

BARNUM EFFECT

INFULENCE OF SOCIAL DESIRABILITY,
BASE RATE AND PERSONALIZATION

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Is this your perfect Astrology Profile?

“ You have a great need for other people to like and admire you. Disciplined and self-controlled outside, you tend to be worrisome and insecure inside. At times you have serious doubts as to whether you have made the right decision or done the right thing. You pride yourself as an independent thinker and do not accept others' statements without satisfactory proof. At times you are extroverted, affable, sociable, while at other times you are introverted, wary, reserved. Success is one of your major goals in life.” (*Forer, 1948*)

Barnum Effect

- People tend to accept these vague and very general statements as accurate descriptions of their personalities
- This effect is known as **Barnum Effect**, named after the showman P.T. Barnum's famous aphorism - "A circus should have a little something for everyone"
- These *Barnum* statements apply to almost everyone!
- Barnum statements can be classified into four categories (*Sundberg, 1955*):
 - Vague
 - Double-headed
 - Modal
 - Favorable

Various 'Possible' Influencing Factors

- There's no definite explanation why Barnum Effect happens. It's **universal**, no effect of gender, age, culture etc.
- Several explanatory hypotheses:
 - Prestige/Authority of the test administrator
 - Gullibility of the subject
 - Generality of the statements - apply to almost everyone (high base rate)
 - Favorability - more positive or socially desirable traits
 - Personalization - the subject is made to believe that the analysis is specifically tailored for her

Social Desirability

- Barnum statements are highly accepted because they are *favorable*
- Sundberg's(1955) experiment
 - 59% participants claimed their *Barnum* profiles to be more accurate over their *bona fide* profiles.
 - Barnum profiles contained 5 times more favorable statements.
- Why accept socially desirable traits?
 - People want to portray that they have characteristics that are believed to be 'good to have' by the society.

Base Rate

- Barnum statements are highly accepted because they are true of most of the people
- Statements *with high social desirability and high base rates* have wide acceptance
- But what about highly desirable statements with low base rates? (to be investigated in the experiments)
- Do social desirability and base rate jointly affect Barnum profiles' acceptance? (to be investigated in the experiments)

Personalization

- Acceptance of Barnum profiles also depend on whether they are presented as ‘personalized’ or ‘non-personalized’
- Snyder’s (1974) experiment
 - Half of the participants were presented with non-personalized profiles while the other half with personalized profiles
 - Non-personalized: They were told that the profile contained statements that are in general true of many people
 - Personalized: They were asked for their date of birth and were told that the profiles were specifically tailored for them
 - The results showed that personalized profiles were more widely accepted

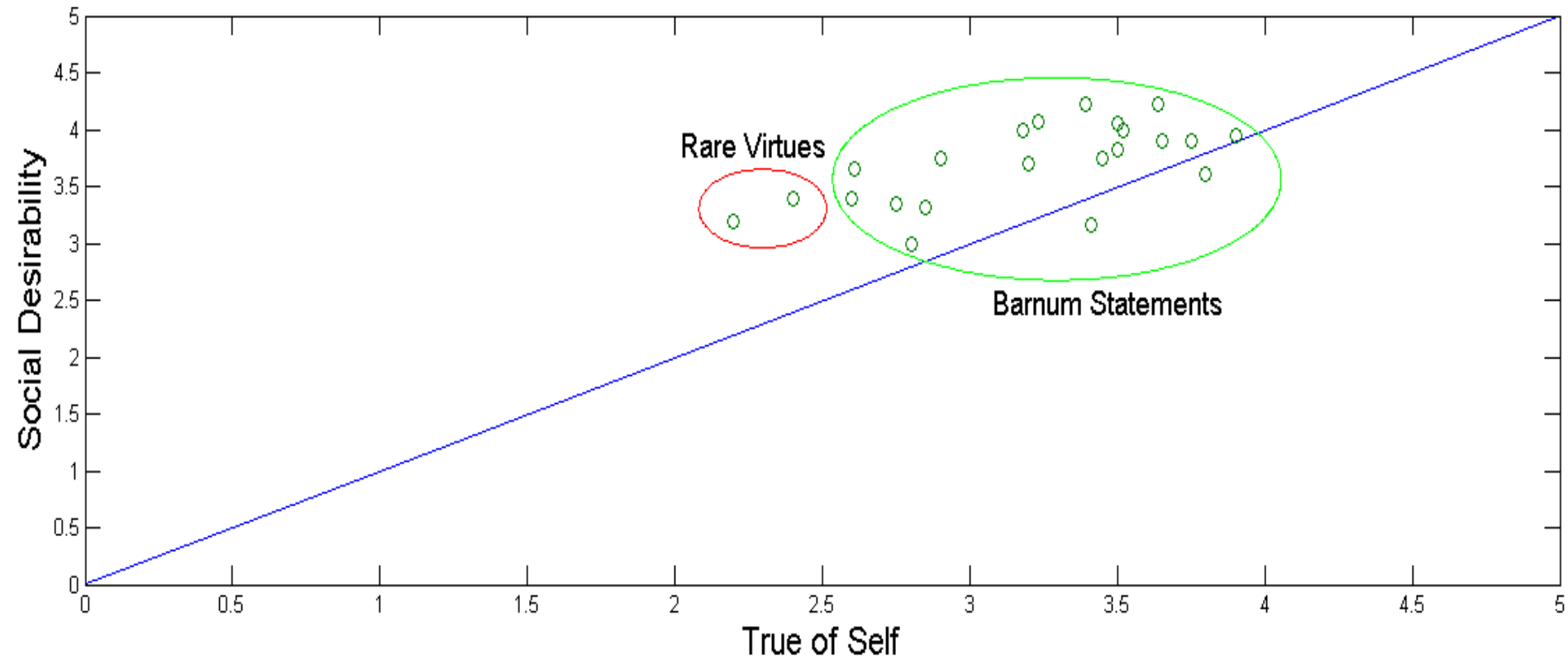
Methodology

- To investigate Social Desirability and Base Rates, three different kinds of personality traits are required to be evaluated:
- Barnum Statements
 - Highly socially desirable traits with high base rates
 - Eg:- Fairness is an important value for you
- Rare Virtues
 - Highly socially desirable traits with low base rates
 - Eg:- You are extraordinarily courteous to others
- Common faults
 - Low social desirability and high base rate
 - Eg:- You have said something bad about a friend behind his back

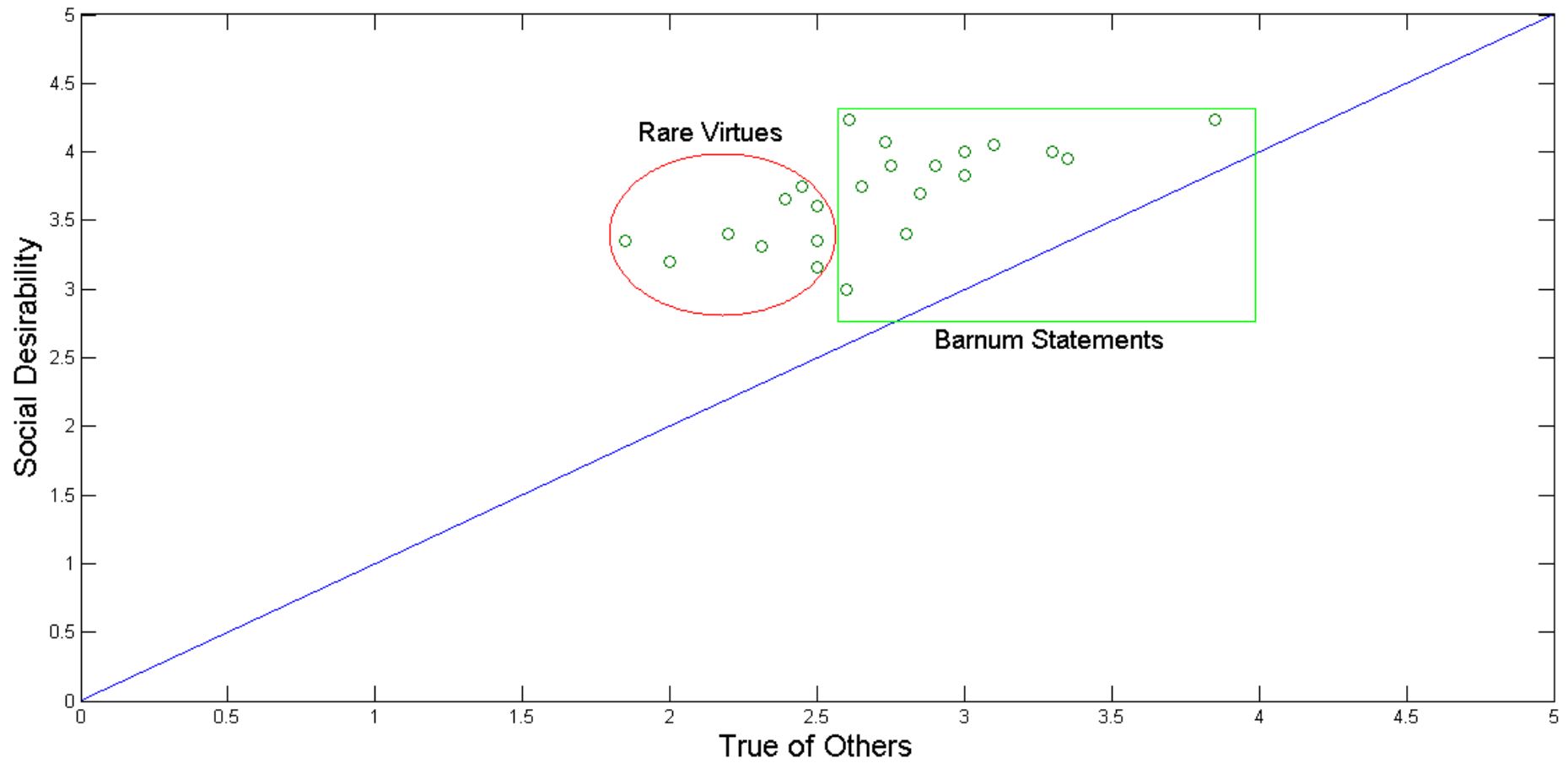
Experiment 1

- Aim - Investigate whether any correlation exists between social desirability and base rate. If not then collect statements that satisfy the criteria of rare virtues.
- Experiment:
 - 48 (male and female) subjects filled an online survey of about 20 candidate personality traits
 - They had to rate each one of them on three different scales
 - Highly to least socially desirable
 - Highly to least true of self
 - Highly to least true of others
 - Rare virtues shall be the items with a high rating on scale 1 (above 50%) but low on scale 2 or 3 (below 50%) for most of the subjects.

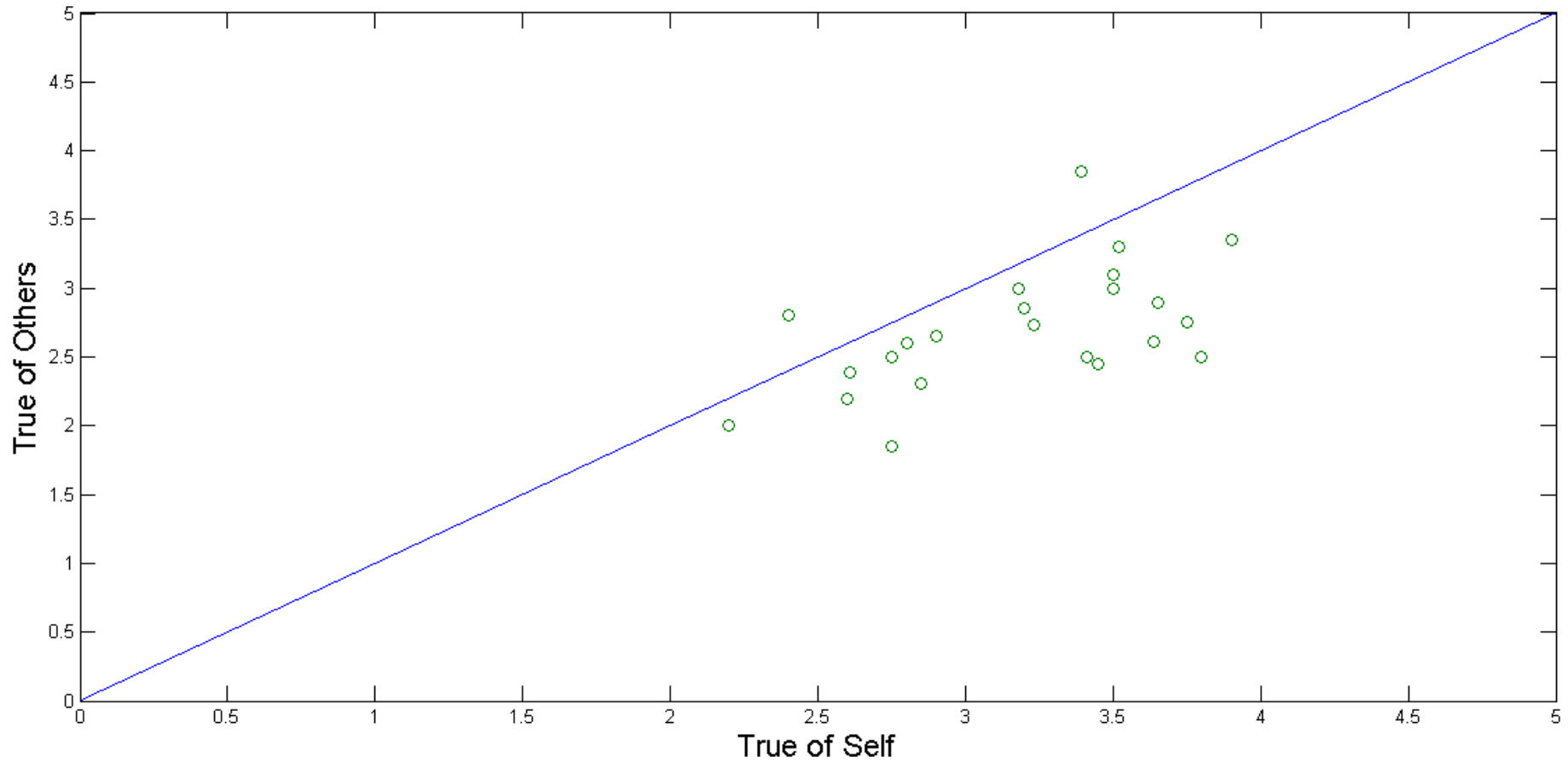
Results



Results



Results



Results

Some Rare Virtues found

Personality Traits	Social Desirability	True of Others
1. You never get irritated when things don't go your way	3.2	2
2. If you see trash in street, you pick it up and throw it away	3.35	1.85
3. You never gossip about people behind their backs	3.4	2.2
4. When you offer help you expect nothing in return	3.31	2.31
5. You are a very punctual person	3.66	2.39
6. You find it easy to understand other people's point of view even if they disagree with you.	3.75	2.45

Experiment 2

- Aim - To study Barnum effect and influence of social desirability, base rate and personalization
- Experiment:
 - Subjects shall be told that the experiment concerns with evaluating a personality predicting software.
 - Everyone shall be given 15 minutes to complete a personality test (Goldberg Personality Questionnaire).
 - After the test, subjects shall be presented with their personality reports.
 - There will six different kinds of reports: Personalized and non-personalized Barnum reports, common faults and rare virtues.
 - Each subject then shall be asked to rate how accurately the report defines their personality on a scale of 0 (absolutely useless) to 5 (absolutely perfect).

References

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QUESTIONS