

A cross-cultural study on trait inferences of others
: An experimental approach comparing Japanese and American students

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People typically make trait inferences spontaneously when observing others' social behavior, without intentions or awareness (Uleman, Saribay, & Gonzalez, 2008). This spontaneous trait inference (STI) has been expected to show cultural differences. However, there have been few studies that compared STIs of participants from different cultures directly. The current study is designed to explore cultural differences in the occurrence of STIs by comparing American and Japanese participants. In addition, the process dissociation procedure (PDP; e.g., McCarthy & Skowronski, 2011) was used to estimate the extent to which automatic and controlled processes contribute to the occurrence of STI.

Method

Participants and design. Sixty-three Japanese undergraduates and 59 American undergraduates participated. The experimental design was a 2 (country: Japan and U.S.) \times 3 (trial type: hit, false recognition, and mismatch) mixed design ANOVA, with trait valence and trial type as the within-participants variable.

Procedure. Participants first viewed photograph–behavior pairs in the exposure task. In half the pairs, behaviors explicitly included a trait word (e.g., "He is curious because he asked where the stars come from"). In the other half, the behaviors implied but did not include a trait word (e.g., "He asked where the stars come from"). After a confusion task, participants were shown photograph-trait word pairs which were correspondent with those in the exposure task. Participants were asked to indicate whether the word actually appeared in the behavior shown with a photograph in the exposure task. Participants' performance on trials in which the trait word was presented and was correctly identified reflects the hit rate. Performance on trials in which the trait was not presented but implied, and for which participants incorrectly responded "yes," reflects the false recognition rate. Performance on trials in which the trait was neither implied nor appeared in the exposure task reflects the mismatch rate.

Results and Discussion

A 2 (culture) \times 3 (trial type) mixed ANOVA was performed using “yes” response rates as dependent variables (*Figure 1*). The main effects for culture, $F(1,120) = 20.56$, $p < .001$, for trial type, $F(2,240) = 362.84$, $p < .001$, were significant. It is especially important to note that the differences between the false recognition and the mismatch rates were significant among both American and Japanese participants (American $t(58) = 8.63$, Japanese $t(62) = 7.57$, $ps < .001$), because these differences indicate that STIs did occur among both culture groups. Although the interaction for culture \times trial type was not significant, $F(2,240) = 1.77$, $n.s.$, the difference between the false recognition rate and the mismatch rate was marginally larger among Americans than that among Japanese ($t(120) = 1.88$, $p = .062$), suggesting that the STIs among Americans were somewhat stronger.

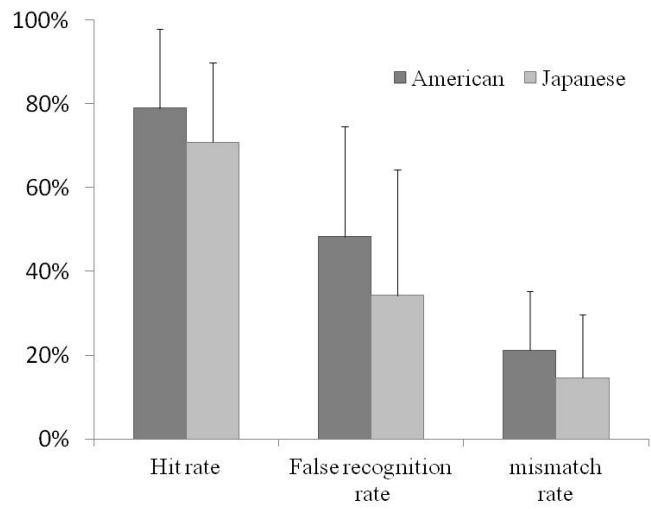


Figure 1. Percentage of "yes" responses for the recognition task in Experiment 1

The controlled processing parameter estimates (C) and the automatic processing parameter estimates (A) were examined in separate t-tests. Results showed that the A parameter estimate among American was higher than that among Japanese, $t(120) = -2.39$, $p < .05$, although the C parameter estimate did not differ between countries, $t(120) = 1.11$, $n.s.$

Table 1 Estimates of Controlled and Automatic Processing parameters in Experiment 1 and Experiment 2

| Estimate | American | Japanese |
|---|-----------|-----------|
| Controlled process | .32 (.22) | .37 (.24) |
| Automatic process | .61 (.29) | .48 (.31) |
| <i>Note.</i> Standard deviation in parentheses. | | |

The results suggest that the occurrence of STIs is not culture-specific, but the intensity of STIs among Americans may be a little larger than that of Japanese. In addition, the contribution of automatic and controlled processes to STI varies among different cultures.

References

- McCarthy, R. J., & Skowronski, J. J. (2011). The interplay of controlled and automatic processing in the expression of spontaneously inferred traits: A PDP analysis. *Journal of Personality and Social Psychology*, **100**, 229-240.
- Uleman, J. S., Saribay, S. A., & Gonzalez, C. M. (2008). Spontaneous inferences, implicit impressions, and implicit theories. *Annual Review of Psychology*, **59**, 329-360.