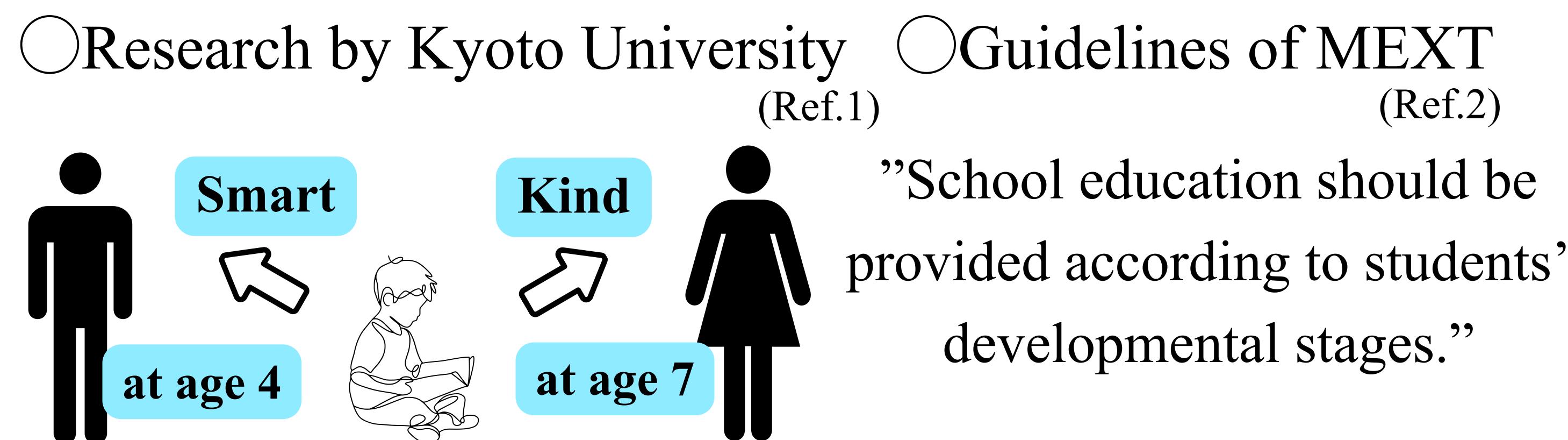


A Generational Analysis of the Causes of Gender Bias and Insights for Improving Current Education

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

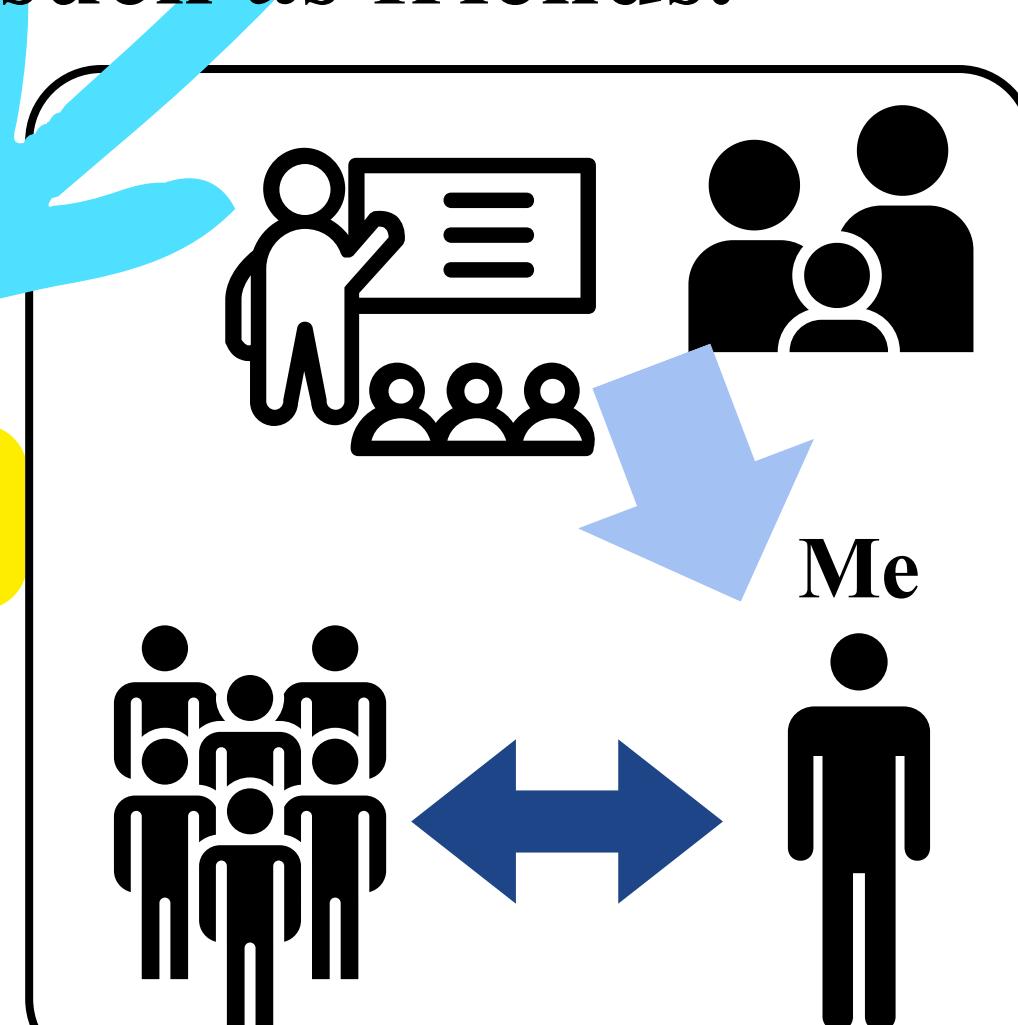
1. Vertical Influence

→ One-way influence from parents or teachers

2. Horizontal Influence

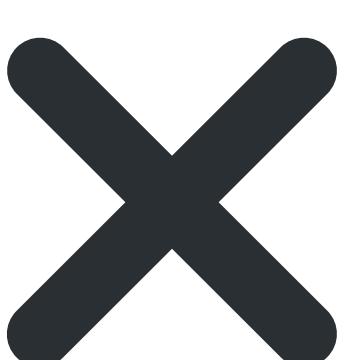
→ Mutual influence among peers, such as friends.

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



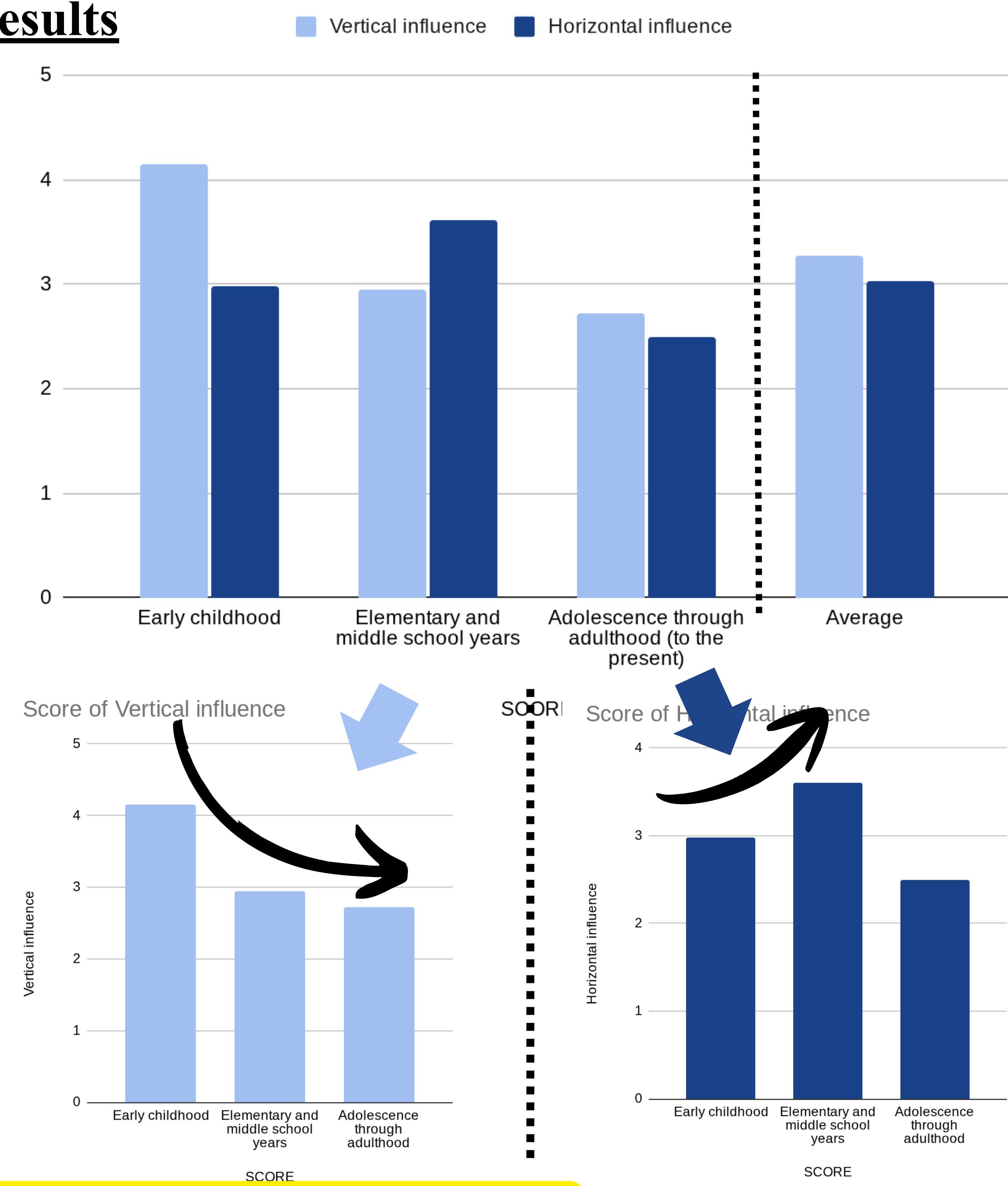
Survey Conducted

- 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.  Hor. Infl.

Early childhood
Primary & Lower Secondary = Divided into six category
Adolescence-Present

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.

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