

# Sex and age differences in face dissatisfaction

Izumi Ito<sup>1</sup> Masaki Mori<sup>1, 2</sup> Takaaki Kato<sup>1</sup>

<sup>1</sup>Keio university, Japan <sup>2</sup>Japan Society for the Promotion of Science, Japan  
mail: 110izumi@sfc.keio.ac.jp

## Introduction

### What is BDD?

**BDD** is a **Body Dysmorphic Disorder** characterized by persistent and intrusive preoccupations with an imagined or slight defect in one's appearance.

In reality, a perceived defect may be only a slight imperfection or nonexistent. But for someone with BDD, the flaw is significant and prominent, often causing severe **emotional distress** and **difficulties in daily functioning**.

### A scale for BDD

Litteleton et al. (2005) and Tanaka et al. (2011) develop **Body Image Concern Inventory** which is a scale to assess the dissatisfaction for whole body in order to find the symptoms of the disorders.

### What body part is people with BDD concerned about?

It is high likely that people with the body dysmorphic concern have a cosmetic surgery around the **face** (Nabeta, 2014; Vaele et al., 2016).



**It is not clear whether the concern for the face may differ depending on sex and age.**

### Purpose

This present study **developed a scale to measure face dissatisfaction** and then investigated the difference of **sex and age in the dissatisfaction**.

## Method

**Thirty-two items** are selected by the authors based on a review of a case study on body dysmorphic symptomatology. Previous instruments are designed to assess dysmorphic concern.

### Participants

**1002** people (**461** males, **541** females)

Mean age = 23.7 years old; Range of age = 17-42 years old

By age participants

Age	Under 19	20-23	24-26	27-29	24	Over 30
Number of participants by age group	119	387	271	153	97	69

### Participants task

Participants are asked to pick 7 out of 32 items regarding facial structure dissatisfaction.

Exploratory factor analysis is used to gather the data below.  
(principal factor method and pro-max rotation)

Example scale

Please select the most suitable one from 1 to 7. When you usually think about your face, you ....	Strongly agree	Moderately agree	Slightly agree	Neither agree nor disagree	Slightly disagree	Moderately disagree	Strongly disagree
Not fair	7	6	5	4	3	2	1
Frustrated	7	6	5	4	3	2	1
Miserable	7	6	5	4	3	2	1

## Result 1: Scaling

The 3 factors drawn from Exploratory Factor Analysis were presented below.

- **Defensiveness** (12 items)

The feeling of protecting oneself from appearance insecurity.

- **Fear of People** (9 items)

The fear of other people's opinions.

- **Obsessionality** (6 items)

Overly concerned about certain matters.

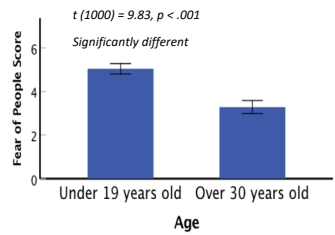
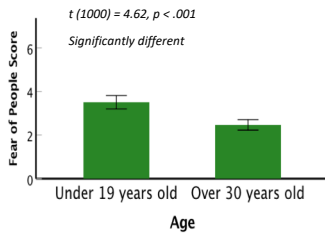
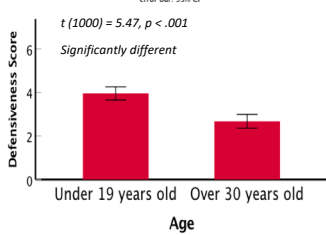
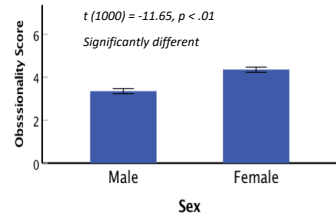
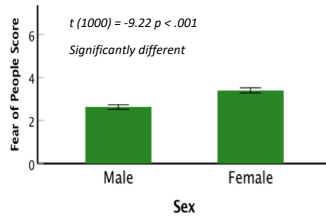
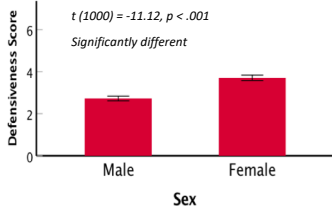
From the result of the study, we created  
**“Facial Structure Dissatisfaction Scale”**.

\*The cumulative percentage of variance extracted by the **3 factors** was 55.30%.

\*Four items were excluded from the analysis due to low communality.

\*The Cronbach  $\alpha$  coefficients were **0.92**, **0.90**, and **0.84**, respectively.

## Result 2: Differences of Sex and Age



- Female had higher score than Male.
- People under 20 years had higher score than people over 36 years.

## Conclusion

- Female are more concerned about their appearance than Male.
- People under 20 years are more concerned about their appearance than people over 36 years.

The differences and similarities among the three studies

	This Study	Tanaka et al. (2014)	Nabeta (2011)
Body Region	Face	Whole	Whole
Sex	difference※1	no difference	no difference
Age	difference※2	difference※2	difference※2

※1: The score of all subscales in female was higher than that of male.  
 ※2: The score of all of young people was higher than that of old people.

The result suggests that facial structure dissatisfaction varies among different Sex groups.

We should conduct more studies to investigate the cause behind differences among age and sex groups regarding facial structure dissatisfaction.

## References

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