Abstract

This experiment is designed to observe the phenomena of the Barnum effect in relation to processes of human association.

- We tested the effect of priming character traits across the variables of self-esteem and the concept called self-serving bias (SSB) which is an attempt to protect the ego by positively biasing their ‘self’ perception.
- Participants completed the Rosenberg self-esteem scale, and then told that a personality description would be generated based on their answers.
- Vignettes using negative, neutral, and positive trait words were randomly assigned for each participant to read.
- Three hypotheses were made, first it was predicted that those primed with negative trait vignette will have lower SSB than the positive vignette group.
- The second hypothesis was that those with low self-esteem primed with the negative trait vignette would show the lowest amount of SSB.
- Lastly, it was predicted that those with high self-esteem primed with positive words would show the Barnum Effect with higher SSB than those with high self-esteem in other conditions.

Introduction

An individual’s impression of oneself (self-esteem) can be attributed to a multitude of factors. Internal attributions are the assumption that an internal factor (e.g. personality) affects behavior. External attributions are conceptualized as the situation being the main factor affecting behavioral outcomes (Siva & Duval, 2001).

Self-Serving Bias (SSB) exemplifies the distinction among a person’s mentality of the Barnum Effect with higher SSB than those with high self-esteem in other contexts. Results indicated a positive correlation between those who received the negative trait vignette and lower SSB; however the negative trait vignette increased SSB for those with low self-esteem. It was also indicated that those with high self-esteem who were primed with the positive trait vignette did have the highest SSB among those with high self-esteem.

The literature of SSB and self-esteem have a strong association, with the added variable of priming and the use of the Barnum Effect, their association was lost in certain groups.

Methods and Materials

Participants

- The sample of this study included 72 women and 35 men totaling 107 participants. The average age of the participants was 26.54 years old (SD=13.083). The subjects in the study volunteered and were not rewarded. The participants were not informed about the goals of the research that were being conducted.

Measures

- The Rosenberg self-esteem scale was used to measure low and high self-esteem as an independent variable.
- After completing the self-esteem section participants are given one of three vignettes for each priming condition (our second independent variable).
- The vignettes are randomly assigned to each participant. Each vignette is characterized in the terms of usage of positive, negative, and neutral words in the context of personality traits.
- Positive trait selection consisted of: Generous, cheerful, ambitious, assertive, and suitable.
- Neutral trait selection consisted of: Passive, impartial, fair, unbiased, satisfactory, and satisfactory.
- Negative trait selection consisted of: Tense, impulsive, moody, fearful, jealous, cynical, and nervous.

Results

- There was a positive relationship as self-esteem increased so did self-serving bias, r(105) = .215, p = .027.
- There was a positive relationship as self-serving bias increased, the scores toward neutral oriented words increased, r(107) = .247, p = .010.
- A weak correlation that was not significant was found, r(105) = -.116, p = .239.
- Self-esteem was not related to answers for neutral oriented words.

Conclusions/Discussion

People were primed with one of three vignette types, and then were asked a series of questions from the Rosenberg self-esteem scale in relation to personality characteristics. We found that there was a correlation between participants who were primed with a negative trait vignette and not committing the self-serving bias to the degree of those who received a positive trait vignette. Furthermore, those who received the positive vignette displayed characteristics of the self-serving bias. The low self-esteem participants primed with the negative vignette did not display accurate personality trait descriptions compared to those given the neutral or positive vignettes. People primed with negative vignettes displayed lower accuracy of personality descriptions compared to those primed with neutral and positive vignettes. It was demonstrated that people with low self-esteem were not influenced by any positive oriented words. Only a positive correlation was shown when the participants were given the negative and neutral oriented words. Those who are realistically pessimistic tend to have lower Self-serving bias, which is related to low self-esteem.

Acknowledgements

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References


Table 1

<table>
<thead>
<tr>
<th>Vignette Type</th>
<th>Positive Trait Selection</th>
<th>Neutral Word Selection</th>
<th>Negative Trait Selection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>Generous, cheerful, assertive</td>
<td>Passive, impartial, fair, unbiased</td>
<td>Tense, impulsive, moody, fearful, jealous, cynical, and nervous</td>
</tr>
<tr>
<td>Negative</td>
<td>Tense, impulsive, moody, fearful, jealous, cynical, and nervous</td>
<td>Passive, impartial, fair, unbiased</td>
<td>Neutral</td>
</tr>
</tbody>
</table>

Figure 1: Mean differences for negative, neutral, and positive vignette types on self-serving bias scores. 
Figure 2: Participants were given one of three vignettes, and then were asked a series of questions from the Rosenberg self-esteem scale in relation to personality characteristics.