An attempt to measure implicit and explicit shyness: Using Implicit Association Test (IAT)

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The previous research has shown the difference between the factor in which participants’ implicit and explicit shyness predicted (Asendorpf et al., 2002). In interpersonal situation, implicit self-concepts (estimated from implicit shyness) predicted the spontaneous (that isn’t intentionally controlled easily) shy behavior, while explicit self-concept (estimated from explicit shyness) predicted controlled (that is intentionally controlled easily) shy behavior.
Aim, Methods & Materials

Aim

• Examine whether the same result would be reproduced in Japan as Asendorpf et al. (2002) did.

Methods & Materials

• Study 1: Ninety-one college students completed Trait Shyness Scale (TSS), extroversive scale, Social Desirability Scale (SDS), and self-esteem scale.
• Study 2a: Forty-seven college students (those participated in the Study 1) came to the lab and completed shyness IAT and self-esteem IAT.
• Study 2b: Friends of the Study 2a’s participants completed four scales. The targets of ratings were those participated in the Study 2a (The participant was rated by three friends).
Results

• The negative correlation was detected between TSS and SDS, as well as between TSS and self-esteem scale.

• The correlation between implicit and explicit scale were positive, but it was not significant ($r_s<.22$, $p>.15$).

• However, there was significant negative correlation between implicit shyness and implicit self-esteem ($r=-.30$, $p<.05$).

Table 1: Intercorrelations of the Main Indicators and Summary Statistics for the Main Variables.

<table>
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<tr>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>M</th>
<th>SD</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Shyness IAT</td>
<td>-.30*</td>
<td>.22</td>
<td>-.10</td>
<td>-.18</td>
<td>-.07</td>
<td>-.33*</td>
<td>-.05</td>
<td>.34</td>
<td>-</td>
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<tr>
<td>2 Self-esteem IAT</td>
<td>-.05</td>
<td>.19</td>
<td>.05</td>
<td>-.07</td>
<td>.22</td>
<td>4.09</td>
<td>3.08</td>
<td>-</td>
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</tr>
<tr>
<td>3 Trait shyness scale</td>
<td>- .53***</td>
<td>-.31*</td>
<td>-.10</td>
<td>-.77***</td>
<td>4.24</td>
<td>.97</td>
<td>.91</td>
<td></td>
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</tr>
<tr>
<td>4 Self-esteem scale</td>
<td>.69***</td>
<td>.09</td>
<td>.52***</td>
<td>4.06</td>
<td>.98</td>
<td>.91</td>
<td></td>
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<tr>
<td>5 Self-deception</td>
<td>.26†</td>
<td>.33*</td>
<td>3.55</td>
<td>.70</td>
<td>.74</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>6 Impression management</td>
<td>.02</td>
<td>3.74</td>
<td>.64</td>
<td>.59</td>
<td></td>
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<td></td>
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<tr>
<td>7 Extroversion scale</td>
<td>4.30</td>
<td>1.05</td>
<td>.89</td>
<td></td>
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</tbody>
</table>

† $p<.08$, * $p<.05$, *** $p<.001$
Results

- It was revealed that the correlation between implicit self-concept (estimated from Shyness IAT) and explicit self-concept (estimated from TSS) were positive and significant.

- Also, implicit self-concept predicted others-rated high interpersonal tension. Meanwhile, explicit self-concept predicted others-rated low sociability and low praise seeking and high rejection avoidance.

Figure 1. The result of covariance structure analysis

\[ \chi^2 = 4.161, p = .842, RMSEA = .000, AIC = 30.161 \]
\[ GFI = .971, AGFI = .925, RMR = .023 \]

Note. TSS: trait shyness scale.
Conclusions

1. The result of present study was similar to that of Asendorpf \textit{et al.} (2002).
   - Interpersonal tension (\textit{that isn’t intentionally controlled easily}) was predicted by implicit self-concept.
   - Other three factors of shyness (\textit{that is intentionally controlled easily}) were predicted by explicit self-concept.

2. It was revealed that there was significant correlation between implicit shyness and self-esteem scale, which was also seen in the result from the explicit level examination.