Respondents’ Manifestations of Extraversion in Survey Interviews: Their Relationships with the Extreme Response Style and Attitude Strength

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Extreme Response: Out of a Style or a Strong Attitude?

• Extreme responses: responses from either end of a Likert scale

• Two contradictory perspectives:
  1. Literature of response styles: simply a way of responding (the ERS), not necessarily indicating real and strong attitudes.
     → high reliability but low validity
  2. Literature of attitude strength: extreme attitudes are strong—stable, resistant, and guiding future behaviors.
Question 1

Is an extreme response due more to the extreme response style? Or to a strong attitude?
Further Research Into the Two Literatures

• Literature of response styles: the ERS is prevalent, almost in every survey, every culture. Blacks > whites > Asians

• Several studies on attitude strength: about 30% respondents did not have strong attitudes when giving substantive answers. E.g., not stable across time, evaluating non-existent matters

**Hypothesis 1**: Extreme responses to an initial attitude question involve more of the ERS and less of strong attitudes.
Extraversion and the Extreme Response Style (ERS)

• Extraversion: likely personality trait associated with the ERS. Several studies supported the association, several did not. Methods varied e.g., country level, individual level, HLM, regression, correlation, SEM, sample size,

• According to the Big Five Personality traits, extraversion has six facets: warmth (friendly, cheerful, sociable), gregariousness (outgoing, spontaneous), activity (energetic, active, enthusiastic), positive emotion (humorous, jolly, praising), excitement-seeking (adventurous, pleasure-seeking, charming), & assertiveness (aggressive, self-confident).
Extraversion and Survey Response

• Interviewers depend on sample persons’ extraversion to complete interviews.

• Two manifestations of extraversion in the context of survey interviews are postulated:
  1. participation eagerness (due to assertiveness, activity, gregariousness, excitement-seeking, positive emotions)
  2. friendliness during the interview (due to warmth, gregariousness, positive emotions, excitement-seeking)
Do more extraverted respondents mean strong attitudes?
Associations between Survey Response and the Two Manifestations of Extraversion

Participation eagerness:

• Happy people are more willing to help others; they may be more likely to honor interviewers’ request for an interview. → extraversion

• Election studies found that people not interested in politics were less likely to be interviewed. --> can be interpreted as:

   More eager participants may be more interested in the survey topic, and hence may be more likely to have strong attitudes.

No literature on friendliness in interviews
Hypotheses 2 to 5

• H2. More eager respondents have higher levels of the ERS.
• H3. Friendlier respondents have higher levels of the ERS.
• H4. More eager respondents have stronger attitudes.
• H5. Friendlier respondents do not have stronger attitudes.
Methodology

• Data:
Survey Research on Attitudes toward the Death Penalty and Related Values in Taiwan (Chiu, 2014)
Sample size= 2,039; completed by 54 f-to-f interviewers

• Analytical Method: Hierarchical Linear Models, control for I’s and R’s characteristics
Measures-1

• Extreme response (ER_initial): to an initial death penalty attitude “Strongly agree” or “Strongly disagree is coded one. The others 0.

• Reasons for the use of an initial question: most likely to represent R’s initial (non) attitude or response styles. Later questions in the interview may allow R think about the issues and arrive at a strong attitude.
Measures-2

• The ERS: extreme responses to six items, which are uncorrelated with each other (Spearman rank order \( r < .20 \)), and with items on the death penalty and the relevant issues.

• The six items have similar proportions of extreme responses, ranging from 16.06 to 26.06.

• Scores range from 0 to 6.

*Based on Greenleaf’s (1992) recommendation. So that the ERS is not confounded with similar attitudes, and the measure is not dominated by one or two items which have particularly high proportions of extreme responses.

• Appendix Figure of Weijters, Schillewaert, and Geuens (2008)
Measures-3

• Indicator of strong attitudes: Stability
• Constructed by comparing items in a pair; two comparisons are made for each person.
• Expression of identical attitudes across the two items are scored 1. Different attitudes or NR’s are scored 0. Then scores on the two pairs are summed.
• The final measure has scores ranging from 0 to 2, with higher scores indicating higher stability.
Measures-4

• Participation Eagerness and Friendliness: interviewers selected one from several behavioral categories that best fit their experience:
  E.g., eagerness: hardly any introduction; full description;
  plus importance; plus asking for favors
  friendliness: atmosphere rigid and awkward; no smile exchange,
  R smiled or told small jokes; R reciprocated smile

• Scores range from 1 to 4; higher scores indicate higher levels of eagerness and friendliness.

• To further reduce effects of interviewer subjectivity, the two are centered around the group (interviewer) mean in HLM models.
Results - Hypothesis 1

• Preliminary analysis: ER_initial has a higher association with the ERS than with Stability
  1. SP rank corr. =0.318 vs. 0.138)
  2. logistic regression of ER_initial on ERS only, Pseudo-R-sq= 0.083 on Stability only, Pseudo-R-sq=0.015

• Logistic model in HLM (use AIC. Lower AIC, better fit→ the predictor better explains the dependent variable, ER_initial)
  Basic Model (17 est parm.), AIC= 6230.012
  ERS Model (18 est. parm.), AIC =6095.747
  Stability Model (18 est. parm.), AIC= 6210.059

• Conclusion: Extreme responses to an initial Q involve more of the ERS
Results- Hypotheses 2 & 3

- Binomial Model in HLM of the ERS (7 values, 0 to 6): Both hypotheses are supported.

Table 4  Results of HLM Binomial Models on the ERS

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eagerness</td>
<td>0.101**</td>
<td></td>
<td>0.092**</td>
</tr>
<tr>
<td></td>
<td>(0.033)</td>
<td></td>
<td>(0.033)</td>
</tr>
<tr>
<td>Friendliness</td>
<td></td>
<td>0.106*</td>
<td>0.091*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.041)</td>
<td>(0.042)</td>
</tr>
</tbody>
</table>
## Results- Hypotheses 4 & 5

### Table 5  Results of HLM Binomial models on Stability

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eagerness</td>
<td>0.151**</td>
<td></td>
<td></td>
<td>0.143*</td>
<td></td>
<td>0.133*</td>
</tr>
<tr>
<td></td>
<td>(0.052)</td>
<td></td>
<td></td>
<td>(0.055)</td>
<td></td>
<td>(0.056)</td>
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<tr>
<td>Friendliness</td>
<td></td>
<td>0.140 †</td>
<td></td>
<td>0.127</td>
<td></td>
<td>0.097</td>
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<tr>
<td></td>
<td></td>
<td>(0.072)</td>
<td></td>
<td>(0.080)</td>
<td></td>
<td>(0.081)</td>
</tr>
<tr>
<td>Eagerness* ER_initial</td>
<td>-0.038</td>
<td></td>
<td></td>
<td></td>
<td>-0.042</td>
<td></td>
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<tr>
<td></td>
<td>(0.089)</td>
<td></td>
<td></td>
<td></td>
<td>(0.096)</td>
<td></td>
</tr>
<tr>
<td>Friendliness*ER_initial</td>
<td>-0.020</td>
<td></td>
<td></td>
<td></td>
<td>0.006</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.121)</td>
<td></td>
<td></td>
<td></td>
<td>(0.132)</td>
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</tr>
<tr>
<td>ER_initial</td>
<td>0.617***</td>
<td>0.725*</td>
<td>0.650*</td>
<td>0.722*</td>
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</tr>
<tr>
<td></td>
<td>(0.099)</td>
<td>(0.297)</td>
<td>(0.255)</td>
<td>(0.328)</td>
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Conclusion

• This the first attempt to compare the strength of the perspective of the response style with that of attitude strength.

• Extreme responses do represent strong attitudes, but may involve a large portion of systematic measurement error (the ERS).

• This study proffers another piece of evidence that the ERS is positively associated with extraversion, as measured in social survey interviews.

• The data quality of survey respondents is positively related to their participation eagerness, consistent with implications of findings of election studies.