Cognitive Dissonance Experiment

The Cognitive Dissonance Experiment is based on the theory of cognitive dissonance proposed by Leon Festinger in the year 1957: People hold many different cognitions about their world, e.g. about their environment and their personalities.

In an event wherein some of these cognitions clash, an unsettled state of tension occurs and this is called cognitive dissonance.

Within the same theory, Festinger suggests that every person has innate drives to keep all his cognitions in a harmonious state and avoid a state of tension or dissonance. If a person encounters a state of dissonance, the discomfort brought by the conflict of cognition leads to an alteration in one of the involved cognitions to reduce the conflict and bring a harmonious state once again.

The Classic Experiment of Leon Festinger

Deception [1] is the cornerstone of the experiment conceived by Leon Festinger in the year 1959. He hoped to exhibit cognitive dissonance in an experiment which was cleverly disguised as a performance experiment.

Initially, subjects will be told that they will be participating in a two-hour experiment. Participants will be briefed that the experiment aims to observe the relationship between
expectations and the actual experience of a task. With no other introduction about the experiment, the subject will be shown the first task which involves putting 12 spools into a tray, emptying it again, refilling the tray and so on.

The subject will be instructed to do this for thirty minutes. After the said time, the experimenter will approach the subject and ask him to turn 48 square pegs a quarter turn in a clockwise direction, then another quarter, and so on. Bored to hell, the subject must finish the task. The subjects will be advised to work on both experiments on their own preferred speed. While the subject is doing the tasks, the experimenter acts as if recording the progress of the subject and timing him accordingly.

After finishing the two tasks, the subjects will be debriefed.

The experimenter will tell the subject that the experiment contains two separate groups. In one group, the group you were in, subjects were only told instructions to accomplish the tasks and very little about the experiment. The other group however, was given a thorough introduction about the experiment. Subjects in the other group were also briefed by a student we've hired who also finished the task so they have accurate expectations about the experiment.

Up to this point of the experiment, all the treatment conditions were identical. Divergence occurs after this point; conditions divide into Control, One Dollar and Twenty Dollars.

The following step of the experimenter is the master deception of all. After debriefing the subject, he then acts as if he is very nervous and it is the first time that he will do this.

He then tells the subjects that the other group needs someone who will give them a background about the experiment. For some reason, the student the experimenters hired was not available for the given day. The subject will be told that he will be given (One Dollar or Twenty Dollars) if he will do the request. After agreeing, the subject will be handed a piece of paper containing the vital points that he needs to impart to the next subjects of the other groups. The notes include:

It was very enjoyable, very exciting, I had a lot of fun. I enjoyed myself. It was very interesting. It was really intriguing.

After this part, all the treatment conditions will be proceeding similarly again.

After briefing the subjects in the other group, the subject will be interviewed to know his thoughts about the experiment. The questions include:

1. Were the tasks interesting and enjoyable? 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.
2. Did the experiment give you an opportunity to learn about your own ability to perform these tasks? 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. Do you think the results of the experiment may have scientific value? Would you rate your opinion on this matter on a scale from 0 to 10 where 0 means the results have no scientific 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? Would you rate your desire to participate in a similar experiment again on a scale from -5 to +5, where -5 means you would definitely dislike to participate, +5 means you would definitely like to participate, and 0 means you have no particular feeling.

Results of the Experiment

<table>
<thead>
<tr>
<th>Questions in Interview</th>
<th>Control</th>
<th>One Dollar</th>
<th>Twenty Dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td>How enjoyable tasks were</td>
<td>-0.45</td>
<td>1.35</td>
<td>-0.05</td>
</tr>
<tr>
<td>How much you learned</td>
<td>3.08</td>
<td>2.80</td>
<td>3.15</td>
</tr>
<tr>
<td>Scientific importance</td>
<td>5.60</td>
<td>6.45</td>
<td>5.18</td>
</tr>
<tr>
<td>Would participate in similar experiment</td>
<td>-0.62</td>
<td>1.20</td>
<td>-0.25</td>
</tr>
</tbody>
</table>

The most relevant of all these data is the first row, how enjoyable the tasks were since we are looking at cognitive dissonance [3]. Since the tasks were purposefully crafted to be monotonous and boring, the control group averaged -0.45. On the other hand, the One Dollar group showed a significantly higher score with +1.35. The resulting dissonance in the subjects was somehow reduced by persuading themselves that the tasks were indeed interesting. Comparing this result to the results from the Twenty Dollar group, we see a significantly lower score in the Twenty Dollar group -0.05.

Conclusions

Two conclusions were obtained from the results.

First, if a person is induced to do or say something which is contrary to his private opinion, there will be a tendency for him to change his opinion so as to bring it into correspondence with what he has done or said.

Second, the larger the pressure used to change one’s private opinion, beyond the minimum needed to change it, the weaker will be the above-mentioned tendency. This is clearly evident in the results of the Twenty Dollar group, the experimenters obtained a lower score since they used a large amount of pressure compared to One Dollar which can be considered as the minimum pressure needed to make the change of opinion.

Source URL: https://explorable.com/cognitive-dissonance-experiment

Links
[1] https://explorable.com/deception-and-research