Event segmentation in moral learning & impression updating

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The task idea is to present a look across time in many people's lives. The subject read behaviors of a person throughout the years like a storyline. The idea is that this occurred in the past.

- No face is given, names are alphabet letters, the year is clearly marked under the behavior
- Every behavior they come across, they rate on a 1-9 scale (1 = bad, 5 = neutral, 9 = good)

**Year 1:** learned either all positive/negative behaviors to set initial reputations.

**Judge 1:** made an initial judgment about the individual on trustworthy, competent, friendliness, or disgusting on a 9 point scale (1 = not at all, 5 = neutral, 9 = definitely).

**Year 2:** they either encounter that the person behaved the same way (control), that they changed dramatically (dramatic) or they gradually changed throughout the year (slow).

**Year 3:** they get 3 reinstatement behaviors that match the valence of “year 1”.

**Judge 2:** The individual's storyline finishes when they rate the individual on previous four social traits, but for what they think the person is like “now”.

Some memory tests for behaviors were randomly thrown in at the end of some individuals as attention checks for Mturkers.
## Design choices

<table>
<thead>
<tr>
<th>Stimuli</th>
<th>Reputation</th>
<th>Change</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive -&gt; Neg</td>
<td>Control</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Positive -&gt; Neg</td>
<td>Gradual</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Positive -&gt; Neg</td>
<td>Dramatic</td>
<td>3</td>
<td></td>
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<tr>
<td>Negative -&gt; Pos</td>
<td>Control</td>
<td>3</td>
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<td>Dramatic</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

### Conditions
- Reputation = between subjects
- Change = within subjects
- 12 storylines per participant
Measures

- **Behavioral valence rating** (bad-good)
  - Manipulation check of the behaviors’ valence
- **Trait Judgements** (trust, friend, etc)
  - Judge2 - Judge1 = change in impression
- **Predictions**:
  - Drastic = no change
  - Control = no change
  - Slow = change towards incongruent valence
# Version 1

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Judge 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Judge 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td>+</td>
<td>control</td>
<td>+</td>
<td>Trust</td>
</tr>
<tr>
<td>Competent</td>
<td>4</td>
<td>dramatic</td>
<td>3/6</td>
<td>Competent</td>
</tr>
<tr>
<td>Friendly</td>
<td></td>
<td>slow</td>
<td>9</td>
<td>Friendly</td>
</tr>
<tr>
<td>Disgusting</td>
<td></td>
<td></td>
<td></td>
<td>Disgusting</td>
</tr>
</tbody>
</table>

Or

<table>
<thead>
<tr>
<th>rate: good/bad</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
</tr>
</tbody>
</table>

= positive behavior trial

= negative behavior trial

*rate: good/bad*
Results

Manipulation check
Did subjects notice/track the valence shifts as behaviors progressed?

Yes they’re following the valence/shifts
Impression update
Did subjects update their pre-post impressions as predicted?

Averages Pre/Post

Differences Post-Pre

No, seems like they’re just tracking valence proportion
Drastic has more incongruent trials than Slow
Control continued in direction of valence

n=24
n=21

95% CI shown
Version 2

- Removed **Year 3** reinstatement behaviors. The idea is to examine whether Year 1 impression shifted, we can simply assess Year 1 impressions pre and post change.

- Changed **Judge2** question to rate **Year 1** behavior instead of guessing what the individuals are like now.
Version 2

Year 1 | Judge1 | Year 2 | Judge2
--- | --- | --- | ---
Trust | Competent | dramatic | Trust
Competent | Friendly | slow | Friendly
Disgusting | | control | Disgusting

Or

rate: good/bad

= positive behavior trial
= negative behavior trial
Results

Manipulation check
Did subjects notice/track the valence shifts as behaviors progressed?

Yes they’re following the valence/shifts
Impression update
Did subjects update their pre-post impressions as predicted?

Averages Pre/Post

Differences Post-Pre

Still seems like they’re just tracking valence proportion
Control closer to predicted no difference than V1
Version 3

• Removed the rating of each behavior, only had to read through and make judgements at Judge 1&2

• It is possible that repeatedly rating may affect recency/primacy effects and holistic impression formation

• Due to coding error, did not collect negative
Version 3

Year 1 Judge1 Year 2 Judge2

Trust Competent Friendly Disgusting control dramatic slow

4 9 9 3/6

= positive behavior trial
= negative behavior trial

“Year 1”
Results

Manipulation check
Did subjects notice/track the valence shifts as behaviors progressed?

Couldn’t calculate this since they didn’t rate the behaviors
**Impression update**

Did subjects update their pre-post impressions as predicted?

### Averages Pre/Post

<table>
<thead>
<tr>
<th>Trustworthiness</th>
<th>pre</th>
<th>final</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pos</td>
<td>7.5</td>
<td>7.5</td>
</tr>
<tr>
<td>Pos</td>
<td>5.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Pos</td>
<td>7.5</td>
<td>7.5</td>
</tr>
</tbody>
</table>

### Differences Post-Pre

<table>
<thead>
<tr>
<th>Condition</th>
<th>Con</th>
<th>DRA</th>
<th>SLO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pos</td>
<td>0</td>
<td>-2</td>
<td>-4</td>
</tr>
</tbody>
</table>

Still tracking valence proportion

Control close to no difference

n=23

95% CI shown