

Effects of Barnum Personality Assessments on Cognitive Behavior

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Barnum assessments, personality descriptions that seem accurate to clients but fit largely or wholly by virtue of their universality, were found in the present experiments to have an impact on behavior that equaled or exceeded direct instructions from the experimenter. Seventy-three undergraduates were either given Barnum characterizations or straightforward instructions regarding open- or closed-mindedness. The Barnum inductions influenced subsequent cognitive behavior: Subjects led to believe that they were open-minded were more balanced in the thoughts they produced on two campus issues than were subjects led to believe that they were closed-minded.

Krueger and Zeitz (1933) originally referred to the universally valid or "Barnum" personality trait as *universalcharakteristik* and suggested several methods of construction. Of course, clients are typically ill-equipped to distinguish Barnum assessments by a therapist from authentic assessments that veridically delineate personality idiosyncrasy.

Research following Krueger and Zeitz has focused exclusively on the perceived accuracy of Barnum profiles under a number of conditions. Although it is now clear that subjects perceive Barnum statements as accurate and uniquely descriptive (cf. Forer, 1949), it remains unclear if Barnum assessments can affect subsequent behavior. An experiment was conducted to address this interesting possibility. Specifically, subjects were given an open-minded (OM) or closed-minded (CM) bias, either in a Barnum assessment or in direct instructions. In a subsequent experiment, subjects were asked to list their thoughts on two controversial issues. It was expected that the Barnum assessments would affect the profile of thoughts listed.

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Method

Seventy-three introductory psychology students participated in partial fulfillment of a course requirement in one of five experimental sessions. Within each session, subjects were randomly assigned to one of five experimental conditions: OM Barnum, CM Barnum, OM instructions, CM instructions, or control.

On arrival at the experiment entitled, "Personality Assessment," subjects completed an 18-statement bogus personality test on a computer answer sheet. The answer sheets were collected and ostensibly taken to the university computer center for processing. When the experimenter returned with individual printouts, he distributed them to subjects, instructing them to read over their results but not to discuss them with anyone because they should be considered confidential.

Subjects in all five experimental conditions received a bogus personalized computer printout that contained four general Barnum statements adapted from Forer (1949), for example, "You are aware that some of your aspirations tend to be pretty unrealistic." For subjects in the OM Barnum condition, a paragraph followed the general personality outline and stated: "It is clear that you are an open-minded person. You have the ability to see both sides of an issue and recognize the good points on both sides. You have the ability to appreciate a wide variety of viewpoints." Subjects in the CM Barnum condition received the following paragraph instead: "It is clear that you are not a wishy-washy person. You have the ability to know

your positions and be confident that your position is the right one. You have the ability to determine your position on an issue quickly and with great conviction." Pilot testing revealed that both the OM and CM assessments were rated as highly accurate by over 85% of the subjects tested ($N = 30$). After reading their assessments, the printouts were returned to the experimenter, and a bogus debriefing commenced.

After signing subjects' "experimental credit" cards, the experimenter left the room, and a second experimenter who had been sitting in the front of the room solicited subjects' participation in another experiment (all subjects agreed to remain). A booklet entitled "University Survey" was distributed, which contained descriptions of two campus issues. For subjects in the OM instructions condition, the first page of the survey booklet directed subjects to respond to the issues in an OM fashion (e.g., "You should be as objective as possible in making your evaluations."), while subjects in the CM instructions condition were directed to take a strong stand on one side or the other. Subjects who had previously received the OM and CM Barnum inductions and control subjects read a neutral statement that directed them to give their views "freely and honestly." All subjects signed their names below the instructions to signify compliance.

Subjects then read two arguments in favor and two arguments opposed to Proposal 1, which was "General university course requirements should be abolished and replaced with a system of free electives," and Proposal 2, which was "The university community should be incorporated into a separate city." Following a procedure adapted from Petty and Cacioppo (1977), subjects were given 3 minutes to list their thoughts on each of the proposals. Fifteen 18×4 cm boxes were provided in which to list thoughts for each issue. After generating their thoughts, subjects rated their ideas as + (in favor of the proposal), - (opposed to the proposal), or 0 (neutral or irrelevant to the proposal).

Two measures of the tendency to be OM or CM in the thoughts generated were constructed. On the "difference balance index," each subject was assigned a number equal to the absolute value of the difference between the number of positive and negative thoughts recorded. The closer a subject's score was to zero on the index, the more OM the behavior was. A second measure, the "ratio balance index," was devised

to control for the absolute number of thoughts written by each subject. This measure consisted of a ratio of either the number of positive or negative thoughts (whichever was greater) to the total number of positive and negative thoughts. The closer a subject's score was to 1 on the index, the more CM the behavior was (three subjects who scored none of their thoughts as positive or negative were assigned a score of .5).

Results

The cognitive biasing inductions produced no significant effects on the total number of positive, negative, or neutral thoughts generated. However, the inductions did produce significant differences on the balance indices, which reflected the profile of cognitions listed. The balance measures were analyzed in 5×2 analyses of variance, with experimental condition as a between-subjects factor and issue as a within-subjects variable. Neither main effects for issue nor interactions involving the issue factor were found on either index. Thus, the hypotheses testing contrasts comparing the OM and CM Barnum conditions and comparing the OM and CM instructions conditions were made, collapsing across issue.

Subjects in the OM Barnum condition obtained a significantly lower score on the difference balance index ($M = 1.9$) than did subjects in the CM Barnum condition ($M = 3.6$), $F(1, 68) = 7.86$, $p < .01$. Subjects in the OM Barnum condition also scored lower on the ratio balance index ($M = .77$) than did subjects in the CM Barnum cell ($M = .91$), $F(1, 68) = 7.54$, $p < .01$. In addition, the scores for the OM instructions group were significantly lower on the ratio balance index ($M = .81$) than those for the CM instructions group ($M = .94$), $F(1, 68) = 7.2$, $p < .01$. On the difference balance index, however, this difference was statistically unreliable ($M_{OM} = 2.7$; $M_{CM} = 3.7$).

Subjects in the neutral control condition tended to behave in a CM fashion ($M_{\text{difference index}} = 3.2$, $M_{\text{ratio index}} = .91$). A comparison of each of the OM and CM biasing conditions with the control, using the Dunnett test, revealed one significant effect: The OM Barnum condition differed from the control ($p < .05$) on the ratio balance index, suggesting that this Barnum manipulation may have been the most powerful.

Conclusions

The experiment provided strong support for the notion that Barnum assessments can have as powerful an impact on behavior as other forms of demand or suggestion. Previous researchers have warned that the use of Barnum statements in clinical interpretation might give clinicians a false sense of security in the accuracy of their assessments (Forer, 1949). The present data suggest a further warning that Barnum inductions may lead to unintentional modifications in a client's behavior. The present data also have implications for research aimed at understanding the conditions under which self-conceptions (e.g., I am open-minded) lead to corresponding behavior (e.g., acknowledging both sides of an attitudinal issue) and suggest that Barnum inductions may prove useful in

cognitive behavior modification therapies (cf. Meichenbaum, 1977).

References

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