The Impact of Prior True or False Information on Personality Trait Judgment Accuracy

Jacob R. Gibson & Tera D. Letzring
Idaho State University

Introduction

- According to the primacy effect, people rely more on initial information compared to later information when making personality judgments (Anderson, 1965).
- This has important implications for personality judgment accuracy because individuals often come into an interaction with prior information about that person.
- Research on stereotype accuracy shows that as people gain more individualizing information about a target (get to know the unique aspects of them better), they tend to rely less heavily on stereotypes (or their idea of what is normative for a group) and more on the unique aspects of a target (Jussim, Crawford, & Rubenstein, 2015).
- Trait visibility is positively related to accuracy because more relevant information is likely to be available. Therefore, having additional information about a trait should be more useful for less visible traits compared to more visible traits.
- Relative to the control group, it was hypothesized that:
  - H1: Giving participants true information about a target’s personality before an initial observation would lead to greater distinctive accuracy but less normativity.
  - H2: Giving participants false information would lead to decreases in both normativity and distinctive accuracy, and there would be a larger effect for false over true information.
  - H3: Both true and false prior information would have a greater effect on less visible traits compared to more visible traits.

Method

Main Study
- Participants
  - N = 152; 73% Female; 79% Caucasian, 12% Hispanic, 9% other
  - Age: M = 21.44 years, SD = 4.15.
  - Only participants who passed 80% or more attention checks were utilized.
- Procedures
  - 12 targets were selected from a previous study
  - Targets were chosen based on the level of distinctive accuracy with which they were judged in a previous study, and to represent a cross-section of all big five traits.
  - Self-reports on the BFI-2 were used to create true paragraphs that described the targets’ personalities. These paragraphs were then altered to create mostly identical false paragraphs.
  - Judges watched video recordings of six targets engaging in a semi-structured interview, and then provided impressions of each target’s personality using the BFI-2 after each video.
  - Those assigned to the Experimental group had the addition of reading either a true or false paragraph description of each target prior to watching the interview.

M Turk Study
- A short study was conducted to assess the favorability of each paragraph and to examine whether true paragraphs were more favorable than false paragraphs.
- Participants
  - N = 20; 75% Female; 60% Caucasian, 5% Black/African American, 10% Hispanic, 15% other
  - Age: M = 29.56 years, SD = 9.33
- Procedures
  - Participants read 12 paragraphs and rate each on favorability.

Main Study Measures:
- Big Five Inventory-2: The BFI-2 is a 60-item measure of the traits of Open-mindedness, Conscientiousness, Extraversion, Agreeableness, and Negative Emotionality (Soto & John, 2017).
- Paragraph and video usage. A question was created for the purpose of this study that asked participants in the experimental condition if they relied more heavily on the paragraph descriptions or on the videos when making judgments of targets.

Main Study Analytic Procedure:
- The current study utilized the Social Accuracy Model (Biesanz, 2010) to estimate two perceptual components:
  - Normativity – correspondence between a judges’ ratings of targets and the average target.
  - Distinctive accuracy – the ability to discern the unique characteristics of other individuals.

Results

Comparing the Base Model (All Conditions Together) and the Full Model (Dummy Coded by True or False Prior Information Versus Control Condition) for All Traits Combined

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Overall Accuracy b(SE)</th>
<th>Accuracy with interactions b(SE)</th>
<th>χ2(df)</th>
</tr>
</thead>
<tbody>
<tr>
<td>True and Control</td>
<td>0.65(0.09)**</td>
<td>0.31(0.04)**</td>
<td>-10.06</td>
</tr>
<tr>
<td>False and Control</td>
<td>0.34(0.08)**</td>
<td>-1.81(0.05)**</td>
<td>-58.07</td>
</tr>
</tbody>
</table>

- H1: In the true condition, the effects for both normativity and distinctive accuracy were in the expected direction, although only distinctive accuracy was statistically significant.
- H2: In the false condition, both normativity and distinctive accuracy were significantly lower.
- When the true condition was compared directly to the false condition, and paragraph favorability was controlled for, true information still led to increases in normativity (b = .46, SE = .02, p < .001) and distinctive accuracy (b = .21, SE = .01, p < .001) compared to false information.

Discussion & Conclusions

- The impact of false information on both normativity and distinctive accuracy was more extreme (farther from 0) when compared to the impact of true information on both normativity and distinctive accuracy. This suggests that prior false information has a larger impact on accuracy than prior true information, supporting hypothesis two.

- H1: True prior information led to greater distinctive accuracy but did not affect normativity.
- H2: False information led to decreases in both normativity and distinctive accuracy, and false information had a larger effect than true information.
- H3: Normativity was positively correlated with visibility, while distinctive accuracy was negatively correlated with visibility.

Implications
- False and true information about a target prior to an encounter can impact how accurately they are judged.
- These findings are consistent with the primacy effect.

References


To access a digital copy of this poster, view the preregistration, or read the unpublished manuscript, scan this QR code or visit: bit.ly/SPSS2020