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BUS BOYCOTT IN MONTGOMERY

<https://www.socialistalternative.org/2016/11/16/60th-anniversary-montgomery-bus-boycott-struggle-sparked-civil-rights-movement/>



STUDIES ON SOCIAL INFLUENCE

“Majority and Minority Influence Using the
Afterimage Paradigm”

Overview

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BACKGROUND

02

THE STUDY

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04

OVERALL
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DISCUSSION

BACKGROUND

- * June 14th ,1925 in Braila, Romania
- † November 15th , 2014 in Paris
- Suffered from **anti-semitic discrimination** from an early age on
 - > 1938 **excluded** from Bucharest **high school**
- During World War II
 - > witnessed **Bucharest Pogrom (1941)**
 - > brought into **labor camp**
 - > freed by Soviet Red Army in 1944

Serge Moscovici
Romanian-born French Social Psychologist



<https://upload.wikimedia.org/wikipedia/commons/e/e2/2003Moscovici2.jpg>

BACKGROUND

- Fled to Paris, France
-> **studied Psychology** due to help from
refugee fund
- Worked as Psychologist at **Stanford
University and Yale**

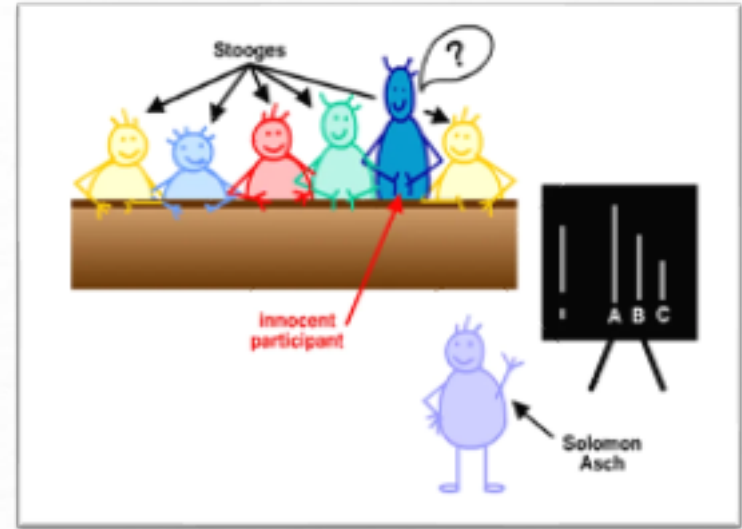
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<https://upload.wikimedia.org/wikipedia/commons/e/e2/2003Moscovici2.jpg>

BACKGROUND

- Moscovici and Personnaz based their ideas on **Asch's conformity experiment**
- Asch focused on the effect a **majority group** has on influencing ones beliefs
- Moscovici and Personnaz extended this idea by paying **closer attention to the influence of a minority**



<https://www.simplypsychology.org/wp-content/uploads/asch-experiment.jpg>

CONVERSION THEORY

“Conversion Theory” describes the influence of either a majority or minority separated in two different cognitive processes and a change in private or public response

COMPARISON PROCESS

- **Majority influence**
- **Comparing own response without actually analyzing majority's message**
- **No change in actual belief (public)**

CONVERSION BEHAVIOR

- **Minority influence**
- **No public change but start of validation process**
- **Leads to private change**

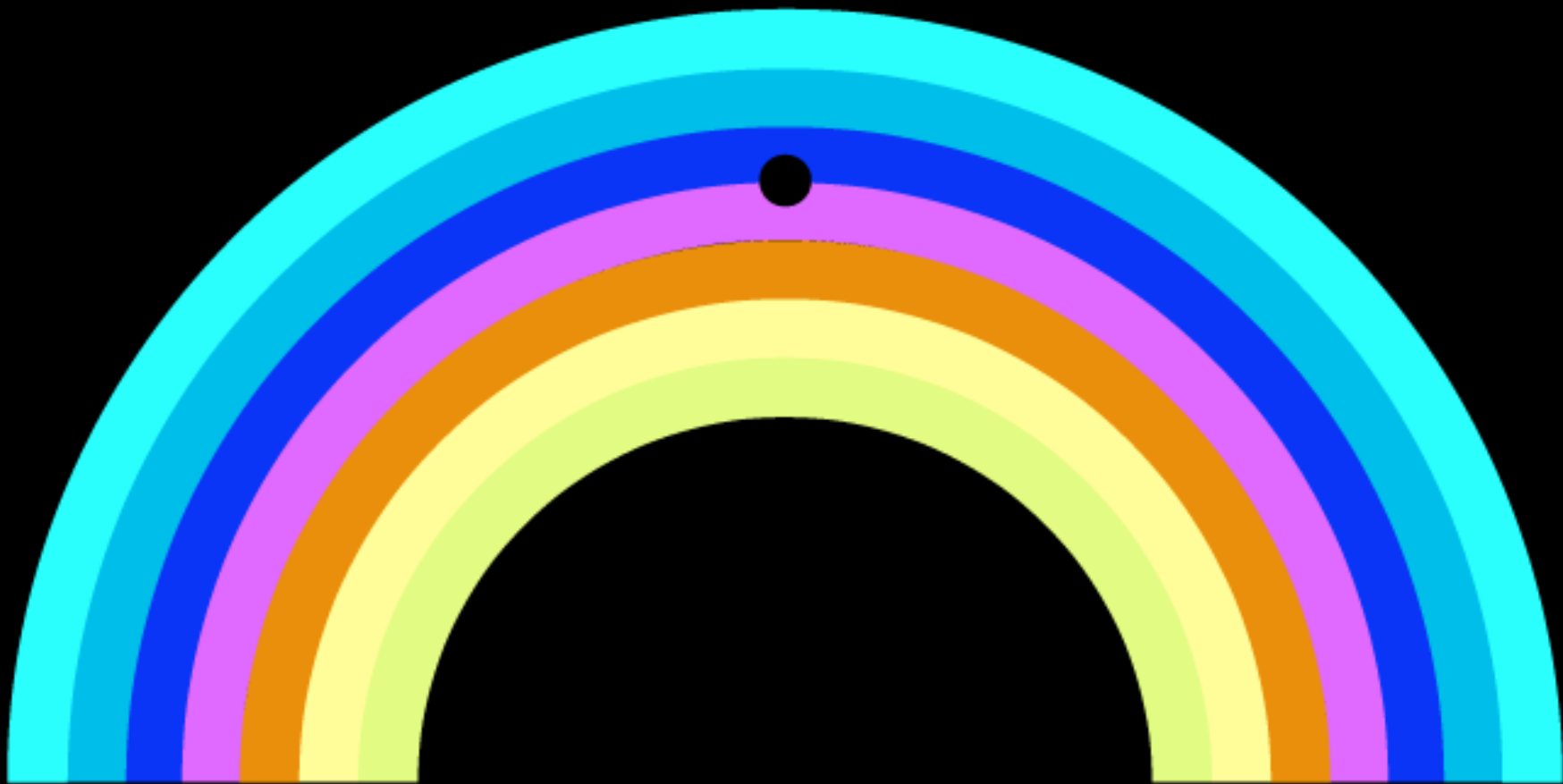


WHICH PROPERTIES DO YOU CONSIDER TO BE
IMPORTANT FOR A MINORITY TO HAVE AN
INFLUENCE OVER A MAJORITY?

NAME 3-4



THE STUDY



<https://www.brainhq.com/brain-resources/brain-teasers/rainbow-illusion/p>

THE STUDY

Two tasks:

- 1) Judge color of slide (blue slide)
- 2) Judge color of chromatic afterimage on a 9-point-scale



CHROMATIC CIRCLE



<https://thesisterisadoraknocking.files.wordpress.com/2014/06/chromatic-circle.png>

CU^u

THE STUDY

- examined the influence of a **consistent minority** on cognitive and personal processes
- only female students as subjects plus a female confederate
- confederate represents either majority or minority

Majority and Minority Influence Using the Afterimage Paradigm: A Series of Attempted Replications

Robin Martin

School of Psychology, University of Wales, Cardiff, P.O. Box 901, Cardiff CF1 3YG, United Kingdom

Received: February 22, 1996; revised: March 3, 1997; accepted: July 28, 1997

Five experiments are reported which attempt to replicate Moscovici and Personnaz's (1980) study that showed that a minority, but not a majority, produced a perceptual conversion in a task involving afterimage judgments. Given the theoretical importance of the study, a number of replications were conducted which were designed to test four explanations. The experiments also address a methodological issue that had not been previously examined, namely within-phase effects. Afterimage shifts were found for a majority and minority source only when there were more trials after-inphase effect than pre-influence. In all the experiments there was a consistent within-phase effect showing afterimages gradually shifted toward the complementary color of green. These results suggest that afterimage shifts are due to a within-phase effect of afterimages progressing to the complementary color of green and to subject suspiciousness. Comments moving to the question the validity of the paradigm as an approach to the study of conversion theory. © 1998 Academic Press

INTRODUCTION

This paper describes a series of experiments designed to replicate Moscovici and Personnaz's (1980) study that claims to show that a minority, but not a majority, produced a perceptual conversion. The results of this study are compared with those of other studies in the conversion Theory. Moscovici proposes that majority influence is determined by two separate cognitive processes: public and private influence. In the case of a majority, the public process whereby the majority influences the minority is a comparison process whereby the majority compares its own response with that of the majority.

Part of this research was funded by the Social Sciences and Humanities Research Council of Canada. I am grateful to Miles Hewstone and John Turner for constructive comments and to two anonymous reviewers for constructive comments. Address reprint requests to Robin Martin, School of Psychology, Cardiff University, P.O. Box 901, Cardiff CF1 3YG.

JOURNAL OF EXPERIMENTAL SOCIAL PSYCHOLOGY 16, 270-282 (1980)

V. Minority Influence and Conversion Behavior in a Perceptual Task

SERGE MOSCOVICI

École des Hautes Études en Sciences Sociales

AND

BERNARD PERSONNAZ

Laboratoire de Psychologie Sociale de l'Université Paris VII associée au Centre National de Recherche Scientifique

Received February 15, 1979

The effects of influence attempts by a majority and by a minority were examined on both a manifest response level and a latent perceptual level. Female subjects were exposed to a series of blue slides that were consistently labeled as green by a female confederate. The confederate was presented as a member of either a majority or a minority. On each trial, subjects were required to indicate the color of the slide presented and the color of the afterimage perceived on a white screen following removal of the slide. It was predicted that (a) the subject's judgment of the chromatic afterimage would be modified when the influence agent represented a minority, and (b) this modification will be more pronounced when the source of influence is absent than when it is present. The results supported the prediction in both the main study and its replication.

In a previous study, Moscovici, Lage, and Naffrechoux (1969) showed that if a minority consistently affirmed that it saw as green a series of slides that were objectively blue, it influenced both the public and private responses of a majority. Moreover, individuals who did not change their responses during the social interaction were even more likely than those who did conform to the minority's position to change their responses in a subsequent test.

This experiment is the result of criticisms addressed to us by L. Festinger and J. Lanzetta. It follows from a suggestion made to us by R. Zajonc several years ago. It was piloted with K. Bradley at the New School for Social Research. Marie Personnaz served as the experimenter in the final study. This article, as a whole, has benefited very much from the scientific help and criticisms of Sharon Wolf. We thank her for her patience and work with us. Requests for reprints may be addressed to Serge Moscovici, Maison des Sciences de l'Homme, 54, Bd Raspail, 75006 Paris, France.

THE STUDY

Predictions:

- 1) subject's judgement of chromatic afterimage would be modified when confederate represents a minority
- 2) Modification more pronounced when source of influence is absent

Majority and Minority Influence Using the Afterimage Paradigm: A Series of Attempted Replications

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INTRODUCTION

This paper describes a series of experiments designed to test Moscovici and Personnaz's (1980) study that claims to show perceptual conversion. The results of this experiment are compared with those of other researchers, are widely cited as evidence in favor of Social Influence Theory. Moscovici proposes that conversion is determined by two separate cognitive processes: public and private influence. In the case of public influence, conversion is determined by a comparison process whereby the subject compares his or her own response with that of the majority or minority.

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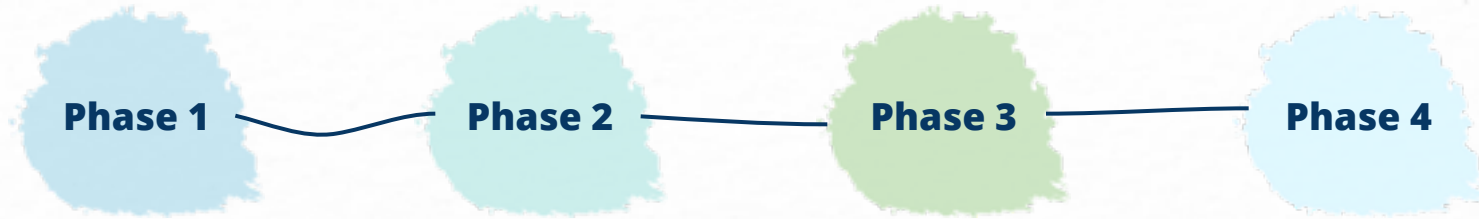
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The effects of influence attempts by a majority and by a minority were examined on both a manifest response level and a latent perceptual level. Female subjects were exposed to a series of blue slides that were consistently labeled as green by a confederate. The confederate was presented as a member of either a majority or a minority. On each trial, subjects were required to indicate the color of the slide presented and the color of the afterimage perceived on a white screen following removal of the slide. It was predicted that (a) the subject's judgment of the chromatic afterimage would be modified when the influence agent represented a majority, and (b) this modification will be more pronounced when the source of influence is absent than when it is present. The results supported the prediction in both the main study and its replication.

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THE ORIGINAL EXPERIMENT



PHASE 1

- The first study consisted of 5 trials
- Subjects wrote down their answers to
 - the color of the slide
 - the color of the afterimage
- Afterwards, the experimenter shows subjects the results that she supposedly had from previous studies
- Majority group: **18.2%** saw the color **blue**, **81.8%** saw the color **green**
- Minority group: **81.8%** saw the color **blue**, **18.2%** saw the color **green**

PHASE 2

= social interaction phase

- Consists of 15 trials
- Color of slide answers orally and public
-> afterimage answer given privately
- Confederate always gave first and consistent response -> “green”

PHASE 3

- Consists of 15 trials
- Subjects and confederate noted their answers privately
- Confederate left at the end -> “urgent appointment”

PHASE 4

- Consists of 5 trials
- Repeated the third phase but subjects were alone -> confederate absent

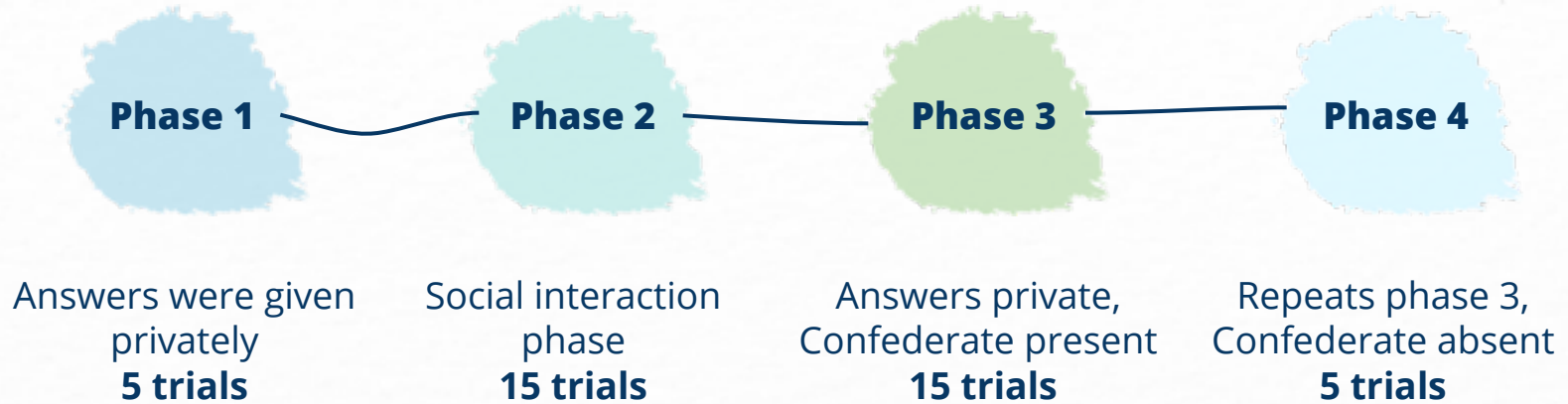
Post-experimental questionnaire

- Assessed perception of oneself, stimulus and source of influence
- Items rated on 6-point-scale

How have you perceived your partner:

Not compe- tent at all	Little competent	Just competent	Rather competent	Competent	Very competent
I	I	I	I	I	I

THE ORIGINAL EXPERIMENT



RESULTS

- Statistical analysis **confirmed** hypotheses
- Consistent minority led to a change in response, best when source of influence is absent

Is there an actual perceptual change or just in verbal response?

- Conversion behavior or just compliance?
- Results show that there is an actual perceptual change in minority condition
-> afterimage effect
- Some changes in verbal response in majority condition

EXPERIMENT 2

- Moscovici conducted a second experiment to strengthen his results
- Replicated the two conditions but only used **5 trials each**
- Results confirm his findings



DEBATE AND CONTROVERSY



WHAT DO YOU THINK ARE CRITICAL ASPECTS OF
THE STUDY?

NAME 3-4

EXAMPLE OF CRITIC

- Study by Doms and Van Avermaet (1980)
- Results show **no compliance** in both conditions
- **Found conversion behavior** in both conditions
-> due to increased attention to the **deviant response** given by confederate

Martin, R. (1998). Majority and minority influence using the afterimage paradigm: A series of attempted replications. *Journal of Experimental Social Psychology*, 34, 1-26. <https://doi.org/10.1006/jesp.1997.1339> (Article No. JS971339)

Doms, M. & Van Avermaet, E. (1980). Majority influence, minority influence and conversion behavior: A replication. *Journal of Experimental Social Psychology*, 16, 283–292.

REPLICATIONS

1

Consistent number of trials
-> within phase effects
-> color blindness test in all replications

3

- Original number of trials
- No-influence condition
- Pre-influence omitted

5

- Same as 4th experiment
- Source manipulation tested through remembering false feedback

2

- Consistent number of trials
- Maj./Min. physically present
- Number confederates changed

4

- Original number of trials
- No-influence condition
- Pre-influence included



EXPERIMENT 1

RESULTS EXPERIMENT 1



No green response

In either majority/
minority



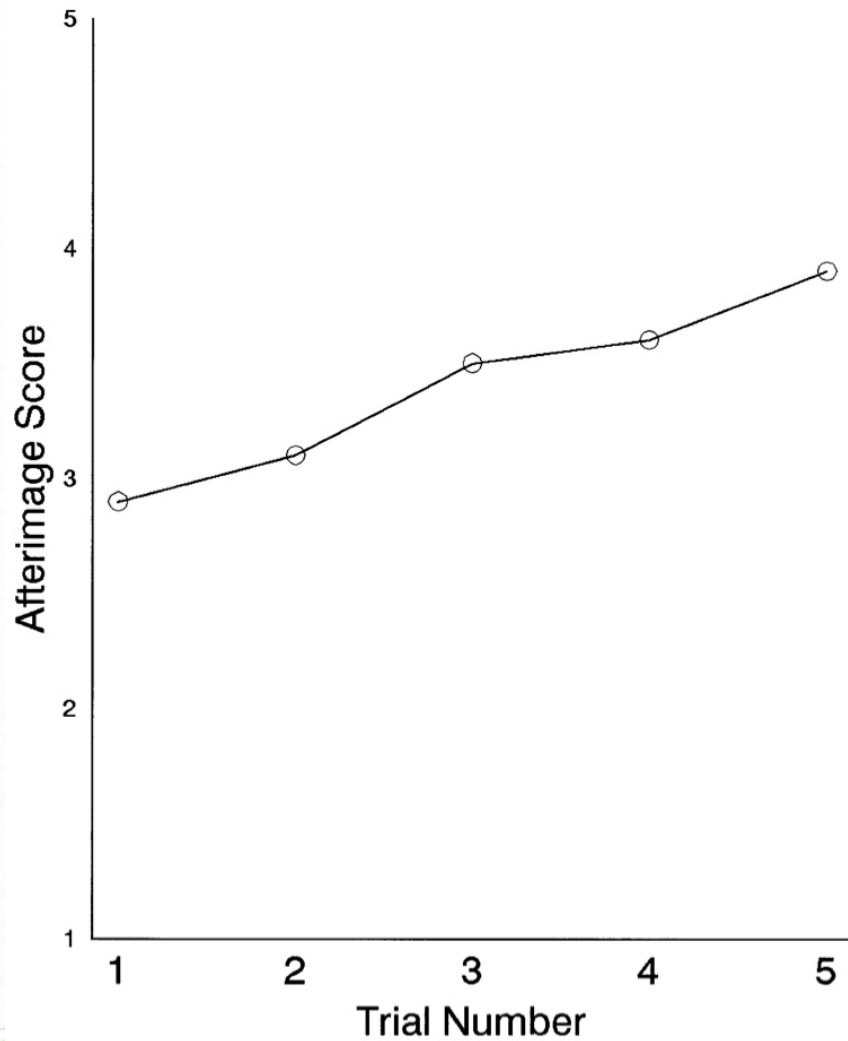
Does not replicate findings

Findings do not show
more change in
minority compared
to majority



Trial number effect

both influence
conditions show
gradually rising change



Martin, R. (1998). Majority and minority influence using the afterimage paradigm: A series of attempted replications. *Journal of Experimental Social Psychology, 34*, 1-26.
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EXPERIMENT 2

TRIALS

5 trials each phase

GROUPS

Groups of four tested together

PROCESS

CONFEDERATE (MIN.)

- Physically present
- One confederate and three subjects

CONFEDERATE (MAJ.)

- Physically present
- Three confederates and one subject

RESULTS EXPERIMENT 2



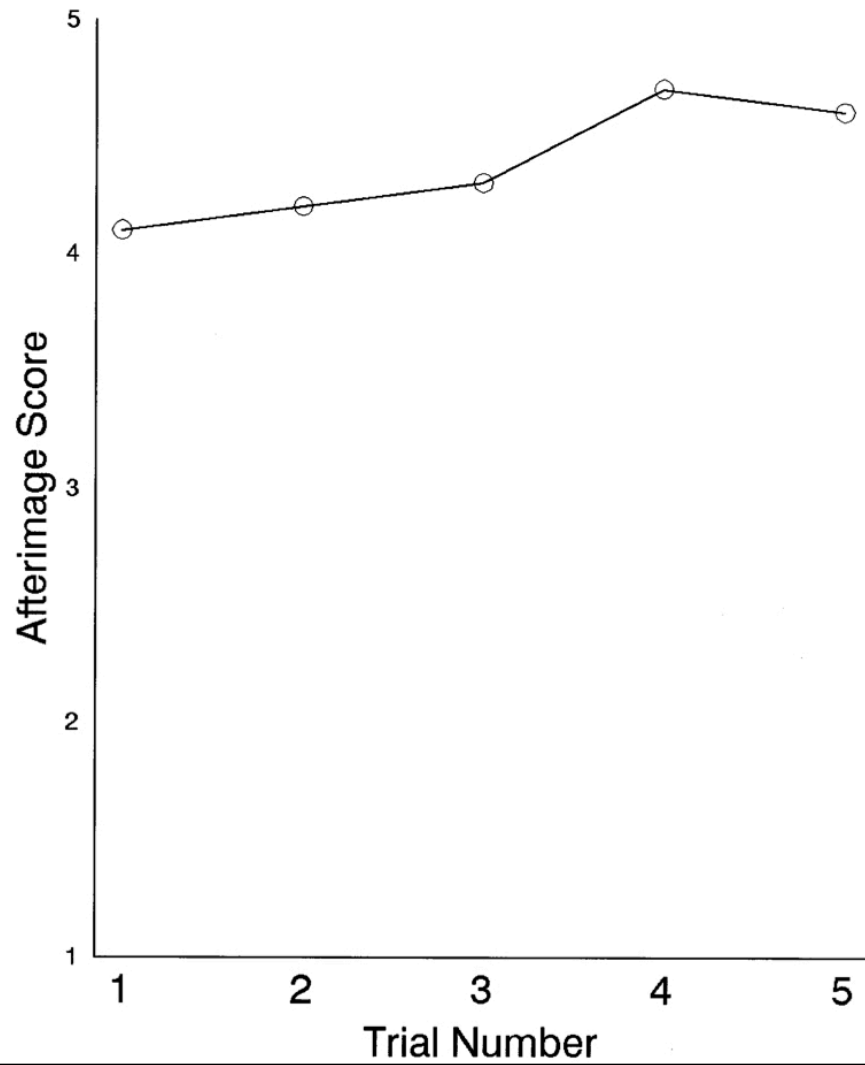
**No green
response**

In either maj./min.
-> present maj.
should increase
conformity (Asch)



**Trial number
effect**

both influence
conditions show
gradually rising change



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ROLE OF ATTENTION

- Sorrentino et al. (1980) claims afterimage effect **due to increased attention/ suspiciousness**
- Experiment 1 and 2 conducted **post-experimental questionnaire**
-> asked if they were suspicious of any aspect of the study
- Two groups formed
-> **high/ low suspicious group**

Martin, R. (1998). Majority and minority influence using the afterimage paradigm: A series of attempted replications. *Journal of Experimental Social Psychology*, 34, 1-26. <https://doi.org/10.1006/jesp.1997.1339> (Article No. JS971339)

Sorrentino, R.M., King, G., & Leo, G. (1980). The influence of the minority on perception: A note on a possible alternative explanation. *Journal of Experimental Social Psychology*, 16, 293-301



HOW DO YOU THINK SUSPICIOUSNESS WILL AFFECT
THE AFTERIMAGE EFFECT



EXPERIMENT 3

TRIALS

Back to original number of trials

CONTROL-CONDITION

Without confederate

PROCESS

PRE-INFLUENCE PHASE

Omitted
-> since no study shows shifts in this phase

CONFEDERATE

Only one (like original experiment)

RESULTS EXPERIMENT 3



Only one green response

No afterimage difference between conditions



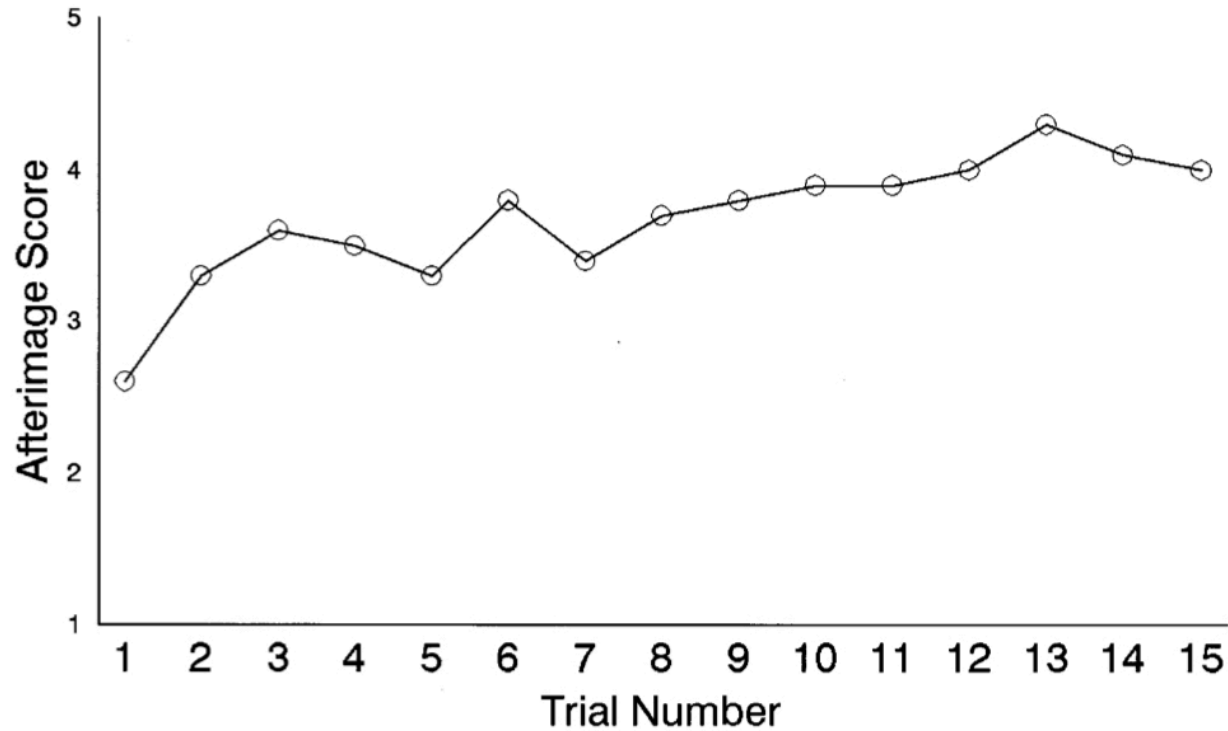
Does not replicate findings

Findings do not show more change in minority compared to majority



Trial number effect

Confirmed in 15 trials



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<https://doi.org/10.1006/jesp.1997.1339>
(Article No. JS971339)



EXPERIMENT 4

PROCEDURE

- **Nearly same procedure** as in third experiment
-> pre-influence was included again
- **Direct replica** of original study (**5-15-15-5**)

RESULTS EXPERIMENT 4

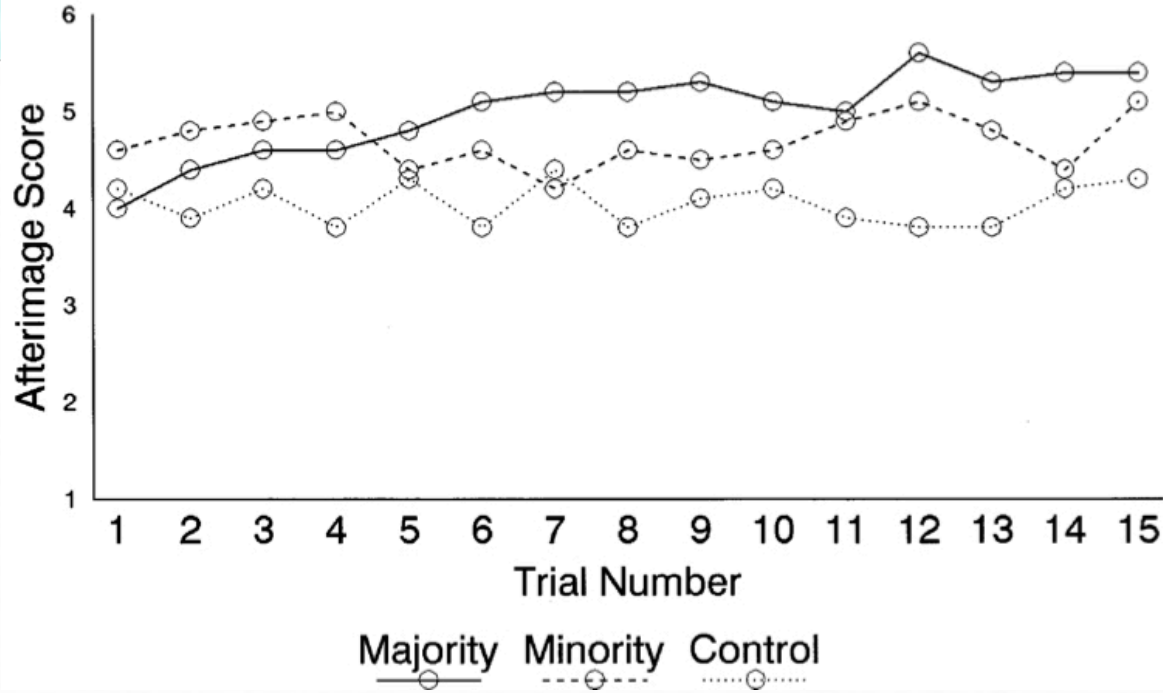


**No green
response**

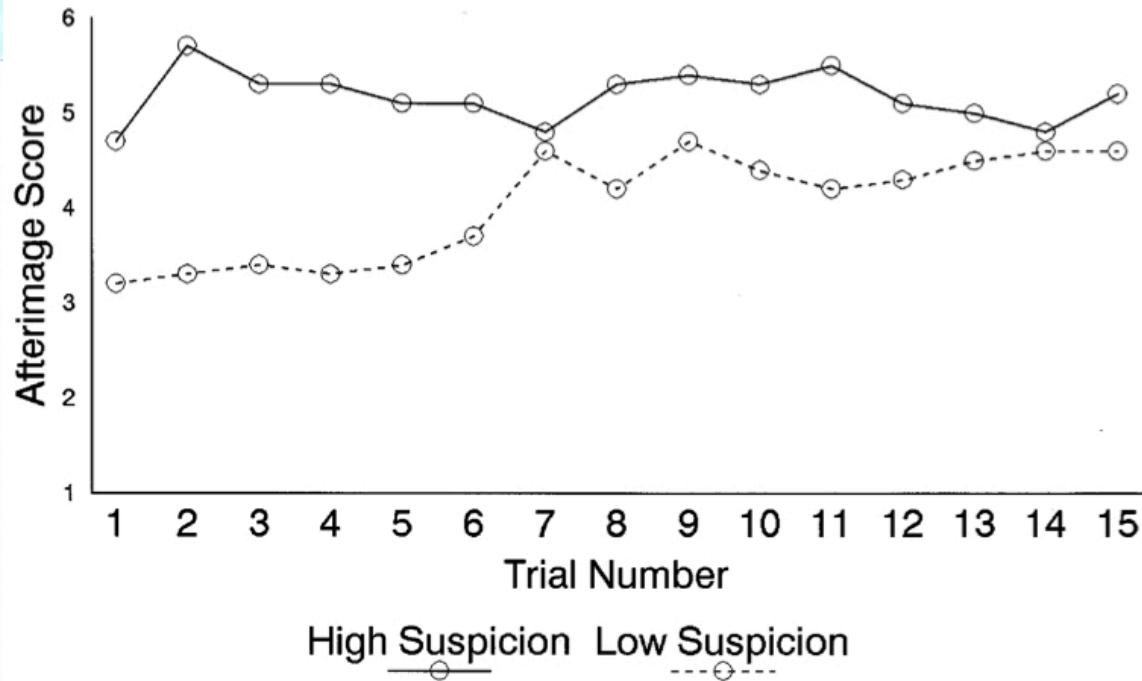


**Does not replicate
findings**

Does not replicate
Moscovici's findings



**Significant afterimage shift
in majority condition**



- **Replicates findings of 1. & 2. Experiment**
-> high-suspicious group gave higher scores
- Extends findings
-> in 15 trials, **low suspicious group reaches level of other group**



EXPERIMENT 5

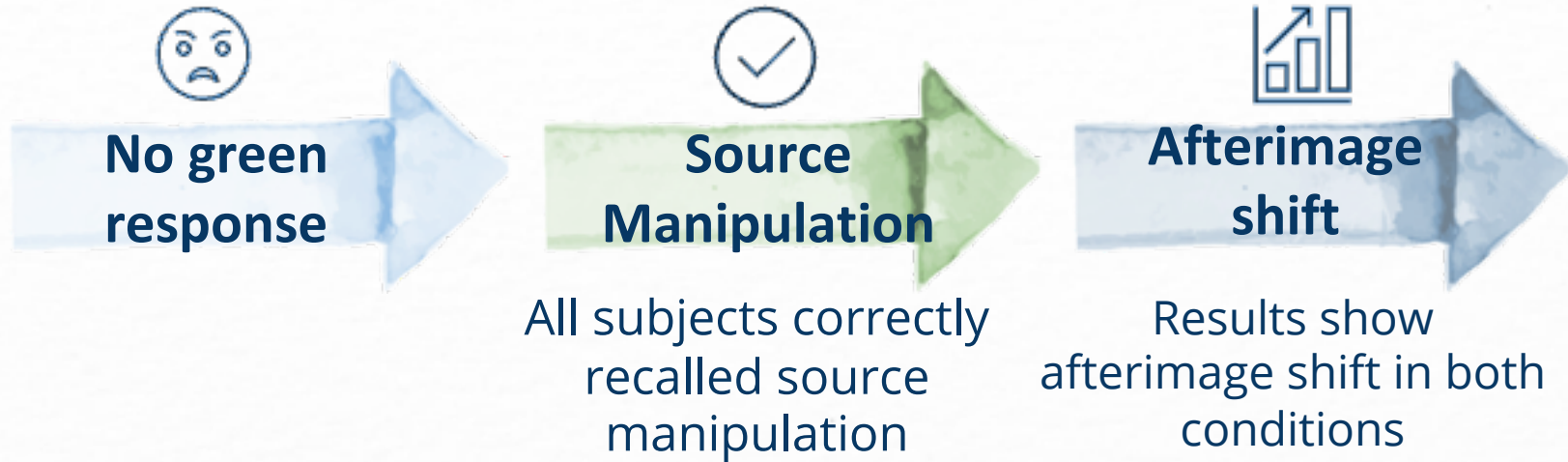
UNTIL NOW

- **Four experiments** have shown **consistent findings**
-> no replication of Moscovici's findings
- What about **attention to source manipulation**?
-> do subjects **process manipulation correctly**?
-> 5th experiment analyses this

PROCEDURE

- Nearly the **same as 4th experiment**
- Subjects informed that they **should remember the feedback information** (false feedback manipulation)
 - > should **recall it at the end**
 - > testing attention to source manipulation

RESULTS EXPERIMENT 5





DO THESE RESULTS SEEM FAMILIAR TO YOU?

COMPARISON

- Results of 5th experiment replicate findings by Doms and Van Avermaet (1980)
-> afterimage shift in both conditions, when confronted with deviant response

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OVERALL RESULTS

- Findings of Moscovici and Personnaz could not be replicated
- New ideas:
 - > within-phase effect
 - > subjects suspiciousness



<https://www.swr.de/swr2/leben-und-gesellschaft/rosa-parks-110-geburtstag-politische-und-popkulturelle-ikone-100.html>



CAN YOU THINK OF EXAMPLES IN WHICH MINORITY
INFLUENCE WORKED OR IN WHICH IT DIDN'T

NAME 2-3



THANK YOU FOR LISTENING AND PARTICIPATING 😊

ANY QUESTIONS LEFT?