predictor of the two. This is to be expected, since the conditional probability measure makes use of a greater number of transition probabilities. The correlations between association scales and those of pronounceability and information are all negative. Sequences that are difficult to pronounce are more unfamiliar and contain more information and consequently elicit fewer associations. In some instances the information values correlate more highly with some association scales than do other association measures. However, the m' association measure would seem to be a better measure of the rather elusive concept of meaningfulness.

Information-theory ratings, while not measuring the identical qualities of meaningfulness dealt with in other investigations, can be said to measure a different aspect of meaningfulness, the capacity for signification meaning. Trigrams with very little structure are far less likely to elicit associations or signification than those with more

structure. In this context it is significant that a great deal of what we call meaningfulness can be predicted on the basis of information measurement of digram and trigram letter dependencies alone, without recourse to ratings or responses by human Ss.

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Transgression, fate control, and compliant behavior

DAVID L. McMILLEN Mississippi State University, State College, Miss. 39762

A hypothesis was tested that increased "fate control" will lead to increased compliance. Fate control was manipulated by inducing S to tell a lie about information he had received and then make use of the information. Other Ss were induced to lie but could not make use of the information. Control Ss who told no lie were included in the design. Significant compliance was observed in the "fate control" group only.

Several studies have demonstrated that compliant behavior increases following transgression. Different kinds of transgression have been employed, including destroying a machine (Brock & Becker, 1966; Wallace & Sadalla, 1966), upsetting the order of a graduate student's index cards (Freedman, Wallington, & Bless, 1967), costing another person green stamps (Berscheid & Walster, 1967), lying (Freedman, Wallington, & Bless, 1967), and administration of electric shocks (Carlsmith & Gross, 1969), and the results have been essentially the same. However, the theoretical explanations of the data are not uniform. Some investigators (e.g., Freedman et al, Carlsmith & Gross) employ a "guilt" interpretation to these findings, while others (e.g., Brock, 1969) state that such an interpretation is not warranted on the basis of the existing data. Brock expresses concern over the imprecise conceptual status of guilt and the lack of manipulation checks. In addition, he suggests that the body of data can be explained in terms of fate control and maintenance of social consistency. According to Brock: "An individual who has affected the fate of another person in a certain magnitude will repeat that magnitude of control over the other person (or a person in a similar role) if an opportunity to do so presents itself [p. 143]."

The present study was designed to test the viability of Brock's fate-control hypothesis. The basic design of this experiment was similar to the one employed by Freedman et al (1967). S was induced to tell a lie to E and later given an opportunity to comply with a request made by E. However, in this experiment half of the Ss gained fate control over E by lying; the other half (who also lied) did not. The design also consisted of two control groups composed of Ss who did not lie to E. If Brock's hypothesis is correct, then the "fate control" group should exhibit greater compliance than the "no-fate control" group, even though Ss in both groups tell a lie.

SUBJECTS

Thirty-two males were recruited from introductory psychology classes during the summer session at Mississippi State University. At the time they signed up, Ss were informed that they would be participating in a study of the psychology of education. Eight Ss were assigned randomly to each of four groups.

The Ss were scheduled in pairs. When they arrived, they were seated in a waiting room and told that the previous Ss had not completed the experiment as yet. E left the room; 1 min later the confederate entered saying that he was looking for a book he had forgotten when he was in an experiment earlier in the day. The confederate engaged the Ss in brief informal discussion. During the course of this discussion, the confederate furnished that half of the Ss with information about the experiment. Specifically, he said that he had taken a multiple-choice psychology test. He further stated that after he had completed the test, E had shown him the answer key and he had been surprised to learn that the majority of the correct answers were "B." In the control condition the confederate did not discuss the experiment. If S asked about the experiment, the confederate claimed he

Table 1
Number of Ss Complying in Each
Experimental Condition

	Lie		Not Lie	
	Test 1	Test 2	Test 1	Test 2
Comply	7	1	3	2
Not Comply	1	7	5	6

had been in a person-perception experiment.

The confederate's decision to administer the experimental manipulation was determined by a coin flip prior to entering the waiting room. E was not made aware of the confederate's decision until after the experiment had been completed. Four or five minutes after he entered the waiting room, the confederate left. A few minutes later E returned and began to explain the purpose of the experiment. The following preliminary instructions were given to all Ss: "I am engaged in a research project to evaluate the general psychology course at Mississippi State. Among other things, we are trying to determine how much students know about psychology prior to taking a psychology course. We are also interested in assessing the effectiveness of several types of tests used to determine basic knowledge of psychology. To further these aims, Ss in this experiment will take a diagnostic test on psychology. Some of the Ss are given a multiple-choice test and others are given a short-answer test.

"Before we begin I need to know if you have heard anything about this experiment or have been in it before. Have you heard anything about the experiment?"¹

At this point one S was given a multiple-choice test containing 50 questions selected from a departmental final exam. The other S was given a 15-question short-answer test concerning definitions of psychological terms. Which S took the multiple-choice test was determined by which of two pennies E happened to pull out of his pocket.

All Ss were informed that if they performed well on the test, they would receive credit in their psychology course. This was justified by E's making the following statement: "It is not likely that you will score high on this test. However, if you do, it will count on your psychology grade. We are doing this because we feel if you can demonstrate a knowledge of psychology, you should get credit for it. We have discussed this with the instructors of the introductory course, and they have agreed to this procedure. Of course, if you do not do well, the test will have no effect on your grade."

At this point Ss were taken to separate

cubicles to complete their tests. E checked Ss periodically and returned to the cubicle when each had completed his test.

After E had collected S's test, he administered the compliance measure. E identified himself as a member of a committee attempting to influence the state legislature to appropriate funds to make a four-lane, divided highway of U.S. 82 between Starkville and Columbus.² E further stated that the committee was convinced that one way to influence the legislature was to get as many signatures as possible on a petition. To do this it would be necessary to enlist the service of interested persons to circulate these petitions to the University community and townspeople. The E made the compliance request in the following manner:

"You are under no obligation to work on this, and it has nothing to do with the experiment you have just completed. However, if you wish to help, we could certainly use your assistance. I will leave this volunteer slip with you while I check on the other S; fill it out if you wish. Should you volunteer, we will provide you with a list of people to call and you may make as many or as few contacts as you wish. You may make your calls anytime during the next month. Remember, you are under no obligation to do this."

At this point \vec{E} handed the volunteer slip to S and left the cubicle. The volunteer slip contained blanks for S's name, telephone number, address, and whether or not he wished to help. Several minutes later \vec{E} returned to the cubicle, collected the compliance measure, and debriefed S.

RESULTS AND DISCUSSION

A comparison was made of the test responses of Ss taking the multiple-choice test, and it was found that Ss with information about the test made significantly more "B" responses than did the control group (t = 2.49, p < .05). The means for the two groups were 22.0 and 14.0, respectively. Actually, only 10 of the questions had "B" as the correct response. This result indicates that Ss who lied and took the multiple-choice test did make use of the information furnished by the confederate.

The data on compliant behavior are shown in Table 1. Fisher exact probability tests were performed on the lie condition, the no-lie condition, the multiple-choice test (Test 1), and the short-answer test (Test 2). Significant compliant behavior was observed in the multiple-choice test, lie group only (p = .01). This finding supports Brock's "fate control" hypothesis. All Ss in the lie group told a lie, regardless of which test they took; therefore, equal amounts of guilt should be present in each group. However, Ss who took the short-answer test had no information; therefore, they could not exert fate control over E. Ss who lied and took the multiple-choice test had fate control over E by virtue of the information they possessed. According to Brock, Ss should, when given an opportunity, attempt to maintain fate control over E.

The guilt hypothesis is based (1) on the assumption that transgression arouses guilt and (2) on the assumption that by complying, an individual can alleviate his guilt. The lack of significant differences in compliant behavior between the no-lie groups and the lie, no-fate control group appears to minimize the importance of guilt in determining compliant behavior.

An additional factor that might influence compliance is mentioned by Carlsmith & Gross (1969). They suggest that compliant behavior following transgression may serve to bolster S's self-image. Under certain circumstances it is possible that transgression may be inconsistant with one's self-image. If this were the case, compliance may serve to restore one's self-image. Such an approach is somewhat similar to the guilt hypothesis; however, self-image can probably be defined and manipulated more precisely than guilt. Subsequent research is being planned to determine the effect of self-image on compliant behavior.

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1. Only one S answered in the affirmative to this question. Both he and the S with him were given credit and dismissed; they are not included in the analysis.

2. This was a current issue, and the majority of students were very much in favor of such a highway. The university is located in a dry county and the closest source of beer and liquor is down Highway 82. In addition, there is a state university for women in Columbus, and many students and townspeople commute to jobs in Columbus. The traffic is extremely heavy and slow-moving on this two-lane hilly road.