

## Seminal Studies In Social Psychology

[Asch S. E. \(1956\) Studies of independence and conformity](#)

[Sherif M. \(1956\) Experiments in inter-group conflict.](#)

[Festinger and Carlsmith \(1959\) Cognitive consequences of forced compliance](#)

### Asch S. E. (1956) Studies of independence and conformity



Solomon E. Asch was born in Warsaw, Poland, on September 14, 1907. He came to the United States in 1920 and received a Ph.D. from Columbia University in 1932. His mentor there was the gestalt psychologist Max Wertheimer. On joining Swarthmore College he spent the next 19 years working with another notable gestalt psychologist Wolfgang Kohler. Asch was assisted in his work into conformity by a young Stanley Milgram, who himself was later to achieve worldwide fame with his studies into obedience to authority.

#### What is conformity?

Conformity is any change in a person's behaviour or opinions as a result of real or imagined pressure from a person or group of people (Keegan, 2004).

Asch said that conformity should be measured in terms of our tendency to give the wrong answer on a task where the solution is obvious or *unambiguous*. This was because of a criticism levelled at an earlier study done by Sherif (1935) called the Autokinetic Effect. Regards this, Asch and others thought Sherif's task ambiguous, and that this ambiguity influenced the degree of individual conformity shown.

#### Asch and Conformity

ASCH, S.E. Studies of independence and conformity: a minority of one against a unanimous majority. Psychological Monographs, 1956, 70.

#### Aim

The aim of these studies was to investigate conformity in a group situation.

#### Method

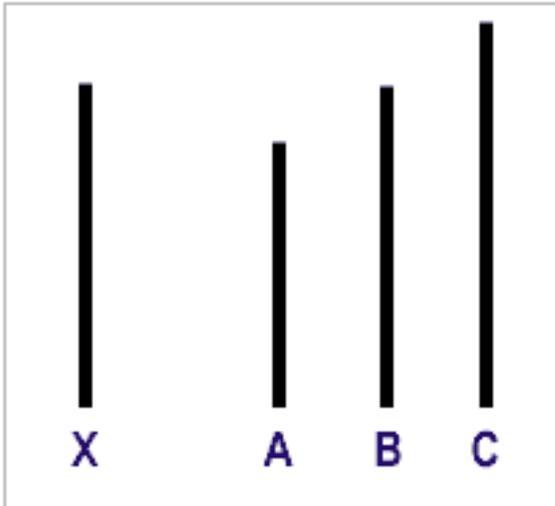
Laboratory experiment

Independent variable:

There were various manipulations of the IV. Main one involved stooges giving a wrong answer on the size of a line at particular points (critical trials) during the experiment. Other manipulations included the changing the size of the group; whether a stooge (dissenter) disagreed with the majority; and whether the adjudging line task took place in

private or public.

Initially in a pilot study Asch tested 36 participants INDIVIDUALLY on 20 presentations of stimuli like the one below. When asked to compare and identify the standard line with the three A, B, C comparison lines only three mistakes were made in 720 trials (0.42 error rate). The purpose of the pilot was to ascertain that the task was both simple and unambiguous. This procedure in social psychology is known as the **Asch Paradigm**.



Some of his participants were then asked to take part in the main experiment, but this time in a group. They were told that the group was to have a 'naïve' participant who would not know that they were stooges.

On certain critical trials, of which there were 12, Asch secretly signalled the stooges to give the same wrong answer. These were interspersed by 6 neutral (right answer) trials, giving 18 trials in all. 50 naïve participants were recruited.

Dependent variable:

The occurrence of a conformity response by naïve participants when the critical trials occurred.

### **Procedure**

Naïve participant is brought into lab with 7-9 stooges  
Seated last, or last but one, at a straight or round table  
Asked to make a judgment about line length.

In 12 of 18 trials stooges gave wrong answer. NB DV is whether participant concurs.

### **Results**

Asch found a mean conformity rate of 32% over all trials.

No one conformed on all of the critical trials

Of the 50 naïve participants who took part 13 (20%) never conformed

1 conformed on eleven of 12 critical trials

38 conformed at least once on 12 critical trials

In further studies using his Asch Paradigm he discovered other variables that affect group conformity

Size of group: as group size increases to 3 others, conformity increases. After that, little

change. One naïve participant, one stooge: 3% conformity. One naïve participant, two stooges: 14% conformity. One naïve participant, three stooges: 32% conformity (confirmed results of original experiment above).

Unanimity: Presence of one dissenter amongst the stooges decreases conformity immensely.

Privacy: The more private the setting the naïve participant is allowed to give their answer (e.g. writing it down/behind a screen) the less conformity there was (12.5%).

### **Why?**

When asked *why* they had conformed naïve participants reported the following:

To convey a good impression of himself or herself to the experimenter.

Not to upset the experimenter.

Some genuinely believed their eyesight had suddenly got worse and that the stooges therefore must be right.

Not to look inferior. Not to be a social outcast. These participants had a private belief that the stooges were wrong but kept it to themselves.

To be like everyone else, to appear part of the group.

For any Freudians reading this you will be interested to discover that some later denied they had conformed, when clearly they had! (Asch was himself an admirer of Freud).

### **Variables Asch found That Increase/Decrease Conformity**

Decrease: lack of unanimity

Decrease: induce individual to make commitment to their initial judgment

Decrease: high-self esteem individuals

Decrease: Whether you come from an Individualistic or Collective culture

Decrease: feeling of security in a group

Increase: perceived expert power

Increase: similarity of group to the individual

### **What Others Say**

Eiser (1987) says 'for Asch, the important finding was that there was any conformity at

all.'

This study became a classic and is to be found in all texts on psychology. However, studies carried out from 1980 onwards have undermined this classic status - or at least preferred *alternative* explanations for the amount of conformity found.

Perrin and Spencer (1980, 1981) suggested that the Asch effect was a "child of its time". They carried out an exact replication of the original Asch experiment using engineering, mathematics and chemistry students as subjects. The results were clear-cut: on only one out of 396 trials did an observer join the erroneous majority. They argue that a cultural change has taken place in the value placed on conformity and obedience and in the position of students. In America in the 1950s students were unobtrusive members of society whereas now they occupy a free questioning role. (See Perrin, S & Spencer, C, 1980. 'The Asch effect - a child of its time'. *Bulletin of the BPS*, 33, 405-406).

Nicholson, N., Cole, S. & Rocklin, T (1985). 'Conformity in the Asch situation: a comparison between contemporary British and US Students'. *British Journal of Social Psychology*, 24, 59-63. Nicholson *et al.* were more positive. They found while the number of error responses obtained was significantly less than those reported by Asch, it was also significantly greater than zero (12 out of the UK sample of 38 and 8 of the US sample of 21 conformed at least once). British and American students did not differ in their responses to unanimous peer-group opinion.

Lalancette, M-F & Standing, L.G (1990). 'Asch fails again'. *Social Behaviour and Personality*; 18(1) 7-12. Lalancette and Standing modified the social conformity paradigm of Asch (1956) to (1) make the test stimuli more ambiguous and (2) increase the likelihood of obtaining conformity in an experiment with 40 undergraduates. With the same aim, anonymous and individuated conditions were used. As with a previous attempt to replicate Asch (Perrin and Spencer, 1981), no conformity was observed. They conclude that the Asch effect appears to be an unpredictable phenomenon rather than a stable tendency of human behaviour.

Neto, F. (1995). 'Conformity and independence revisited'. *Social Behaviour and Personality*, 23 (3), 217-222 This study aimed at investigating whether conformity in the experimental setting suggested by Asch was particularly related to American culture and less likely to be replicable elsewhere - e.g. in Portugal - as has been suggested more recently. Thus, Asch's classic conformity and independence experiment was replicated, using women psychology students in a Portuguese university as minority of one, unanimous majority group, and control participants. The original procedure was re-enacted as similarly as possible using a computer program. Among participants in the experimental condition 59% conformed at least once, 28% yielded three to twelve times. Among participants in the control condition 27% erred at least once, 3.3% made more than three errors. The differences between the experimental and control group was significant. Thus this shows that a degree of conformity to a unanimous peer-group opinion remains observable. Participants reported considerable distress under the group pressure.

## Sherif M. (1956) Experiments in inter-group conflict.

### Introduction and Overview



Muzafer Sherif is a famous social psychologist important to the psychological understanding of groups and its members. His main contribution is known as **Realistic Conflict Theory**, and accounts for group conflict, negative prejudices, and stereotypes as being the result of competition between groups for desired resources. Sherif validated his theory in one his most famous experiments, "The Robber's Cave"

In this **field experiment**, 22 white, fifth grade (P7/S1), 11-year-old boys with average-to-good school records, and above average intelligence were sent to a special remote summer camp in Oklahoma, Robbers Cave State Park. They all shared a Protestant, two-parent background. The remoteness of the part ensured that the study remained free

from external influences and that the true nature of conflict and prejudice could be studied. None of the boys knew each other prior to the study. The researchers *randomly* divided the boys into two different groups, and assigned them cabins far apart from each other. During this first phase, the groups did not know of the other group's existence. The boys developed an attachment to their groups throughout the first week of the camp by doing various activities together like hiking, swimming, etc. The boys chose names for their groups, **The Eagles** and **The Rattlers**, and stencilled them onto shirts and flags.

At this point, the next part of the study began. Sherif set up a four-day series of competitions between the groups, and promised trophies, medals, and camping knives to the winners. As the competition progressed, *prejudice* began to become apparent between the two groups.

At first, this prejudice was only verbally expressed, such as taunting or name-calling. As the competition wore on, this expression took a more direct route. The Eagles burned the Rattler's flag. Then the next day, the Rattler's ransacked The Eagle's cabin, overturned beds, and stole private property. The groups became so aggressive with each other that the researchers had to physically separate them.

During the subsequent two-day cooling off period, the boys listed features of the two groups. The boys tended to characterize their own **in-group** in very favourable terms, and the other **out-group** in very unfavourable terms.

Sherif then attempted to reduce the prejudice, or *inter-group conflict*, shown by each group. However, simply increasing the contact of the two groups only made the situation worse. This was because they noised each other up even more! Alternatively forcing the groups to work together to reach common goals, eased prejudice and tension among the groups. This experiment confirmed Sherif's realistic conflict theory.

### The study itself: The Robbers Cave Experiment

In the mid-1950's Muzafer Sherif and others carried out the Robbers Cave experiment on intergroup conflict and co-operation as a part of research programme at the University of Oklahoma. This large-scale Intergroup Relations Project was established as an interdisciplinary "psychological" and "sociological" approach to the testing of a number of hypotheses about intergroup relations.

The hypotheses tested were:

(1) When individuals who don't know each other are brought together to interact in group activities in order to achieve common goals, they will produce a group structure with hierarchical statuses and roles within it.

(2) When two in-groups, once formed, are brought into functional relationship under conditions of competition and group frustration, attitudes and appropriate hostile actions in relation to the out-group and its members will arise; these will be standardised and shared in varying degrees by group members.

The experiment initially called for the selection of 24 boys of about 12 years of age from similar, settled, lower middle-class Protestant backgrounds. They were to be well adjusted psychologically, of normal physical development, and in the same year at school.

In the event 22 such young persons were selected and were randomly divided by the researchers into two groups, with efforts being made to balance the physical, mental and social talents of the groups. They were then, as individual groups, picked up by bus on successive days in the summer of 1954 and transported to a 200 acre Boy Scouts of America camp in the Robbers Cave State Park in Oklahoma.

At the camp the groups were kept separate from each other and were encouraged to bond as two individual groups through the pursuit of common goals that required co-operative discussion, planning and execution. As expected, and in line with the findings of earlier studies, over the initial five or six day "first stage" of the experiment the two groups of boys tended to individually generate their own acceptance of common membership and their own status hierarchies. One group adopted spontaneously name of "The Rattlers" and the other similarly the name of "The Eagles."

As each group became aware of the presence of the other group the boys become reinforced regards being in a particular group and defensive about the camp facilities that their group enjoyed, and that the other group might be "abusing." Both groups were happy to encourage the camp staff (i.e. the researchers) to arrange some sort of competition against the other. Performance in all activities like tent pitching, baseball, etc. was entered into with more zest and also with more efficiency.

The researches now arranged Stage Two or the **Competition Stage** where friction between the groups was to occur over the next 4-6 days. In this phase it was intended to bring the two groups into competition with each other in conditions that would create *frustration* between them. A series of competitive activities were arranged with a trophy being awarded on the basis of accumulated team score. There were also individual prizes for the winning group such as a medal and a multi-bladed pocketknife with no consolation

prizes being given to the "losers."

The Rattlers' reaction to the informal announcement of a series of contests was absolute confidence in their victory! They spent the day talking about the contests and making improvements on the ball field, which they took over as their own to such an extent that they spoke of putting a "Keep Off" sign there! They ended up putting their Rattler flag on the pitch. At this time, several Rattlers made threatening remarks about what they would do if anybody from The Eagles bothered their flag.

When the two competing groups were brought together for the first time in the mess hall there was considerable name-calling, teasing, and singing of derogatory songs by each group in turn. Before supper that evening, some Eagles expressed a desire not to eat with the Rattlers.

Following on from this the groups showed disrespect for each other's flags (i.e. each group actually felt moved to burn the others flag), and they also raided each other's cabins. After the Eagles, with the discreet connivance of the researchers, won the contest the Rattlers raided their cabin again, and removed any medals or pocket-knives they could find!

In the row that ensued the Rattlers and the Eagles almost came to blows. The names, which had previously been routinely hurled back and forth ("stinkers, " "braggers, " "sissies, " and many considerably worse) now intensified. Derogation of the out-group was expressed in word and deed e.g. holding noses when in their vicinity. Now also both groups objected to eating in the same mess hall at the same time.

The researchers now embarked upon Stage Three, or the **Integration Phase**, which was intended to dispel the present state of friction and was intended to last some 6-7 days.

There were to be a number of improvised, and hopefully reconciliatory, get-to-know-you opportunities such as a bean-collecting contest, or the showing of a film, or the shooting of Firecrackers to celebrate the fourth of July. In the event this series of reconciliatory opportunities did not lead to any appreciable lessening of tensions between the Eagles and the Rattlers. Several such get-to-know-you opportunities ended in food fights.

Sherif et al. concluded that such contrived contact opportunities were not going to lessen tensions between the groups. They now arranged for the introduction of a number of scenarios presenting **superordinate goals** which could not be easily ignored by members of the two antagonistic groups, but the attainment of which was beyond the resources and efforts of one group alone. These scenarios were played out at a new location in the belief that this would tend to inhibit recall of grievances that had been experienced at Robbers Cave.

**The Drinking Water Problem:** The first superordinate goal to be introduced concerned a common resource used by both groups. Their water supply, which had suddenly stopped flowing.

All of the drinking water in the camp came from a reservoir on the mountain north of the camp. The water supply had failed and the Camp staff blamed this on "vandals." Upon

investigations of the extensive water lines by the Eagles and the Rattlers as separate groups, they discovered that an outlet faucet had a sack stuffed into it. Almost all the boys gathered around the faucet to try to clear it. Suggestions from members of both groups concerning effective ways to unblock the obstruction were thrown in from all sides simultaneously which led to cooperative efforts clearing the obstacle itself. The joint work on the faucet lasted over 45 minutes.

When the water finally came on there was common rejoicing. The Rattlers did not object to having the Eagles get ahead of them when they all got a drink, as the Eagles did not have canteens with them and were thirstier. No protests or "Ladies first" type of remarks were made!

**The Problem of Securing a Movie:** The next superordinate goal to be introduced was a favourite feature-length movie for boys of their age. Two films had been chosen in consultation with children's movie experts and brought to the camp along with other stimulus materials. In the afternoon, the boys were called together and the staff suggested the possibility of watching either "Treasure Island" or "Kidnapped": Both groups yelled approval of these films. After some discussion, one Rattler said, "Everyone that wants Treasure Island raise their hands." The majority of members in both groups gave enthusiastic approval to "Treasure Island" even though a few dissensions were expressed to this choice.

Then the staff announced that securing the film would cost \$15 and the camp could not pay the whole sum!

After much discussion it was suggested that both groups would pay \$3.50 and the camp would pay the balance. This was accepted even though, as a couple of homesick Eagles had gone home, the contribution per person per group was unequal.

At supper that night there were no objections to eating together. Some scuffling and sticking chewing gum on each other occurred between members of the two groups, but it involved fewer boys on both sides than were usually involved in such encounters.

Other problem-solving superordinate goals introduced in this phase included the joint use of a tug-of-war-rope, and both groups of boys 'accidentally' coming across a stuck-in-a-rut truck that was carrying food for both groups.

In the event the joint pursuit of such superordinate goals saw a lessening of intergroup conflict. At breakfast and lunch on the last day of camp, the seating arrangements were considerably mixed up insofar as group membership was concerned.

The majority of the boys agreed by the last day that it would be a good thing to return to Oklahoma City together on one bus. When they asked if this was possible, and were told yes by the staff, some of the boys actually cheered. When the bus pulled out, the seating arrangement did not follow group lines.

Just before the bus pulled into the town where a refreshment stop was planned, a Rattler asked if they still had the five-dollar reward they had won in the bean contest. Others repeated this inquiry when the boys were at the refreshment stand, and the Rattler leader

suggested that their five dollars be spent on soft drinks for *all* the boys in *both* groups. Several Rattlers nearby agreed; and the others approved the idea when asked. This meant that drinks for all the boys were paid for with the five dollars contributed by the Rattlers, though each boy paid for sandwiches and other treats himself.

Sherif M. (1956) Experiments in inter-group conflict can be read in its original at: <http://psychclassics.yorku.ca/Sherif/>

## **Festinger and Carlsmith (1959) Cognitive consequences of forced compliance**

First published in Journal of Abnormal and Social Psychology, 58, 203-210, and can be read in its original at <http://psychclassics.yorku.ca/Festinger/>

### **Introduction and Overview**



Cognitive Consistency Theory proposes that people are motivated to change and act consistently with their beliefs, values, and perceptions when there is psychological inconsistency or disagreement between two pieces of information. The conflict between the inconsistent factors produces **cognitive dissonance**.

Cognitive dissonance arises when faced with two conflicting pieces of information because we begin to doubt previously held thoughts, beliefs, or values. These doubts produce uncomfortable feelings and may interfere with our ability to act. The pros and cons of each factor are examined. The resolution of dissonance occurs when one factor is seen by us as more attractive than the other. Prior to the resolution of dissonance, the dilemma between the conflicting factors prevents action. When dissonance is resolved, the person is better able to act in accordance with the more attractive factor because beliefs, values, and perceptions agree with the behaviour.

1. This modern theory of motivation contained in **Festinger's Cognitive Consistency Theory (1957)** illustrates that commitment to a decision is the beginning, not the end of conflict.

**Festinger and Carlsmith (1959)**. Cognitive consequences of forced compliance. Journal of Abnormal and Social Psychology, 58, 203-210.

If you want to buy a man's beliefs, how much should you pay him?

Festinger and Carlsmith, social psychologists at Stanford University, explored this question in 1956. The following aspects of cognitive dissonance were investigated by way of laboratory experiment and interview.

1. That when an individual is forced to act in a manner that is contrary to his private attitude, he will experience dissonance.
2. That when external forces which compel him to act contrary to his attitudes are overwhelmingly strong, the total magnitude of dissonance will be minimal; if the forces are weak, or just barely strong enough to induce him to act, or behave the way he does, dissonance will be maximal.
3. That one way to reduce dissonance is for the individual to change his attitude to correspond with his action/behaviour. Since the pressure to reduce dissonance is related to the magnitude of it, Festinger and Carlsmith thought that attitude change should be greatest when the force used to induce the action/behaviour is just minimally sufficient.

Three groups of 20 undergraduate students each were used as participants. There were three conditions of the independent variable. In the "One-Dollar" group, the subjects were first required to perform repetitive and monotonous tasks. They were then hired by the experimenter as an "assistant" and paid one dollar to tell a waiting fellow student that the tasks were enjoyable and interesting! In the "Twenty-Dollar" group, the subjects were hired for twenty dollars to do the same thing. Control subjects merely performed the monotonous tasks.

A post experimental interview was then held to learn the participants' attitudes toward the tasks. The interviewer was identified as a member of the psychology department who was conducting a study of the experiments in which elementary psychology students were required as participants. The true purpose of the interview was to get valid expressions of the subjects' private attitudes.

The results confirmed cognitive dissonance theory. The One-Dollar subjects had persuaded themselves that the tasks were really interesting and enjoyable. The Twenty-Dollar subjects had not changed their private opinions (as compared against the control group). Like the control group they too thought it was incredibly boring, but as they got \$20 for it, who gave a s\*\*\*!