# Distinguishing trust and gullibility through Twitter language

H. Rosenbusch, A. M. Evans, & M. Zeelenberg

# Tilburg University

# Trust vs. Gullibility

What are the differences between trust and gullibility?

Suggested difference (Yamagishi, Kikuchi, & Kosugi, 1999):
trusters → intelligent
gullibles → not intelligent

What about other distinguishing factors? (impulsivity, emotionality, assertiveness, agreeableness...)

In order to distinguish both traits we need to:

- ... measure both traits in the same study,
- ... correlate them,
- ... conduct a comprehensive exploration of differences

How can we *explore* differences between two traits?

Our idea: Language patterns *characterize* personality traits (Schwartz, et al., 2013)

Thus, we could use language to distinguish personality traits

# **Objectives**

- 1) Generate a characteristic language profile for trust.
- 2) Generate a characteristic language profile for gullibility
- 3) Interpret and compare the two

Also: Can online language predict both traits?

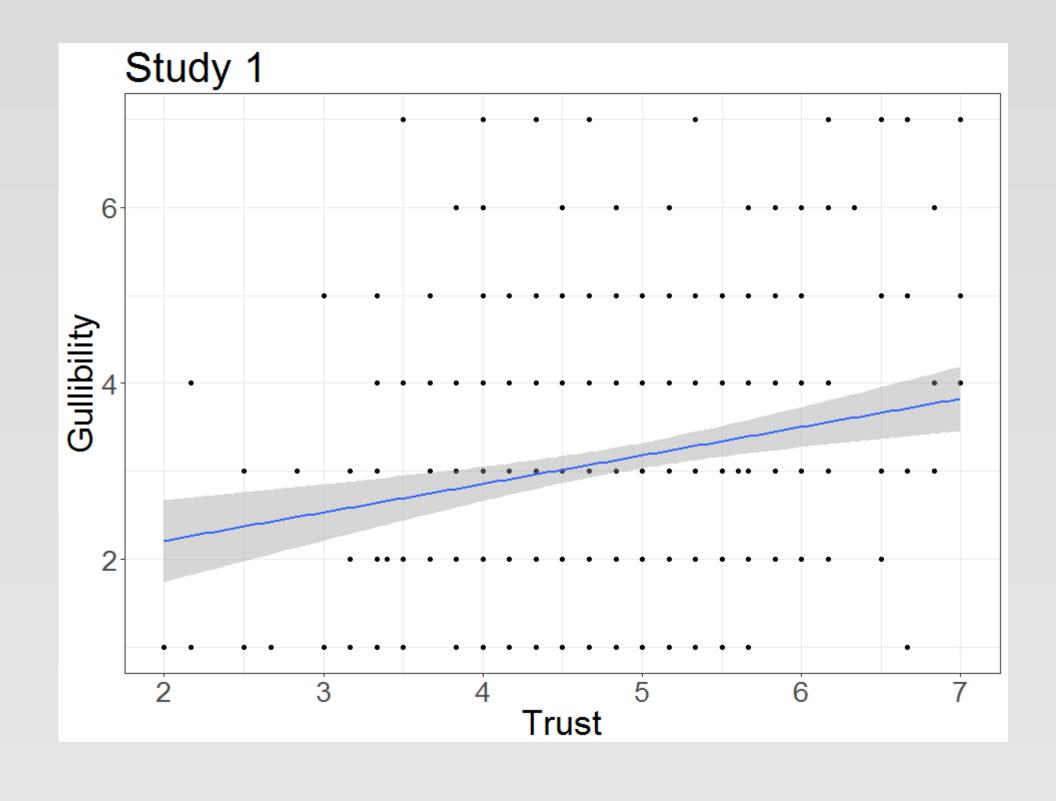
→ Privacy dangers

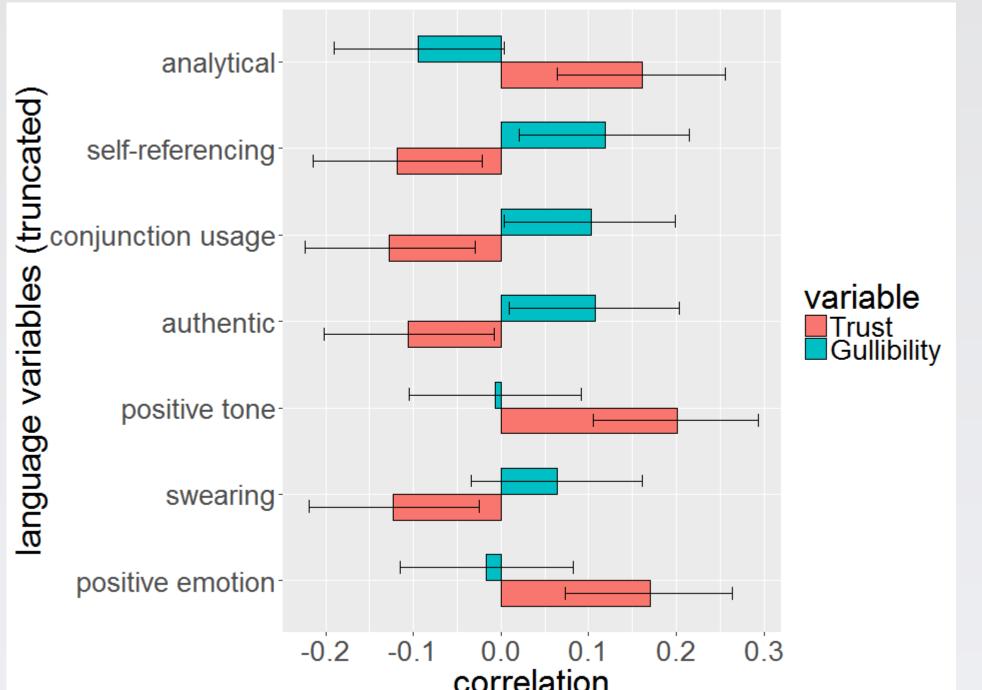
#### Method

- Twitter users fill out scales for trust and gullibility
- We extract language samples from their Twitter profiles
- We correlate language variables with trust/gullibility
- We interpret differences in resulting language profiles
- 6 item trust measure: 'Most people are trustworthy' (Yamagishi & Yamagishi, 1994)
- 1 item gullibility measure: 'To what extent would you describe yourself as a gullible person?'

#### Results

Study 1 (N = 400): Exploring language profiles of both traits





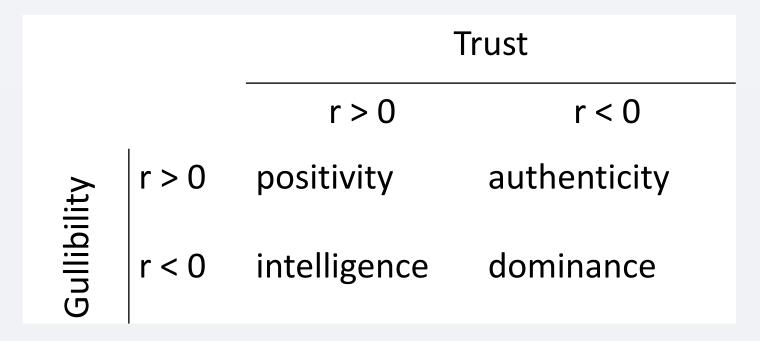
0 out of 93 correlations are significant in the same direction
4 correlations are significant in opposite directions
19 significant correlations are significantly different

Study 2 (ongoing; N = 616, Goal = 1000): Hypotheses-tests

Same method

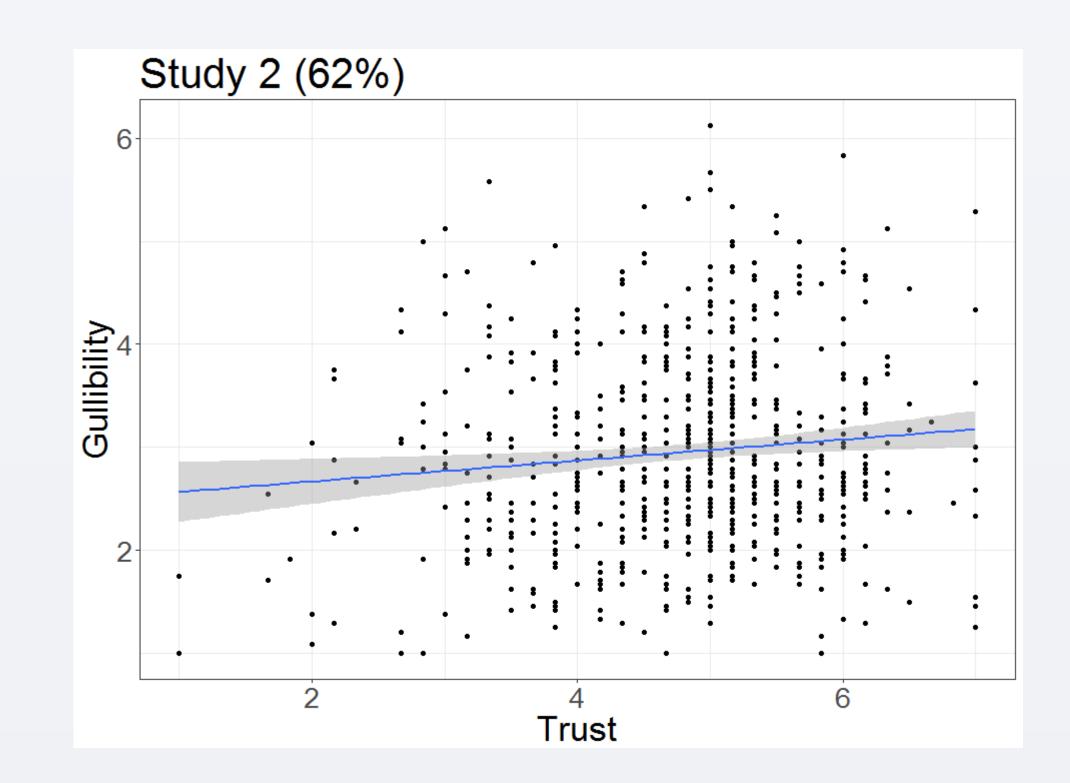
Fewer tests, preregistered hypotheses, and validated gullibility measure (Teunisse, under review)

## **Hypotheses for study 2:**



Hypothesized prediction accuracy: .15 < r < .35

Sneak preview:



#### **Discussion**

Small to negligible correlation between trust & gullibility

No overlap in traits' language profiles

Evidence that analytical thinking is distinguishing factor

Other differences were positivity, authenticity, self-censoring

These factors emerged in exploratory analyses

Study 2 will provide a theroy-driven, preregistered replication

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CONTACT: h.rosenbusch@uvt.nl