	Statistically significant difference (by T.TEST)
Early childhood	4.15	2.98	p<0.01
primary & lower secondary	2.95	3.61	p<0.01
Adolescence - present	2.73	2.50	p<0.01
Average	3.27	3.03	p<0.01

Left table: exact values; all items showed significant differences (t-test).

## Discussion

- Gender education should focus on helping students understand that they unconsciously influence each other through bias in junior high to high school
- At the early childhood, family attitudes and interactions play a more important role than school education.

## Outlook

- Vertical influence is strong in childhood because information is mainly provided by the family, and gender bias can be reduced through multiple perspectives.
- Future research should examine how encouraging parents to reflect on their interactions with children can reduce early childhood bias.

## Reference

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