

What we need to proceed in near future for maximizing our potential in STEM field

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Japan Inter-Society Liaison Association Committee for Promoting **E**qual **P**articipation of **M**en and **W**omen in **S**cience and **E**ngineering (**EPMEWSE**), Japan

<Contents>

- **Introduction of EPMEWSE**
- **Results of surveys of female ratio and activities in each societies**
- **Preliminary reports of large-scale surveys every 5 years (done in the fall of 2016)**

- It was established in 2002, and is the association of 94 academic societies in STEM field in Japan (2017).

<Our Major Rolls>

- 1. Large-scale surveys every 5 years**
2. Proposals and Requests to the Government
3. Annual symposium every fall
- 4. Surveys of female ratio and activities in each societies**
5. Summer camp & Workshop for high-school girls

Introduction of Our Website

<http://www.djrenrakukai.org/en/index.html>

WELCOME TO EPMEWSE

Last update:20-Apr-2017

**Research & Surveys
Female Ratio and Activities
every other year**



**Publish the results to
visualize the actual
conditions in each society**

In Order to Maximize Our Potential,
We Promote Gender Equality in STEM.

ONLY 15.3% in 2016



Target is 30% in 2020



Ratio of **Female Researchers** in Japan



Large Scale Surveys



Proposals & Requests



Research & Surveys



Girls Summer Camps

Japan is well-qualified as a country that promotes scientific advancement. However, the ratio of female professionals in Science including humanities, social science and natural science is only 15.3% in 2016 *, which is far behind other developed countries. The low female ratio is observed especially in STEM field (Natural Science, Technology, Engineering and Mathematics). In order to overcome these gender gaps in Japan over a long period of time, we established "The Japan Inter-Society Liaison Association Committee for Promoting Equal Participation of Men and Women in Science and Engineering (EPMEWSE)" in 2002. At present, EPMEWSE is the association of 90 academic societies in STEM field in Japan, actively working for gender equality in Japan.

Topics

- [14th Annual Symposium in Tokyo \(October 8, 2016\)](#)



- "Japan's Lagging Gender Equality" has been published in the *Science* journal (Homma, MK., Motohashi, R. & Ohtsubo, H. Japan's Lagging Gender Equality. *Science*, 26 APRIL 2013, VOL 340, pp.428-430.)

Links

- Association for Women in Science (AWIS)
- American Association of University Women (AAUW)
- ADVANCE for advancement of women in science and engineering careers (NSF ADVANCE PORTAL), USA
- Equality Challenge Unit — Athena SWAN, UK
- Gender Equality Bureau Cabinet Office — UN Women

UN WOMEN



50% in 2030

[More »](#)

**Large Scale Surveys
every five years**



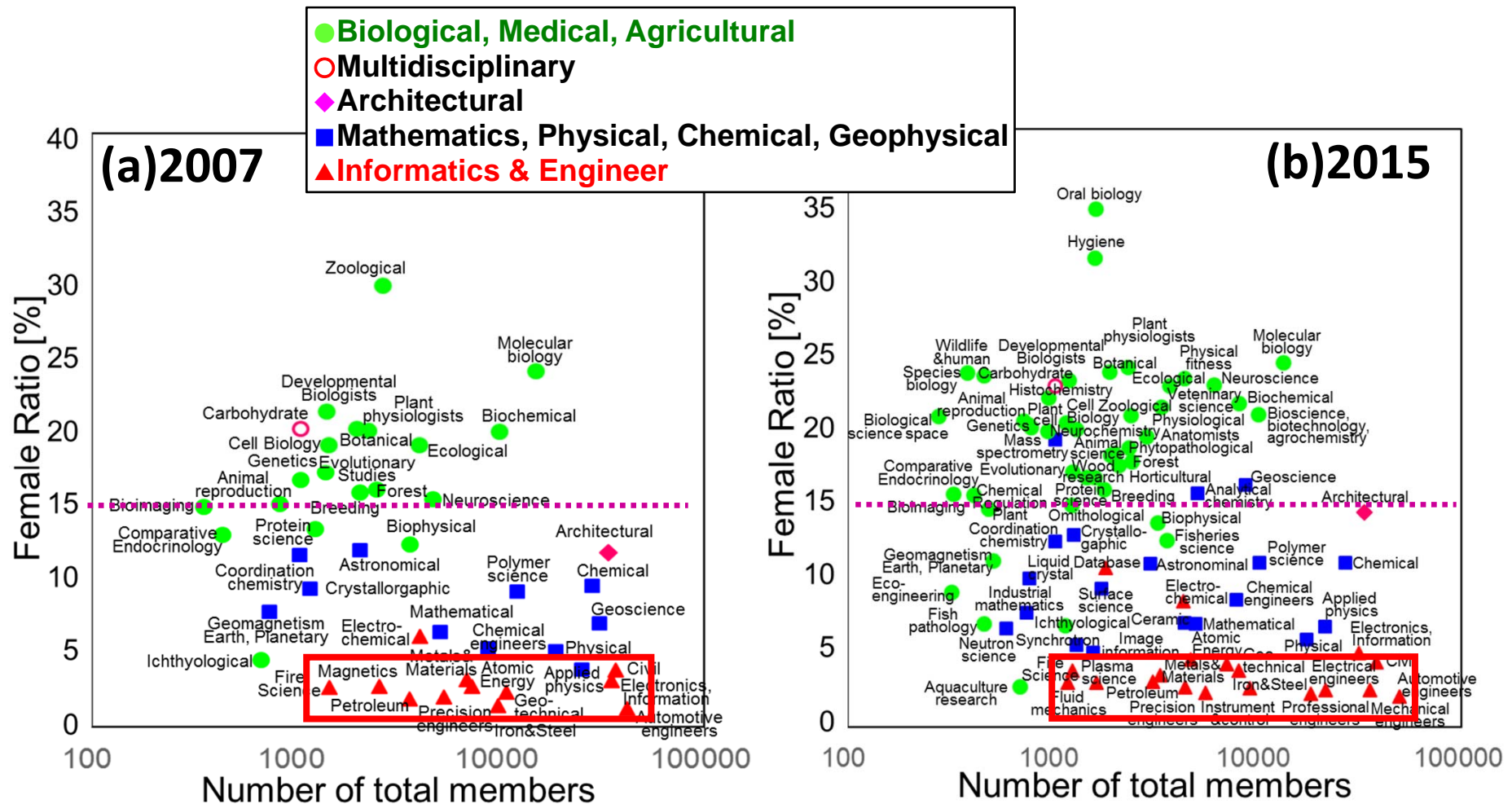
Analysis & Report



Proposals & Requests

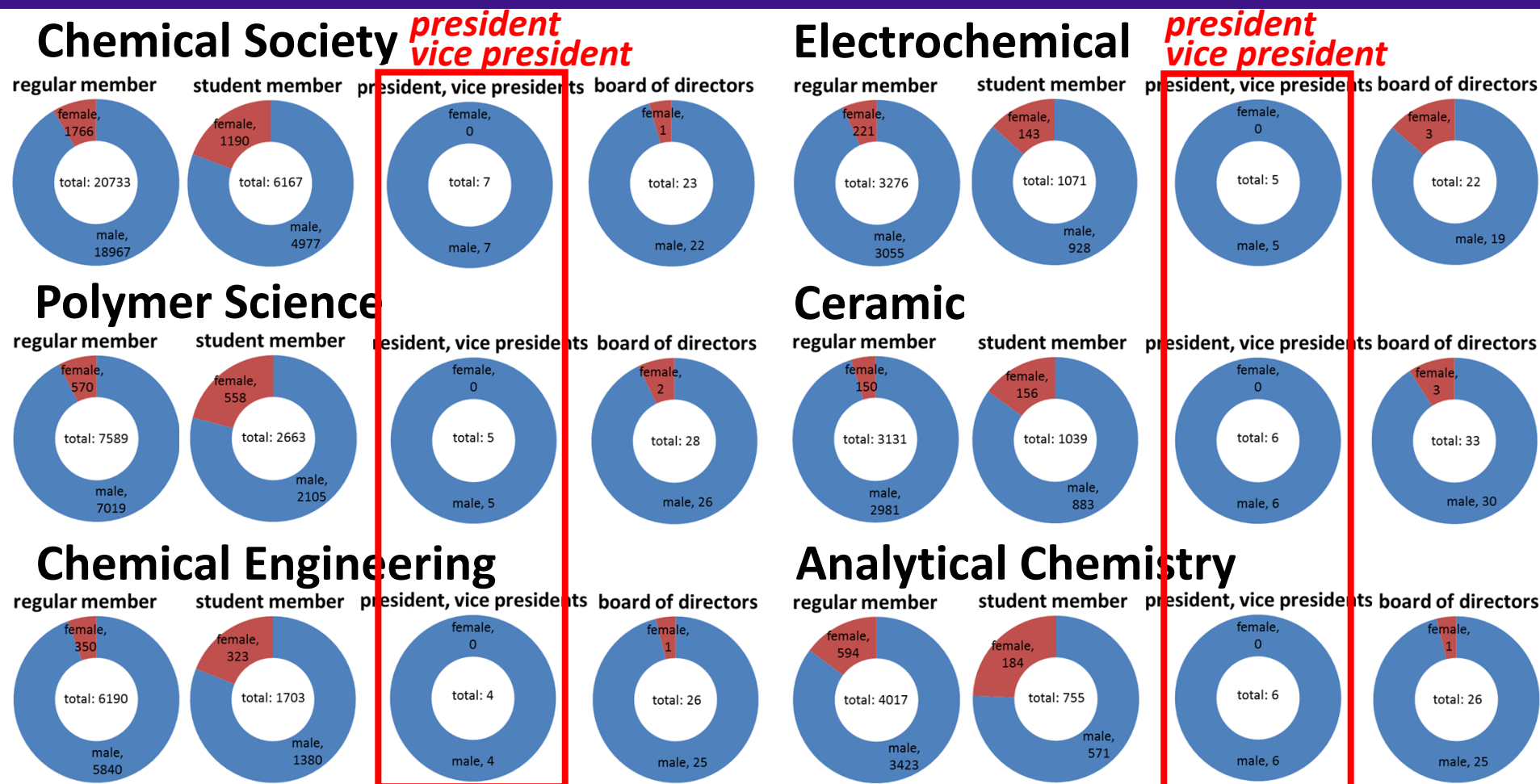


Comparison of Female Ratio



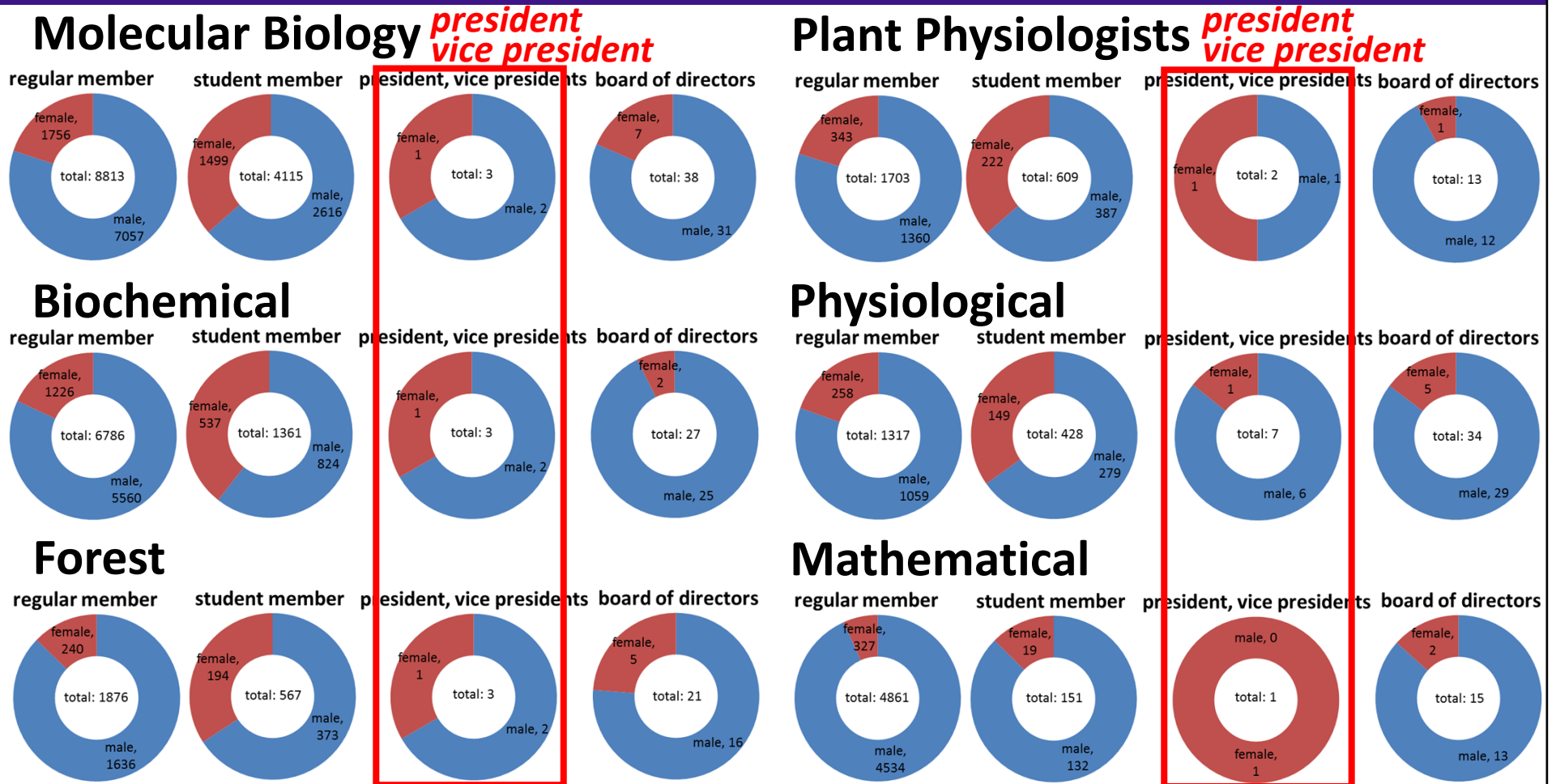
- The ratios in **Life Science** field increased over **15%**.
- Those in **Informatics & Engineer societies** hardly increased and remained under 5%.

Female Leaders in Chemical Societies^{5/16}



- Female ratio in regular member is around 7% and that in student member is around 20%.
- There is no female president and vice presidents yet in the societies related to chemistry.

Female Leaders in Life Science Societies^{6/16}



- Female ratio in regular member is around 20% and that in student member is around 30%.
- In the societies with a high female ratio than 20%, there is a high possibility that female president will appear.

The 3rd Large-Scale Survey of Actual Conditions of Gender Equality in Scientific and Technological Professions, August 2013

81 Scientific Societies in STEM field, Survey was done in the fall of 2012

Numbers of respondents: **16,314** (Male 11,958 & Female 4,356)

http://www.djrenrakukai.org/doc_pdf/3rd_eng_report_en.pdf

<Contents of the Report>

Chapter 1 : Summary of Results

Chapter 2 : Gender Gap in Job Positions

Chapter 3 : Child and Nursing Care

Chapter 4 : Limited-term Employment and Postdocs

Chapter 5 : Programs and Policies

Chapter 6 : Written Comments

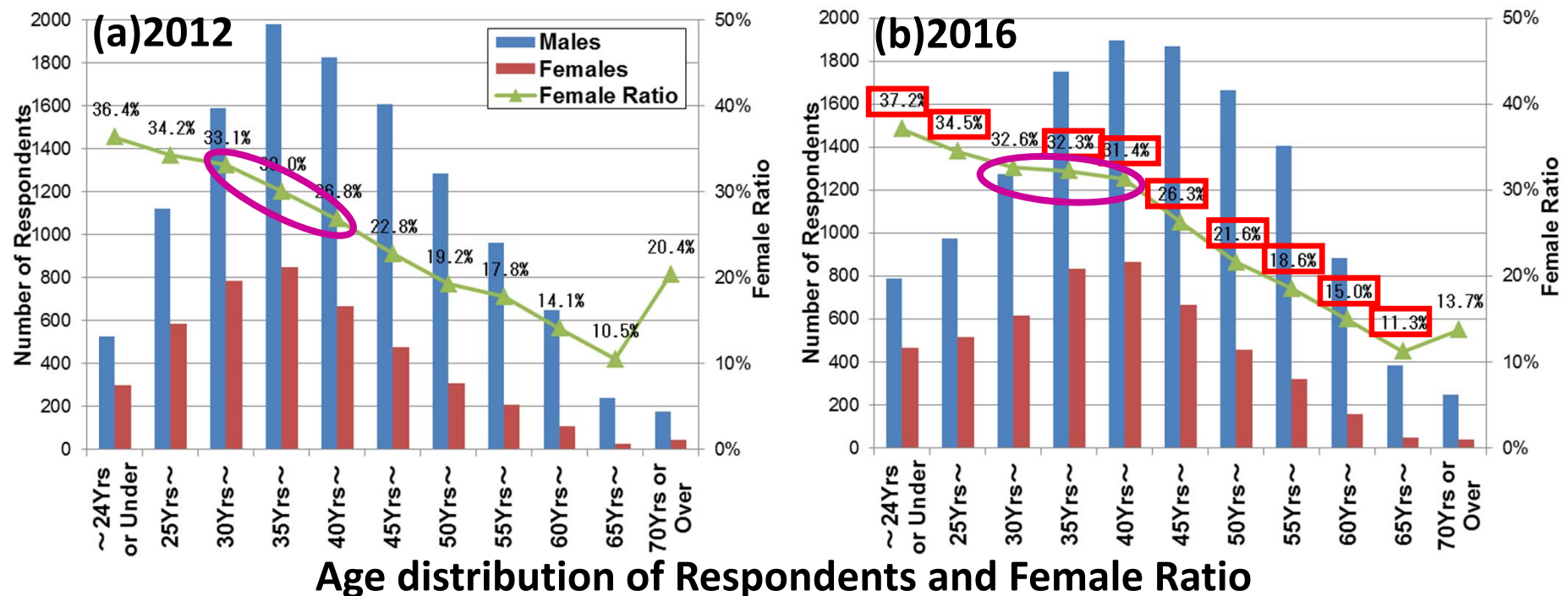
Numbers of respondents:
14,110 (Male 10,349 &
Female 3,761) in 2007

Large-Scale Survey in STEM (2016)

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The analysis of the 4th Large-Scale Survey is going on now.
New data will be open in this fall, 2017.

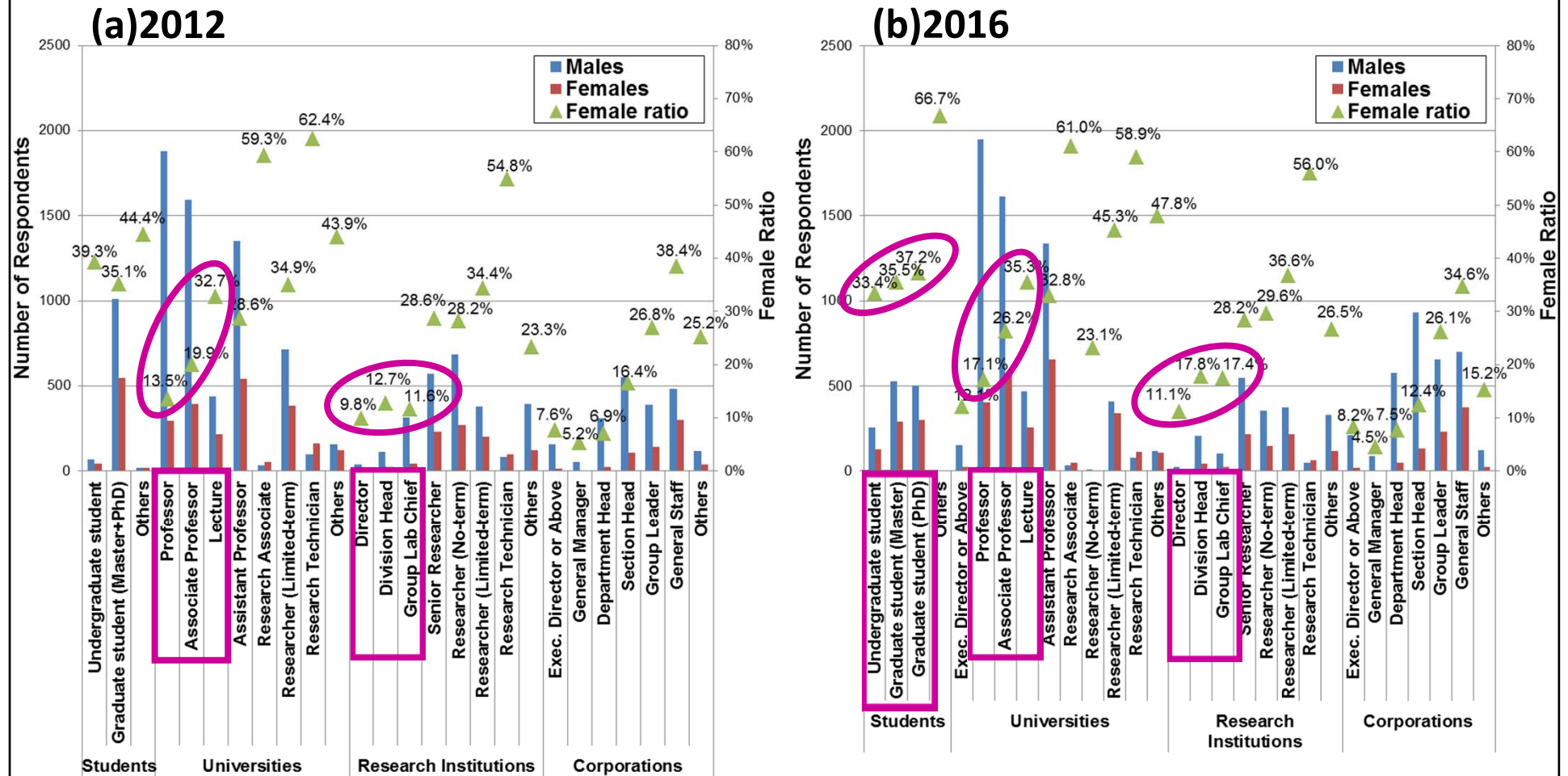
94 Scientific Societies in STEM field, Survey was done in the fall of 2016
Numbers of respondents: **18,154** (Male 13,159 & Female 4,995)



- Female ratios in almost all generations increased.
- Female ratio up to 40's was stopped to decrease.

Chapter 2: Job Positions

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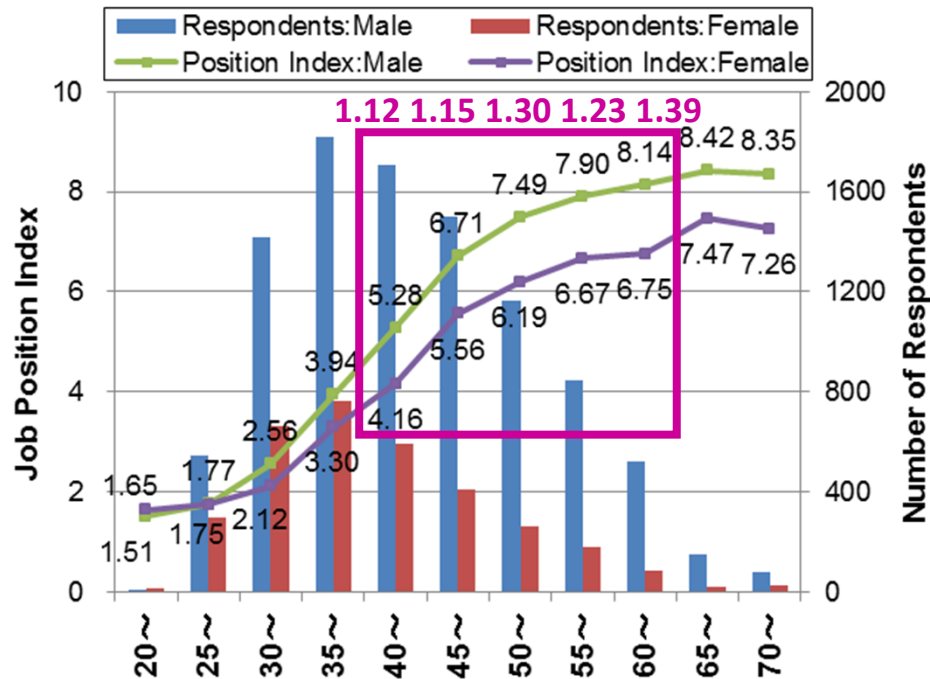


- Female ratio in PhD increased from that in Master!
- Female ratio in higher position in Universities and Research institutions increased!

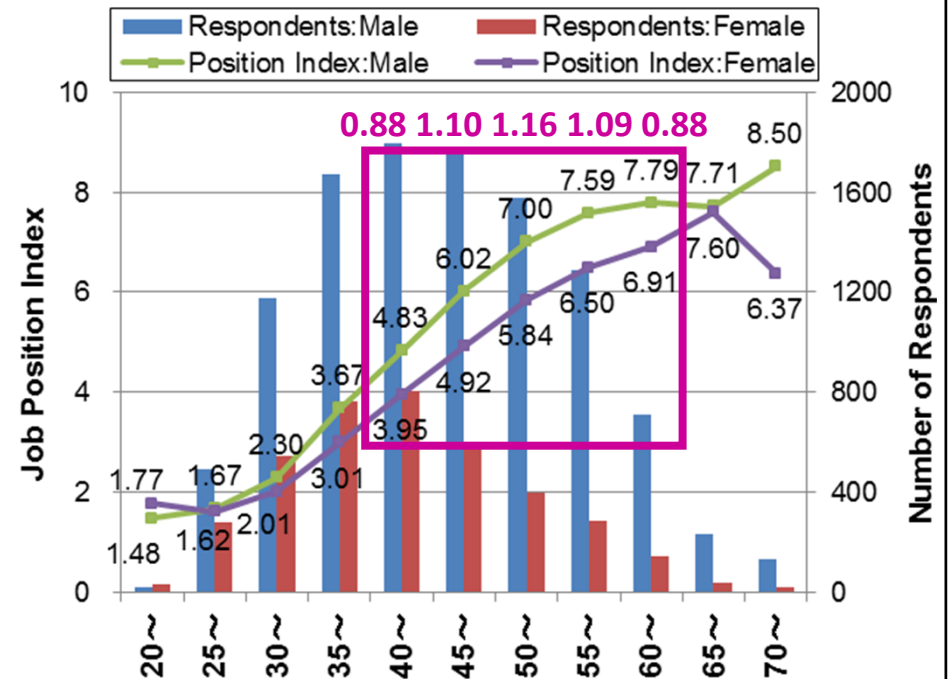
Chapter 2: Job Position Index

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(a)2012



(b)2016

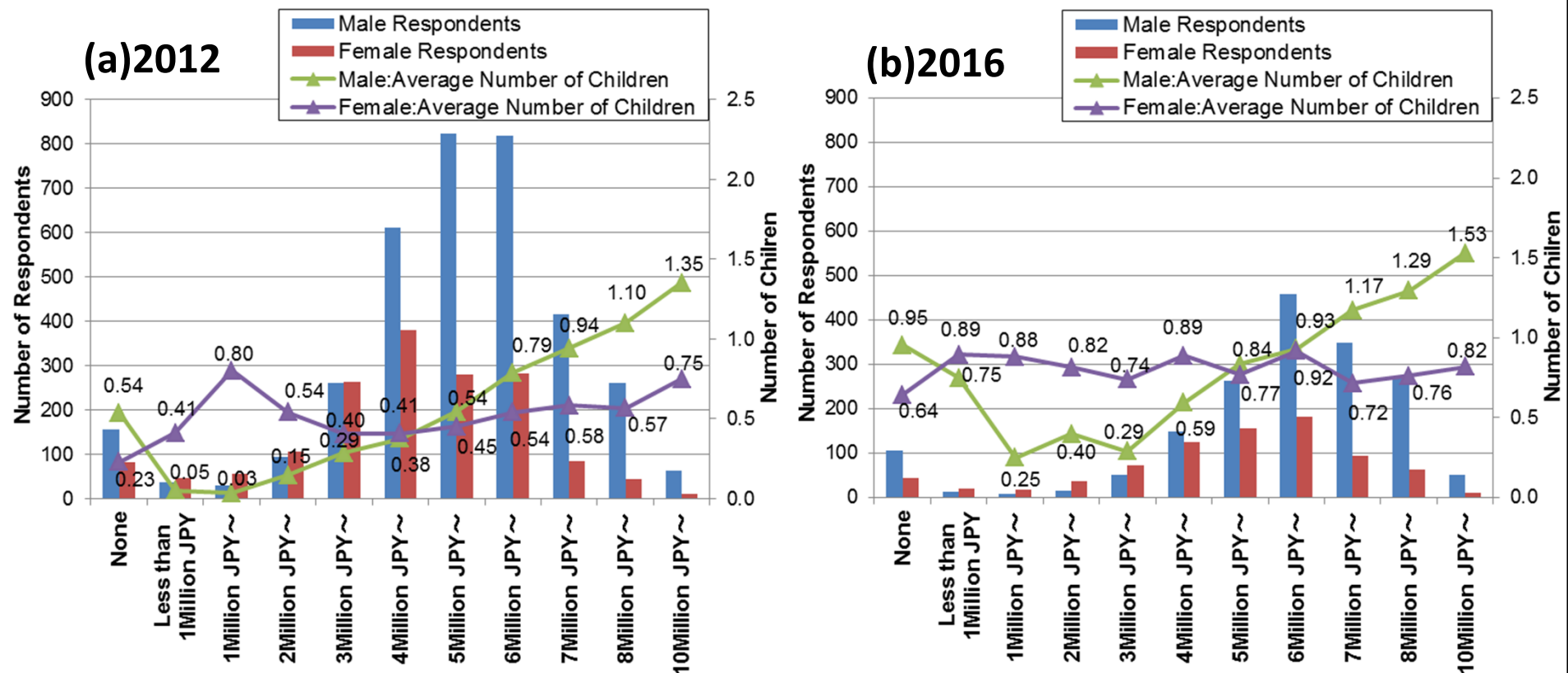


Job Position Index by Age

- Job position index was defined from the position distribution of each institution affiliated with the respondents.
- The index of male was higher in every age group and the same gender gap still exists.
- The difference in the index between male and female became smaller and there is an improving trend.

Chapter 3: Number of Children

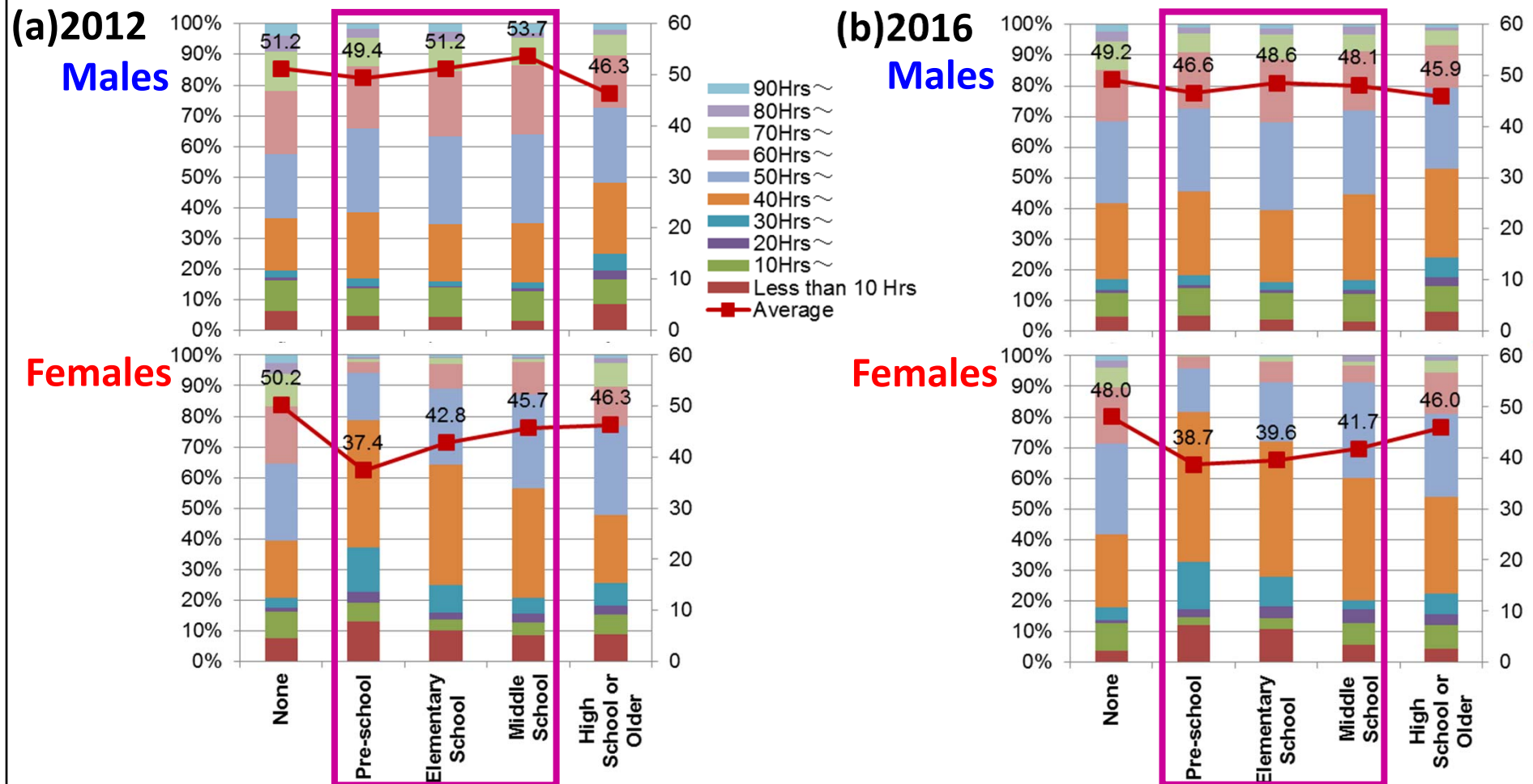
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Annual Salary and Number of Children (respondents in their late 30's)

- Regardless of gender, average number of children slightly increased under any annual salary.
- For females, there is very little correlation between salary and number of children.
- For males making more than 3 million JPY per year, the number of children increased in proportion to annual salary.

Chapter 3: Hours Spent at Workplace ^{12/16}

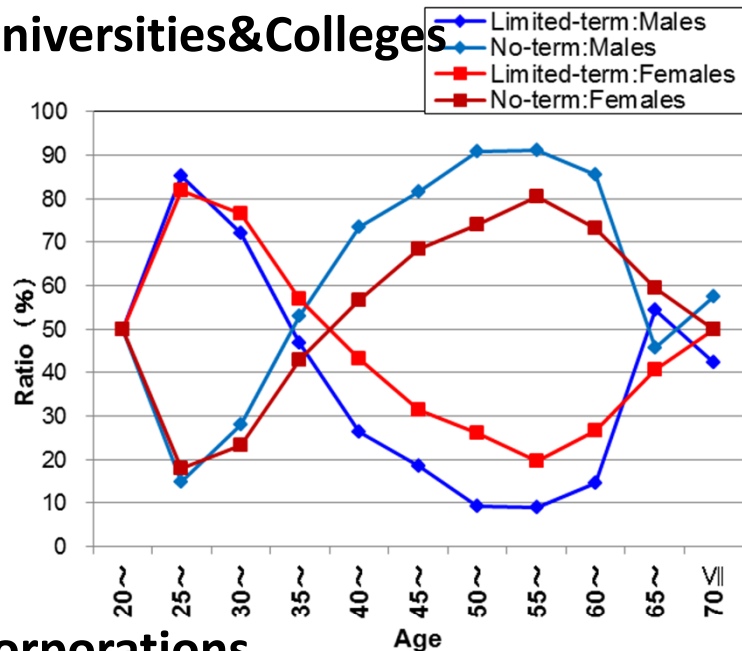


- Regardless of gender, hours spent at their workplace are shorter.
- Among parents with pre- to middle school children, females clearly spent shorter hours and the same gender gap still exists.

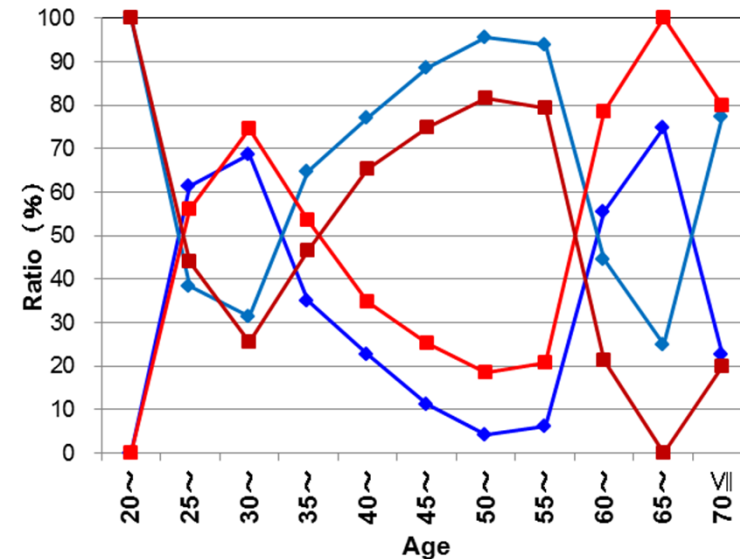
Chapter 4 Working Arrangements for Each Institution(2016)

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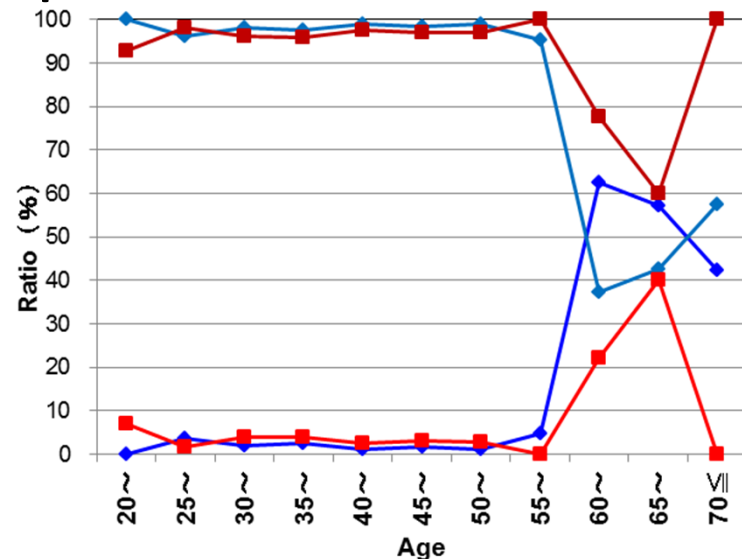
(a) Universities & Colleges



(b) Research Institutions



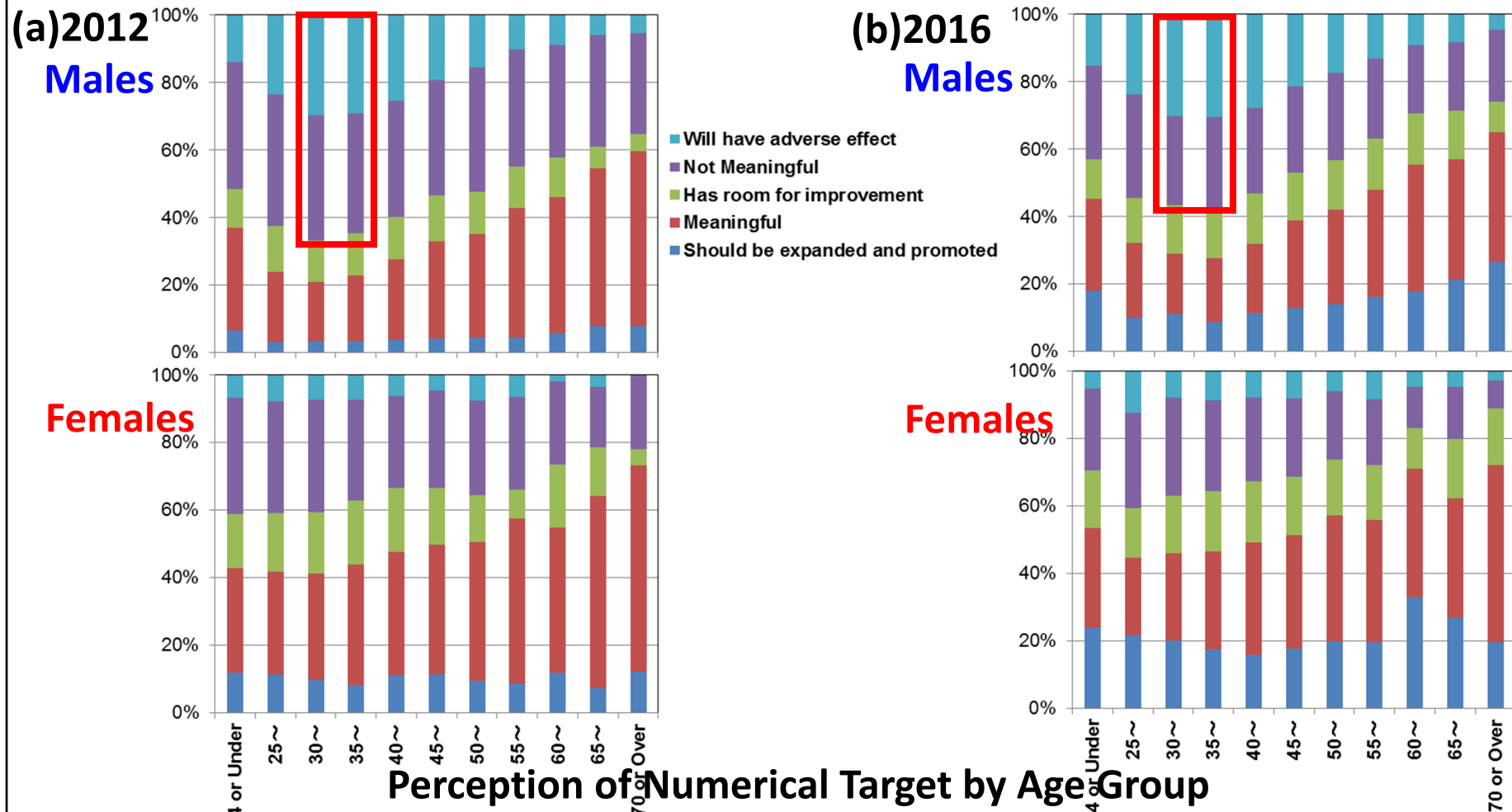
(c) Corporations



- Working arrangements by age for (a) Universities & Colleges and (b) Research institutions are quite different from that for (c) Corporations.
- Respondents affiliated with corporations increased to 24% in 2016 from 15% in 2012.

Chapter 5 Numerical Target of Hired Female Researchers

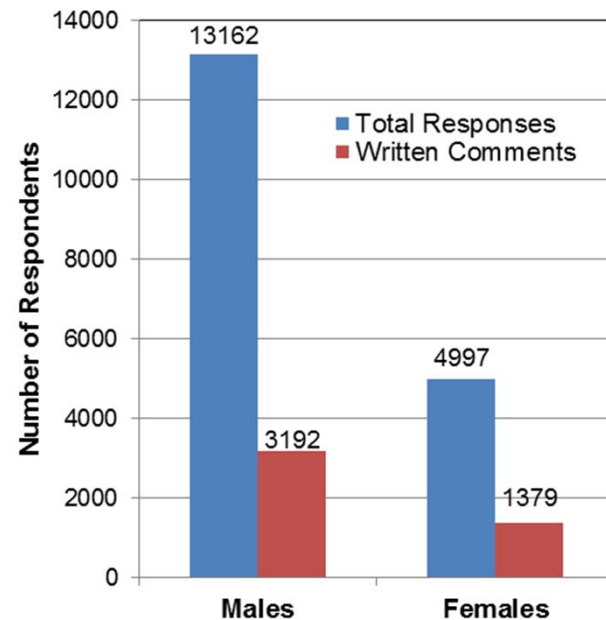
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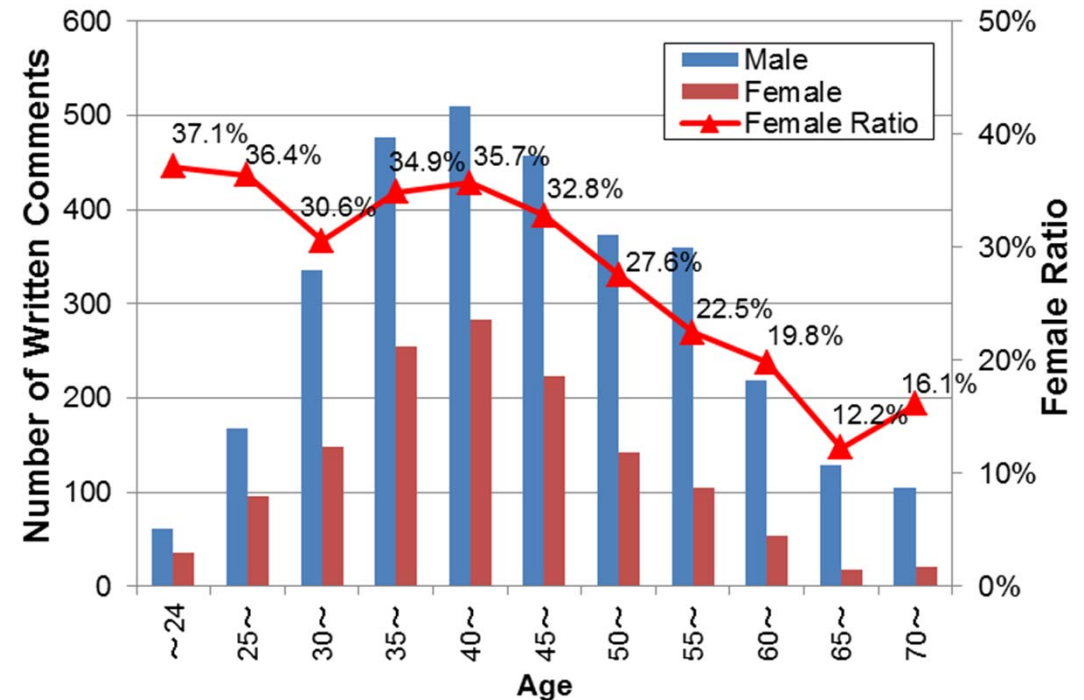
- High percentage of negative responses came from males in their 30's, but those decreased in 2016.
- The percentage of both genders that rate the existence of a numerical target positively rises with age.

Chapter 6 Written Comments

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Total Respondents and Written Comments



Number of Written Comments by Age and Female Ratio

- The number of written comments received was 4,571, which is equivalent to 25% of all survey.
- The female ratio of written comments was almost the same as that of the overall survey.
- This essentially overlaps with age distribution of all survey respondents.

- In the societies with a high female ratio than 20%, there is a high possibility that female president will appear.
- Female ratio in PhD increased from that in Master and the ratio in higher position in Universities and Research institutions increased.
- The difference in the index between male and female became smaller and there is an improving trend.
- Average number of children slightly increased and hours spent at their workplace becomes shorter, thus there is an improving trend of work life balance.

The annual symposium will be held in Oct 14, 2017 at Tokyo Univ. and the detailed report of this large-scale survey will be presented.