



Prejudice in Japan: Comparing explicit and implicit methods

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Purpose of the present study

The present research served two purposes. First of all, the reliability and validity of a variant of the Affect Misattribution Procedure (AMP; Payne, Cheng, Govorun, & Stewart, 2005) adapted to Asian samples should be tested. Secondly, the issue of prejudice in Japan was to be investigated. Specifically, we aimed at assessing prejudice towards Koreans by means of the AMP and different explicit and implicit methods because implicit measures have been shown to be particularly informative in socially sensible domains (Greenwald, Poehlman, Uhlmann, & Banaji, 2009).

Different countries, same problems?

One of the most widely used implicit methods is the Implicit Association Test (IAT; Greenwald, McGhee, & Schwartz, 1998). To date, several studies have attested to the IAT's validity and utility. However, other research has pointed to severe confounds of IAT effects (e.g., Fiedler, Messner, & Bluemke, 2006). Therefore, different implicit methods have received attention that may circumvent problems of the IAT. One example is the AMP (Payne et al., 2005). During an AMP, subjects are presented with affect-laden pictures (e.g., smiling babies) and afterward have to rate a neutral target as either visually pleasant or unpleasant. The affect evoked by the prime is assumed to be automatically ascribed to the target, therefore leading to a misattribution of the prime's evaluation to the target's evaluation. Thus, the AMP can be regarded as an indirect measure of the prime's evaluation.

In the original AMP as introduced by Payne et al. (2005), pictures serve as primes and Chinese characters are employed as neutral targets. However, Korean and Japanese faces may be hard to distinguish, and what is more, Chinese characters are used in everyday-life. That is, even though the AMP has been already used in a variety of studies, it remains an open question whether the AMP can be adapted to an Asian population for which, of course, Chinese characters are not neutral. In order to apply the AMP to a Japanese population, we replaced the Chinese characters with three-lettered Hebrew words (see Figure 1 for details), used typical Korean and Japanese names instead of portraits, and tested whether these changes affected the AMP's psychometric properties.

Besides the AMP, we included a racial IAT, a translation of the Blatant and Subtle Prejudice Scale (Pettigrew & Meertens, 1995), and let participants rate the valence of the Korean and Japanese names used as primes in the AMP and as stimuli of the target categories in the IAT. Furthermore, we included a translation of the Motivation to Control Prejudiced Reactions Scale (Dunton & Fazio, 1997) in order to test whether participants' motivation to control their prejudiced reactions would moderate the relationship between implicit and explicit methods (cf. Payne et al., 2005).

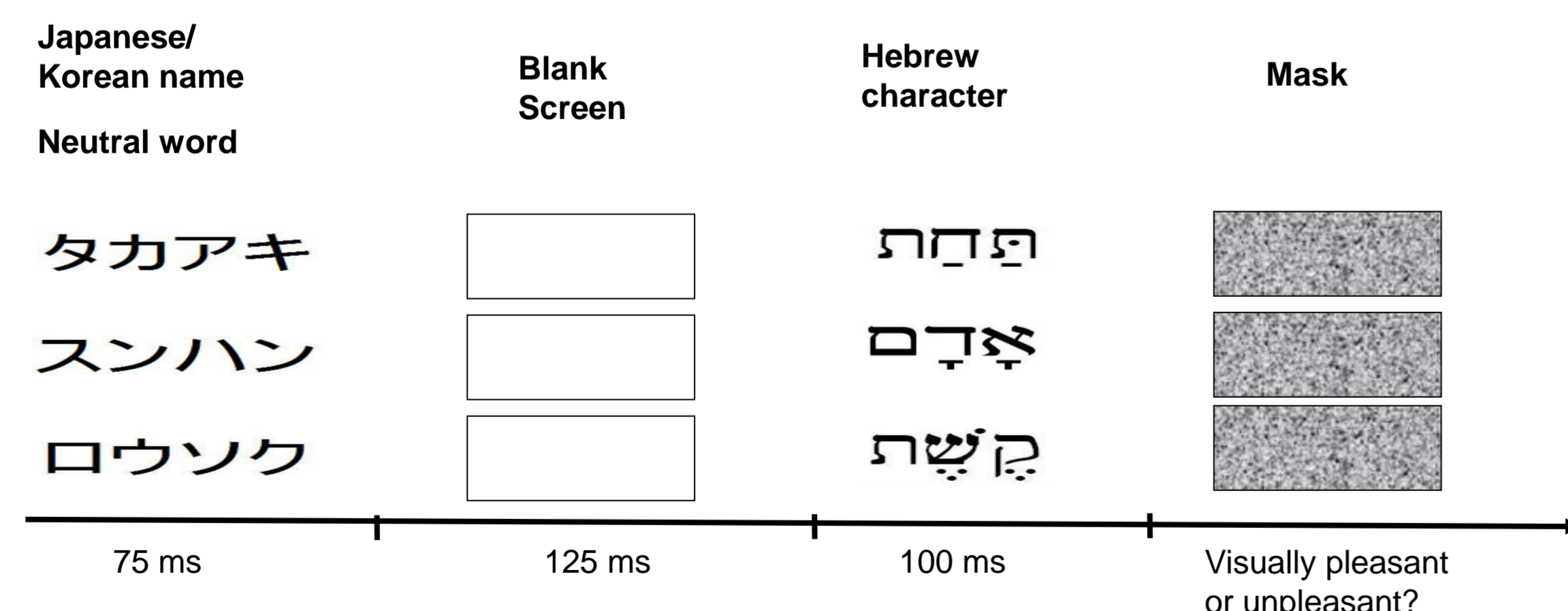


Figure 1. Overview of the adapted version of the AMP.

Method

Stimuli for the implicit methods were selected on the basis of pre-ratings of an online pilot study ($N = 22$). The main study was also conducted online.

The present study consisted of a 2 (IAT first vs. AMP first) x 2 (pleasant on the left key vs. pleasant on the right key) design to control for possible sequence or key assignments effects. 85 Japanese participants ($M_{age} = 29.47$ years; 39 female, 13 missing data) were randomly assigned to one of the four groups.

Method (continued)

The sequence of the study was as follows:

- Implicit methods
- Valence ratings of the Korean and Japanese names (7-point scale)
- Blatant and Subtle Prejudice Scale (20 items; 10-point scale)
- Thermometer Index (10-point scale)
- Motivation to Control Prejudiced Reactions Scale (17 items; 7-point scale)
- Demographic data, questions related to the study

Altogether, the study took approximately 30 minutes to finish.

Table 1. Descriptive statistics for the implicit and explicit methods.

	N	M	SD	t(df)	Significance	Cronbach's α
AMP	70	50.33 (Japanese) 44.29 (Korean)	26.14 22.46	1.90 (69)	$p = .06$.87
IAT	80	702.70 ms (Japanese-positive block) 846.80 ms (Japanese-negative block)	167.88 208.96	8.89 (79)	$p < .001$.73
Name ratings	83	4.37 (Japanese) 3.97 (Korean)	.63 .53	5.52 (82)	$p < .001$.82
Prejudice Scale	84	4.81	1.24	-5.08 (83)	$p < .001$.85
Thermometer Index	84	6.57 (Japanese) 6.26 (Korean)	2.08 1.72	<1 (83)	$p = .18$	n.a.

Table 2. Correlations between the methods.

	AMP	IAT	Prejudice Scale	Thermo-meter	Name ratings	Motivation Scale
AMP	-	-	-	-	-	-
IAT	.05 ($n = 67$)	-	-	-	-	-
Prejudice Scale	.03 ($n = 70$)	.25* ($n = 80$)	-	-	-	-
Thermo-meter	.22† ($n = 70$)	.02 ($n = 80$)	.10 ($n = 84$)	-	-	-
Name ratings	-.24* ($n = 69$)	.16 ($n = 79$)	.31** ($n = 83$)	.01 ($n = 83$)	-	-
Motivation Scale	-.13 ($n = 70$)	.09 ($n = 80$)	.11 ($n = 84$)	.00 ($n = 84$)	.07 ($n = 83$)	-

Note. ** $p < .01$, * $p < .05$, † $p < .10$

Please note that due to different outliers in the respective methods, different ns result.

Results

Due to the exclusion of one subject who stated to be Korean and 90 years old, a sample size of $N = 84$ resulted. Since there was no difference between the four conditions, all data were collapsed for analysis. Refer to Table 1 and Table 2 for further details.

Implicit methods:

AMP. The difference of the rates of pleasant responses after Japanese and Korean names became marginally significant, indicating prejudice towards Koreans. Furthermore, the AMP's reliability, calculated across the four blocks, was satisfactory.

IAT. Participants' performance was better in the Japanese/good – Korean/bad block as compared to the Korean/good – Japanese/bad block. That is, participants evidently preferred their own group. The IAT's reliability was also satisfactory.

Explicit methods:

All of the three explicit ratings achieved a good reliability, Cronbach's $\alpha > .70$.

Name ratings. The ratings for the Japanese and Korean names were aggregated and averaged, showing that Japanese names received significantly higher ratings than Korean names, demonstrating a preference for Japanese names.

Blatant and Subtle Prejudice Scale. All items were aggregated and averaged, resulting in one single score (*Prejudice Scale*). This score differed significantly from the mid-point, however, in the sense that subjects reported to be unprejudiced towards Koreans.

Thermometer Index. The difference between how warm subjects reported to feel towards Koreans and Japanese failed to reach a significant level, that is, subjects stated to feel equally warm towards both groups.

Results (continued)

Correlations between the methods:

Although the results of the IAT and the AMP were very similar in that they indicated prejudice, both methods did not show any correspondence. The AMP showed a meaningful correlation with the valence ratings of the names and had a tendency to correspond with the Thermometer Index, whereas the IAT correlated positively with the Blatant and Subtle Prejudice Scale. Among the explicit ratings, only the valence ratings of the names and the Blatant and Subtle Prejudice Scale showed a meaningful correspondence.

Moderation analysis:

All items of the Motivation to Control Prejudiced Reactions Scale were aggregated and then averaged, resulting in one single score (*Motivation Scale*). For the moderation analysis, we followed Payne et al. (2005, Experiment 6). However, we could not find any moderating effect, that is, implicit-explicit relations were independent of participants' motivation to control prejudiced reactions.

Conclusion

The adapted AMP proved to be a reliable measure that correlated meaningful with external criteria. Contrary to Payne et al. (2005), however, the relationship between the AMP and explicit methods was not moderated by subjects' motivation to control their prejudiced reactions.

This finding may be explained by two reasons: First, 14 subjects had to be excluded from data analysis involving the AMP, thereby lowering statistical power, because they pressed the same response key in all trials. Secondly, the direct translation of the Motivation to Control Prejudiced Reactions Scale might have been inappropriate as indicated by low reliability estimates (Cronbach's $\alpha = .61$). Thus, other scales should be used when assessing the motivation to control prejudiced reactions in an Asian population.

Importantly, in our sample, there was hardly any evidence for explicit prejudice, whereas both implicit measures indicated prejudice towards Koreans. Again, this might result from inappropriate translations. However, it might also point to the importance of using implicit measures in research on prejudice, particularly in Japan as it is a so-called tight culture (Triandis, 1995) in which people strongly conform to social and normative rules. Socially desirable responding may thus influence answer behavior in questionnaires particularly strongly in Japanese populations. Findings from other researchers support this assumption (e.g., Chen, Lee, & Stevenson, 1995).

In sum, further research is advised to improve the applicability of the AMP. By doing so, the underlying processes could be investigated in various populations and cultures. We believe that the AMP has the potential to become a valuable method that can be applied to Asian samples as well.

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