**Background**

Social problem of “Cyberbullying”.

**Our method**

**Category Relevance Maximization Method**

- **Phrase Extraction**: Extract phrase (specific dependency relation).
- **Relevance Estimation**: Calculate relevance of each phrase to seed words.

\[
score = \max \left( \max_{i,j} \text{PMI}(p_i, w_j) \right)
\]

Maximize category relevance of phrase \(p_i\) to seed word \(w_j\).

**Experiments**

- Test data including 500 entries. \(\times 5\)
  - Harmful entries contain 12%.

\[
\text{Precision and Recall for both Matsuba's and proposed method.}
\]

**Discussion**

- Our method's performance overcame Matsuba's method totally.
- Obscene words and abusive words contributed to perform detection of harmful entries strongly.
- Specific harmless entries were recognized as harmful.
- Personal information detection is out of range.