**Does Cognitive Dissonance Explain**

**Why Behavior Can Change Attitudes?**

**YES: Leon Festinger and James M. Carlsmith,** from “Cognitive

Consequences of Forced Compliance,” *The Journal of Abnormal and*

*Social Psychology* (vol. 58, 1959)

**NO: Daryl J. Bem,** from “Self-Perception: An Alternative Interpretation

of Cognitive Dissonance Phenomena,” *Psychological Review*

(May 1967)

**ISSUE SUMMARY**

**YES:** Social psychologists Leon Festinger and James M. Carlsmith

propose their theory of cognitive dissonance to explain why people’s

attitudes may change after they have acted in a way that is

inconsistent with their true attitudes.

**NO:** Social psychologist Daryl J. Bem proposes a theory of selfperception,

which he believes can explain Festinger and Carlsmith’s

results better than cognitive dissonance theory. **Does Cognitive Dissonance Explain**

**Why Behavior Can Change Attitudes?**

**YES: Leon Festinger and James M. Carlsmith,** from “Cognitive

Consequences of Forced Compliance,” *The Journal of Abnormal and*

*Social Psychology* (vol. 58, 1959)

**NO: Daryl J. Bem,** from “Self-Perception: An Alternative Interpretation

of Cognitive Dissonance Phenomena,” *Psychological Review*

(May 1967)

**ISSUE SUMMARY**

**YES:** Social psychologists Leon Festinger and James M. Carlsmith

propose their theory of cognitive dissonance to explain why people’s

attitudes may change after they have acted in a way that is

inconsistent with their true attitudes.

**NO:** Social psychologist Daryl J. Bem proposes a theory of selfperception,

which he believes can explain Festinger and Carlsmith’s

results better than cognitive dissonance theory.

**C**ognitive dissonance theory is one of the best-known theories in social

psychol ogy. Originally proposed by Leon Festinger in 1957, the theory suggests

that we strive to maintain consistency in our attitudes and actions. As a result,

when there is a contradiction between our attitudes and actions we experience

psychological tension. For example, if someone knows that cigarette smoking

is dangerous, yet continues to smoke, the smoker would experience psychological

tension (called cognitive dissonance) as a result of the seeming contradiction

between his or her attitudes and actions. In order to reduce this tension,

people can either change their attitudes or change their actual behavior so that

they no longer contradict one another. In the case of someone who smokes,

this could mean that the smoker can either quit smoking or could change his

or her attitudes by downplaying the risks that smoking poses to one’s health,

in order to reduce the tension that might otherwise occur. In the fi rst selection,

Festinger and Carlsmith describe their classic study that demonstrated people

may, in fact, change their attitudes when they experience a contradiction

between their attitudes and behavior. In their study, participants were asked to

perform a variety of boring tasks, such as repeatedly rotating a set of woodenpegs. Afterward participants were asked to lie about how enjoyable the experiment

was, by telling another person that they actually liked the experiment.

Some participants were paid $20 to lie, while others were only paid $1 to tell

the same lie. According to Festinger and Carlsmith, participants who were only

paid $1 to tell the lie experienced psychological tension as a result of performing

a behavior (saying that they like the experiment) that confl icted with their

true attitudes (the experiment was really boring). They argue that their results

provide substantial support for cognitive dissonance theory.

Daryl Bem believes that Festinger and Carlsmith’s results do not necessarily

demonstrate the importance of cognitive dissonance theory and proposes

his own theory, called self-perception theory, to account for the results. According

to self-perception theory, when people are unsure of their attitudes, they

examine their behavior to determine their attitude. For example, if you are

unsure whether you like a particular student in your class, you might exam ine

how you have treated that person. If you’ve been particularly nice to that person,

you would conclude that you like him or her. If you’ve treated that per son

poorly, you would conclude that you dislike him or her. In other words, you

might infer your attitude toward your classmate based on your behavior. While this idea may seem counterintuitive, consider the Festinger and

Carlsmith study. Participants who were paid $1 to lie and tell someone that

the boring experiment was enjoyable reported liking the experiment more,

compared to those who were paid $20 to tell the same lie. According to selfperception

theory, participants who were only paid $1 to tell the lie conclude

that they must have liked the experiment if they told someone they liked it,

since they had so little fi nancial incentive to tell the lie. They reason, “The

experiment must not have been that bad if I told someone I liked it for only

$1.” Thus, people infer their attitudes based on their actions, rather than

changing their attitudes as a result of the psy chological tension called cognitive

dissonance. In order to examine self-perception theory, the second selection

will describe a study that partially replicates Festinger and Carlsmith’s

original experiment. However, this study was designed so that psy chological

tension (i.e., cognitive dissonance) could not be a plausible explanation for the

results. Instead the results of this experiment are more easily explained by selfperception

theory.

**POINT**

• When people behave in a way that

contradicts their attitudes, they experience

psychological tension called

cognitive dissonance.

• People sometimes change their attitudes

in order to reduce the psychological

tension that is produced by the

contradiction between their ac tions

and attitudes.

• Experimental evidence supports cognitive

dissonance theory.

**COUNTERPOINT**

• Psychological tension is not necessarily

a consequence of a contradiction

between one’s attitudes and actions.

• The attitude change that occurs can be

explained by self-perception theory.

• Additional research indicates that selfperception

theory can account for the

results of these experiments.

**YES**  - **Cognitive Consequences**

**of Forced Compliance Leon Festinger**

**and James M. Carlsmith**

**W**hat happens to a person’s private opinion if he is forced to do or say

some thing contrary to that opinion? Only recently has there been any experimental

work related to this question. Two studies reported by Janis and King

(1954; 1956) clearly showed that, at least under some conditions, the private

opinion changes so as to bring it into closer correspondence with the overt

behavior the person was forced to perform. Specifi cally, they showed that if a

person is forced to improvise a speech supporting a point of view with which

he disagrees, his private opinion moves toward the postion advocated in the

speech. The observed opinion change is greater than for persons who only

hear the speech or for persons who read a pre pared speech with emphasis

solely on elocution and manner of delivery. The authors of these two studies

explain their results mainly in terms of mental rehearsal and thinking up

new arguments. In this way, they propose, the person who is forced to improvise

a speech convinces himself. They present some evidence, which is not

al together conclusive, in support of this explanation. We will have more to say

con cerning this explanation in discussing the results of our experiment. . . .

Recently, Festinger (1957) proposed a theory concerning cognitive

disso nance from which comes a number of derivations about opinion change

fol lowing forced compliance. Since these derivations are stated in detail by Festinger

(1957, Ch. 4), we will here give only a brief outline of the reasoning.

Let us consider a person who privately holds opinion “X” but has, as a result

of pressure brought to bear on him, publicly stated that he believes “not X.”

1. This person has two cognitions which, psychologically, do not fi t

together: one of these is the knowledge that he believes “X,” the

other the knowledge that he has publicly stated that he believes “not

X.” If no factors other than his private opinion are considered, it

would follow, at least in our culture, that if he believes “X” he would

publicly state “X.” Hence, his cognition of his private belief is dissonant

with his cognition concerning his actual public statement.

2. Similarly, the knowledge that he has said “not X” is consonant with

(does fi t together with) those cognitive elements corresponding to

the reasons, pressures, promises of rewards and/or threats of punishment

which induced him to say “not X.”

From *Journal of Abnormal and Social Psychology,* vol. 58, 1959, pp. 203–210. Published in 1959

by American Psychological Association (now in the Public Domain).

3. In evaluating the total magnitude of dissonance, one must take

account of both dissonances and consonances. Let us think of the

sum of all the dissonances involving some particular cognition as

“D” and the sum of all the consonances as “C.” Then we might think

of the total magnitude of dissonance as being a function of “D”

divided by “D” plus “C.”

Let us then see what can be said about the total magnitude of

dissonance in a person created by the knowledge that he said “not X”

and really believes “X.” With everything else held constant, this total

magnitude of dissonance would decrease as the number and importance

of the pressures which induced him to say “not X” increased.

Thus, if the overt behavior was brought about by, say, offers of reward

or threats of punishment, the magnitude of dissonance is maximal if

these promised rewards or threatened punishments were just barely

suffi cient to induce the person to say “not X.” From this point on, as

the promised rewards or threatened punishment become larger, the

magnitude of dissonance becomes smaller.

4. One way in which the dissonance can be reduced is for the person

to change his private opinion so as to bring it into correspondence

with what he has said. One would consequently expect to observe

such opinion change after a person has been forced or induced to say

something contrary to his private opinion. Furthermore, since the

pressure to reduce dissonance will be a function of the magnitude

of the dissonance, the observed opinion change should be greatest

when the pressure used to elicit the overt behavior is just suffi cient

to do it.

The present experiment was designed to test this derivation under controlled,

laboratory conditions. In the experiment we varied the amount of

reward used to force persons to make a statement contrary to their private

views. The prediction [from 3 and 4 above] is that the larger the reward given

to the subject, the smaller will be the subsequent opinion change.

**Procedure**

Seventy-one male students in the introductory psychology course at Stanford

University were used in the experiment . . .

When the *S* [the subject] arrived for the experiment on “Measures of

Per formance” he had to wait for a few minutes in the secretary’s offi ce. The

experimenter (*E*) then came in, introduced himself to the *S* and, together, they

walked into the laboratory room where the *E* said:

This experiment usually takes a little over an hour but, of course, we

had to schedule it for two hours. Since we have that extra time, the

introductory psy chology people asked if they could interview some of

our subjects. [Offhand and conversationally.] Did they announce that

in class? I gather that they’re interviewing some people who have been

in experiments. I don’t know much about it. Anyhow, they may want

to interview you when you’re through here.

With no further introduction or explanation the *S* was shown the fi rst

task, which involved putting 12 spools onto a tray, emptying the tray, refi lling

it with spools, and so on. He was told to use one hand and to work at his own

speed. He did this for one-half hour. The *E* then removed the tray and spools

and placed in front of the *S* a board containing 48 square pegs. His task was to

turn each peg a quarter turn clockwise, then another quarter turn, and so on.

He was told again to use one hand and to work at his own speed. The *S* worked

at this task for another half hour.

While the *S* was working on these tasks, the *E* sat, with a stop watch

in his hand, busily making notations on a sheet of paper. He did so in order

to make it convincing that this was what the *E* was interested in and that

these tasks, and how the *S* worked on them, was the total experiment. From

our point of view the experiment had hardly started. The hour which the *S*

spent working on the repetitive, monotonous tasks was intended to provide,

for each *S* uniformly, an experience about which he would have a somewhat

negative opinion.

After the half hour on the second task was over, the *E* conspicuously set

the stopwatch back to zero, put it away, pushed his chair back, lit a cigarette,

and said:

O.K. Well, that’s all we have in the experiment itself. I’d like to explain

what this has been all about so you’ll have some idea of why you were

doing this. [*E* pauses.] Well, the way the experiment is set up is this.

There are actually two groups in the experiment. In one, the group

you were in, we bring the subject in and give him essentially no introduction

to the experiment. That is, all we tell him is what he needs to

know in order to do the tasks, and he has no idea of what the experiment

is all about, or what it’s going to be like, or anything like that. But

in the other group, we have a student that we’ve hired that works for

us regularly, and what I do is take him into the next room where the

subject is waiting—the same room you were waiting in before—and I

introduce him as if he had just fi nished being a subject in the experiment.

That is, I say: “This is so-and-so, who’s just fi nished the experiment,

and I’ve asked him to tell you a little of what it’s about before

you start.” The fellow who works for us then, in conversa tion with the

next subject, makes these points: [The *E* then produced a sheet headed

“For Group B” which had written on it: It was very enjoyable, I had a

lot of fun, I enjoyed myself, it was very interesting, it was intrigu ing, it

was exciting. The *E* showed this to the *S* and then proceeded with his

false explanation of the purpose of the experiment] Now, of course, we

have this student do this, because if the experimenter does it, it doesn’t

look realistic, and what we’re interested in doing is comparing how

these two groups do on the experiment—the one with this previous

expectation about the experiment, and the other, like yourself, with

essentially none.

point on they diverged somewhat. Three conditions were run, Con trol,

One Dollar, and Twenty Dollars, as follows:

**Control Condition**

The *E* contin ued:

Is that fairly clear? [Pause.] Look, that fellow [looks at watch] I was telling

you about from the introductory psychology class said he would get here

a couple of minutes from now. Would you mind waiting to see if he wants

to talk to you? Fine. Why don’t we go into the other room to wait? [The

*E* left the *S* in the secretary’s offi ce for four minutes. He then returned and

said:] O.K. Let’s check and see if he does want to talk to you.

**One and Twenty Dollar Conditions**

The *E* continued:

Is that fairly clear how it is set up and what we’re trying to do? [Pause.]

Now, I also have a sort of strange thing to ask you. The thing is this.

[Long pause, some confusion and uncertainty in the following, with

a degree of embarrassment on the part of the *E*. The manner of the *E*

contrasted strongly with the preceding unhesitant and assured false

explanation of the experiment. The point was to make it seem to the *S*

that this was the fi rst time the *E* had done this and that he felt unsure

of himself.] The fellow who normally does this for us couldn’t do it

today—he just phoned in, and something or other came up for him—

so we’ve been looking around for someone that we could hire to do it

for us. You see, we’ve got another subject waiting [looks at watch] who

is supposed to be in that other condition. Now Professor\_\_\_\_\_\_\_, who

is in charge of this experiment, suggested that per haps we could take a

chance on your doing it for us. I’ll tell you what we had in mind: the

thing is, if you could do it for us now, then of course you would know

how to do it, and if something like this should ever come up again, that

is, the regular fellow couldn’t make it, and we had a subject scheduled,

it would be very reassuring to us to know that we had somebody else

we could call on who knew how to do it. So, if you would be willing to

do this for us, we’d like to hire you to do it now and then be on call in

the future, if something like this should ever happen again. We can pay

you a dollar (twenty dollars) for doing this for us, that is, for doing it

now and then being on call. Do you think you could do that for us?

If the *S* hesitated, the *E* said things like, “It will only take a few minutes,”

“The regular person is pretty reliable; this is the fi rst time he has missed,” or “If we

needed you we could phone you a day or two in advance; if you couldn’t make

it, of course, we wouldn’t expect you to come.” After the *S* agreed to do it, the

*E* gave him the previously mentioned sheet of paper headed “For Group B” and

asked him to read it through again. The *E* then paid the *S* one dollar (twenty

dollars), made out a hand-written receipt form, and asked the *S* to sign it. He

then said:

O.K., the way we’ll do it is this. As I said, the next subject should be

here by now. I think the next one is a girl. I’ll take you into the next

room and introduce you to her, saying that you’ve just fi nished the

experiment and that we’ve asked you to tell her a little about it. And

what we want you to do is just sit down and get into a conversation

with her and try to get across the points on that sheet of paper. I’ll leave

you alone and come back after a couple of minutes. O.K.?

The *E* then took the *S* into the secretary’s offi ce where he had previously

waited and where the next *S* was waiting. (The secretary had left the offi ce.) He

introduced the girl and the *S* to one another saying that the *S* had just fi nished

the experiment and would tell her something about it. He then left saying he

would return in a couple of minutes. The girl, an undergraduate hired for this

role, said little until the *S* made some positive remarks about the experimentand then said that she was surprised because a friend of hers had taken the

experiment the week before and had told her that it was boring and that she

ought to try to get out of it. Most *S*s responded by saying something like “Oh,

no, it’s really very interesting. I’m sure you’ll enjoy it.” The girl, after this listened

quietly, accepting and agreeing to everything the *S* told her. The discussion

between the *S* and the girl was recorded on a hidden tape recorder.

After two minutes the *E* returned, asked the girl to go into the experimental

room, thanked the *S* for talking to the girl, wrote down his phone

number to continue the fi ction that we might call on him again in the future

and then said: “Look, could we check and see if that fellow from introductory

psychology wants to talk to you?”

From this point on, the procedure for all three conditions was once more

identical. As the *E* and the *S* started to walk to the offi ce where the interviewer

was, the *E* said: “Thanks very much for working on those tasks for us. I hope

you did enjoy it. Most of our subjects tell us afterward that they found it quite

interesting. You get a chance to see how you react to the tasks and so forth.”

This short persuasive communication was made in all conditions in exactly the

same way. The reason for doing it, theoretically, was to make it easier for anyone

who wanted to persuade himself that the tasks had been, indeed, enjoyable.

When they arrived at the interviewer’s offi ce, the *E* asked the interviewer

whether or not he wanted to talk to the *S*. The interviewer said yes, the *E*

shook hands with the *S*, said good-bye, and left. The interviewer, of course,

was always kept in complete ignorance of which condition the *S* was in. The

interview consisted of four questions, on each of which the *S* was fi rst encouraged

to talk about the matter and was then asked to rate his opinion or reaction

on an 11-point scale. The questions are as follows:

1. Were the tasks interesting and enjoyable? In what way? In what way

were they not? Would you rate how you feel about them on a scale

from –5 to +5 where –5 means they were extremely dull and boring,

+5 means they were extremely interesting and enjoyable, and zero

means they were neutral, neither interesting nor uninteresting.

2. Did the experiment give you an opportunity to learn about your own

ability to perform these tasks? In what way? In what way not? Would

you rate how you feel about this on a scale from 0 to 10 where 0

means you learned nothing and 10 means you learned a great deal.

3. From what you know about the experiment and the tasks involved

in it, would you say the experiment was measuring anything important?

That is, do you think the results may have scientifi c value? In

what way? In what way not? Would you rate your opinion on this

matter on a scale from 0 to 10 where 0 means the results have no

scientifi c value or importance and 10 means they have a great deal of

value and importance.

4. Would you have any desire to participate in another similar experiment?

Why? Why not? Would you rate your desire to participate in

a similar experiment again on a scale from –5 to +5, where –5 means

you would defi nitely dislike to participate, +5 means you would definitely

like to participate, and 0 means you have no particular feel ing

about it one way or the other.

what the *S* had told the girl. This point will be discussed further in connection

with the results.

At the close of the interview the *S* was asked what he thought the experiment

was about and, following this, was asked directly whether or not he was

suspicious of anything and, if so, what he was suspicious of. When the interview

was over, the interviewer brought the *S* back to the experimental room

where the *E* was waiting together with the girl who had posed as the waiting *S*.

(In the control condition, of course, the girl was not there.) The true purpose

of the experiment was then explained to the *S* in detail, and the reasons for

each of the various steps in the experiment were explained carefully in relation

to the true purpose. All experimental *S*s in both One Dollar and Twenty

Dollar condi tions were asked, after this explanation, to return the money they

had been given. All *S*s, without exception, were quite willing to return the

money.

The data from 11 of the 71 *S*s in the experiment had to be discarded for

the following reasons:

1. Five *S*s (three in the One Dollar and two in the Twenty Dollar condition)

indicated in the interview that they were suspicious about having

been paid to tell the girl the experiment was fun and suspected

that that was the real purpose of the experiment.

2. Two *S*s (both in the One Dollar condition) told the girl that they had

been hired, that the experiment was really boring but they were supposed

to say it was fun.

3. Three *S*s (one in the One Dollar and two in the Twenty Dollar condition)

refused to take the money and refused to be hired.

4. One *S* (in the One Dollar condition), immediately after having talked

to the girl, demanded her phone number saying he would call her

and explain things, and also told the *E* he wanted to wait until she

was fi nished so he could tell her about it.

These 11 *S*s were, of course, run through the total experiment anyhow

and the experiment was explained to them afterwards. Their data, however,

are not included in the analysis.

**Daryl J. Bem NO**

**Self-Perception: An Alternative**

**Interpretation of Cognitive**

**Dissonance Phenomena1**

**I**f a person holds two cognitions that are inconsistent with one another, he

will experience the pressure of an aversive motivational state called cognitive

dissonance, a pressure which he will seek to remove, among other ways, by

altering one of the two “dissonant” cognitions. This proposition is the heart of

Festinger’s (1957) theory of cognitive dissonance, a theory which has received

more widespread attention from personality and social psychologists in the

past 10 years than any other contemporary statement about human behavior.

Only 5 years after its introduction, Brehm and Cohen (1962) could review over

50 studies conducted within the framework of dissonance theory; and, in the

5 years since the appearance of their book, every major social-psy chologicaljournal has averaged at least one article per issue probing some prediction

“derived” from the basic propositions of dissonance theory. In popularity,

even the empirical law of effect now appears to be running a poor second.

The theory has also had its critics. Reservations about various aspects of

the theory have ranged from mild (e.g., Asch, 1958; Bruner, 1957; Kelly, 1962;

Osgood, 1960; Zajonc, 1960) to severe (Chapanis & Chapanis, 1964), and alternative

interpretations have been offered to account for the results of particular

studies (e.g., Chapanis & Chapanis, 1964; Janis & Gilmore, 1956; Lott,

1963; Rosenberg, 1965). No theoretical alternative to dissonance theory has

been proposed, however, which attempts both to embrace its major phenomena

and to account for some of the secondary patterns of results which have

appeared in the supporting experiments but which were not predicted by the

theory. This article proposes such an alternative.

**The Forced-Compliance Studies**

The most frequently cited evidence for dissonance theory comes from an

experimental procedure known as the forced-compliance paradigm. In these

experiments, an individual is induced to engage in some behavior that would

imply his endorsement of a particular set of beliefs or attitudes. Following his

behavior, his “actual” attitude on belief is assessed to see if it is a function

of the behavior in which he has engaged and of the manipulated stimulus con ditions under which it was evoked. The best known and most widely

quoted study of this type was conducted by Festinger and Carlsmith (1959). In

their experiment, 60 undergraduates were randomly assigned to one of three

experimental conditions. In the $1 condition, *S* was fi rst required to perform

long repetitive laboratory tasks in an individual experimental session. He was

then hired by the experimenter as an “assistant” and paid $1 to tell a waiting

fellow student (a stooge) that the tasks were enjoyable and interesting. In the

$20 condition, each *S* was hired for $20 to do the same thing. Control *S*s simply

engaged in the repetitive tasks. After the experiment, each *S* indicated how

much he had enjoyed the tasks. The results show that *S*s paid $1 evalu ated the

tasks as signifi cantly more enjoyable than did *S*s who had been paid $20. The

$20 *S*s did not express attitude signifi cantly different from those expressed by

the control *S*s.

Dissonance theory interprets these fi ndings by noting that all *S*s initially

hold the cognition that the tasks are dull and boring. In addition, however, the

experimental *S*s have the cognition that they have expressed favorable atti tudes

toward the tasks to a fellow student. These two cognitions are dissonant for *S*s

in the $1 condition because their overt behavior does not “follow from” their

cognition about the task, nor does it follow from the small compensation they

are receiving. To reduce the resulting dissonance pressure, they change their

cognition about the task so that it is consistent with their overt behavior: they

become more favorable toward the tasks. The *S*s in the $20 condition, however,

experience little or no dissonance because engaging in such behavior “follows

from” the large compensation they are receiving. Hence, their fi nal attitude

ratings do not differ from those of the control group.

In contrast with this explanation, the present analysis views these results

as a case of self-perception. Consider the viewpoint of an outside observer who

hears the individual making favorable statements about the tasks to a fellow

student, and who further knows that the individual was paid $1 ($20) to do

so. This hypothetical observer is then asked to state the actual attitude of the

individual he has heard. An outside observer would almost certainly judge a

$20 communicator to be “manding” reinforcement (Skin ner, 1957); that is,

his behavior appears to be under the control of the rein forcement contingencies

of the money and not at all under the discriminative control of the tasks

he appears to be describing. The $20 com municator is not credible in that

his statements cannot be used as a guide for inferring his actual attitudes.

Hence, the observer could conclude that the individual found such repetitive

tasks dull and boring in spite of what he had said. Although the behavior of a

$1 communicator also has some mand prop erties, an outside observer would

be more likely to judge him to be express ing his actual attitudes and, hence,

would infer the communicator’s attitude from the content of the communication

itself. He would thus judge this indi vidual to be favorable toward the

tasks. If one now places the hypothetical observer and the communicator into

the same skin, the fi ndings obtained by Festinger and Carlsmith are the result.

There is no aversive motivational pres sure postulated; the dependent variable

is viewed simply as a self-judgment based on the available evidence, evidence

that includes the apparent control ling variables of the observed behavior. If this analysis of the fi ndings is correct, then it should be possible to

replicate the inverse functional relation between amount of compensation

and the fi nal attitude statement by actually letting an outside observer try to

infer the attitude of an *S* in the original study. Conceptually, this replicates the

Festinger-Carlsmith experiment with the single exception that the observer

and the observed are no longer the same individual.