

An Investigation into Informational Conformity Using the Autokinetic Effect

Introduction

It is necessary that I introduce some definitions before taking a closer look at this practical.

The practical looked at conformity in an ambiguous task/situation.

Zimbardo and Leippe define conformity as “a change in belief or behaviour in response to real or imagined group pressure when there is no direct request to comply with the group nor any reason to justify the behaviour change.” (Gross, 2010, p. 401).

Conformity tends to happen more often as the reliability of one's own observations decreases, as that makes them more vulnerable to be influenced by other people. (Turner, 1991, cited by Gross, 2010, p. 406).

There are different types of conformity. The one seen in this practical is Informational Social Influence (ISI). When people are influenced by this, they will feel the need to be right and to have valid information about the world. In a situation where one does not know the answer, help will be searched for in other people and their answers. These situations are usually ambiguous. ISI is an example of internalisation. It means that one is agreeing publicly and privately. (Gross, 2010, p. 406).

The Normative Social Influence (NSI), on the other hand, happens when one feels the need to be accepted and approved by others, and when there is fear of being rejected or punished in case of disagreeing. NSI is an example of compliance. When complying, one is agreeing publicly but disagreeing privately. (Gross, 2010, p. 406).

The practical was based on Sherif's study, *Some Social Factors In Perception* (1935). In his study Sherif used the autokinetic illusion effect. The autokinetic effect works when a non-moving light is seen in an otherwise pitch black room. Because there are no reference points, the light will seem to move for the human eye. Sherif told the participants that the light will be moving, and that the task was to estimate the length of the light's distance. First the participants were tested individually for several times. Eventually the range of their estimates became homogeneous when looking at each participant's answers. The differences between other participants' estimates was broad as the light was not really moving, and therefore there was no right answer. When the participants were put into groups of three, where they heard the estimates of the other participants, the estimates started to converge. (Gross, 2010, p. 401)

The aim of the study is to find supportive evidence for Sherif's (1935) study and to determine whether or not people conform in an ambiguous situation, in this instance, estimating the distance a light is assumed to move from its starting point.

The hypothesis is; when people give their answers out loud in the presence of others it will influence the estimates of other participants, such that their answers converge.

Method

The independent variable is whether the participant is stating their estimate privately or publicly. The dependent variable is the participants' estimates of the apparent movement of a light in cm. The autokinetic effect was used in the practical. The autokinetic effect is a visual optical illusion. When seeing a single spot of light in an otherwise pitch black room, it will appear to be moving even if it is completely still because there is no reference point for the eye to know where the light actually is in the room.

Prior to the practical, in our group of three researchers, we prepared a consent form and standardised instructions which can be found in the appendix.

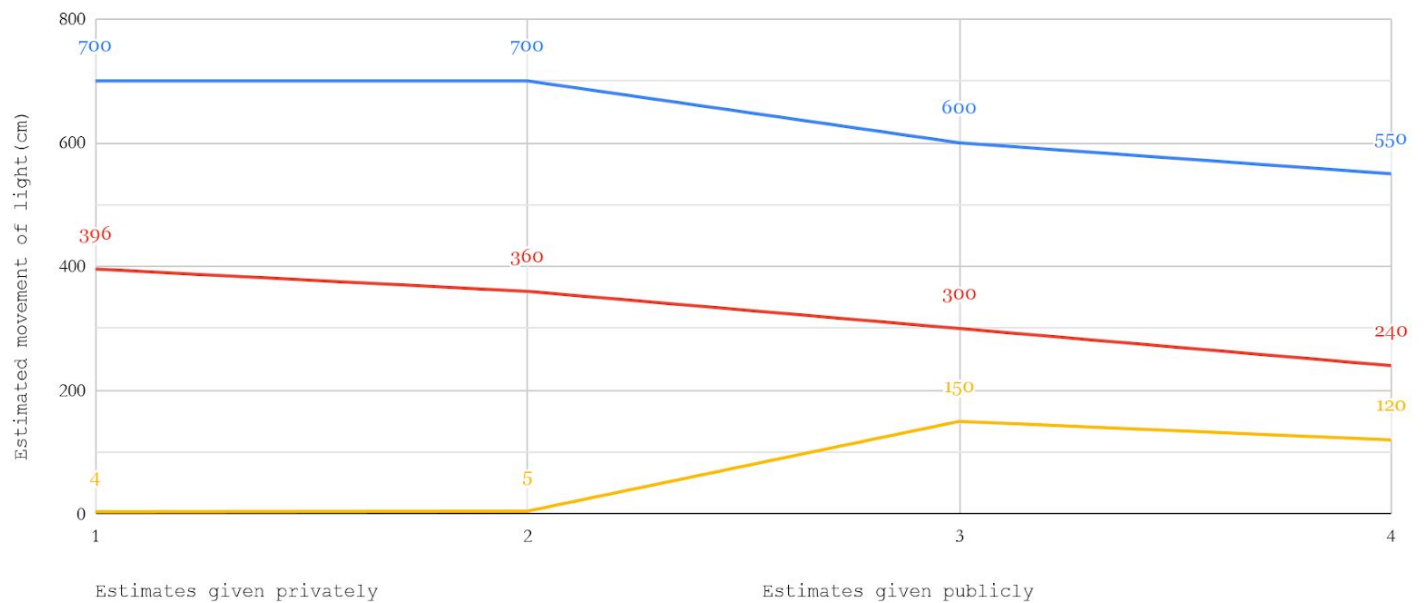
The participants were asked to turn off their telephones and to remain silent for the entire time, unless asked otherwise. They were asked to do so, so that there would not be any disturbance or light from their phones during the time in the dark room. It was emphasized that discussing with other participants was forbidden. It was vital for the second part of the experiment that they had not heard each others' estimates. The participants were guided into a completely dark room with the help of one of our researchers. They were seated in a row of seats which was approximately 7.1 meters away from the red LED-light which was approximately 1.24 meters above the ground. When everyone was seated, the light was turned on for 2 minutes. After the two minutes, the participants were guided back from the dark room to write down their estimates. It was important not to turn the lights on in the room as some of the participants would be coming back for the second part of the practical. After the participants had written down their estimates on a card with a number referring to them, three of them were asked to take part in the second half of the practical. A debrief was given to the rest of the participants. The decision of choosing the three remaining participants was made according to their estimates from the first trial. It was important to pick one participant with a high range to the 2 other participants. One participant with a low estimate and two with high.

For the second part of the practical the participants were guided back to the dark room. This time the red light was turned on 3 times. After each 2 minute period the participants were asked to indicate their answers verbally. The participant with the low estimate on the first trial was the last one to be asked to verbally state their estimate so that they could hear the estimates of the other participants before, therefore the chance of conformity will be higher. The 3 remaining participants were then debriefed.

In both of the debriefs the method was explained to the participants and any possible questions about the practical were answered. In the second debrief, the 3 remaining participants said that when hearing the estimates of other participants they had been doubting their answers. Why they were so different from their own. That had made them want to change their estimates.

Results

The impact of others on participants' estimates on the apparent movement of a light caused by autokinetic effect (N=3).



Participant 1 Participant 2 Participant 3

The graph shows us four different trials. The first trial shows estimates of when participants were asked to write their answers down individually. The 2nd, 3rd, and 4th trials show estimates given verbally in a group. The graph shows that the estimates start to converge more after every trial.

Number of trial	Range
1	696
2	695
3	450

4	430
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The range of the estimates goes from 696 cm (1st trial) to 430 cm (4th trial). In addition, the average of the estimated started to decrease as the trials went forward. The average of the first trial was 366.67 cm and the average of the fourth trial was 303.33 cm.

Treatment of Results

Looking at the graph you can see that the participants' estimates converged. Participant 1 changed their estimates the less as they were the first one to state their estimate on each of the verbal trials. Participant 3 was conforming the most as the range between their estimate to the other participants' was the highest. Participant 3 was also the last participant to state their answer in all of the verbal trials. That increased the potential conforming as they heard two estimates with high range from their previous estimate.

Discussion

The results corresponded with the hypothesis. They were similar to Sherif's (1935) study which was mentioned in the introduction.

This practical does not have much ecological validity as the participants were put in a constrained situation. The way people behave in laboratory experiments cannot be taken as an accurate indication for certainty of how people will behave in real life situations. (Heather, 1976, cited by Gross, 2010, p. 46). A practical The lack of ecological validity itself is unwanted but it also often leads to dehumanisation and distortion of behaviour. On this practical, the sampling was quite biased. All of the participants were students from the same university. The reliability decreases when the amount of participants is small and the amount

of trials too, which was the case in this practical. To improve and to make the practical more reliable there should have been more trials and more participants.

Even if the practical showed the hypothesized results it does not mean that it would be reliable. On the other hand, the fact that even looking at a small group and a small amount of trials still ended up corresponding with Sherif's study is quite impressive.

Creating a constrained situation for the practical does have some advantages when looking at the ethics of the practical. There is an opportunity of debriefing the participants and making sure that everyone understands what happened and why it was done. It also means that the participants can be asked to write a consent form, which indicates that they are aware of being in a practical studying social psychology.

Regarding further studies, I think it would be interesting to look at whether or not people conform out of any other reasons than 'wanting to know the truth' or 'wanting to fit in'. Do people also conform for altruistic reasons? Do people stand up for minority if they believe that it is the right thing to do? This would also be looking at Informational Social Influence (ISI) and internalisation, where one agrees both privately and publicly. "Without active minorities, social and scientific innovations would simply never happen" (van Avermaet, 1996, quoted by Gross, 2010, p.408) Because the majority is not always right, it would be interesting to know what conditions and circumstances are required in order for the minority to take the lead.

Erica Chenoweth did an interesting research looking at the influence minorities can have. Her results established The 3,5% Rule, which fundamentally indicates that a small minority, only 3,5% of the world population is required to make a difference in the world. (BBC Future, 2019)

"Moscovici et al.'s experiment clearly showed that a consistent minority can affect the judgements made by the majority. Although the minority doesn't have a numerical advantage, their consistent behavioural style makes them influential. In conformity experiments, the influence of the (numerical) majority is evident from the start; but minority influence only begins to show after a while." (Gross, 2010, p. 409).

Conclusion

In conclusion, this practical on informational conformity using the autokinetic effect did meet the hypothesis. It showed that people tend to conform in ambiguous situations. It was in line with Sherif's (1935) study which this practical was based on. However, the sample size and amount of trials was poor which made the practical unreliable.

References

Gross, R. (2010) Psychology: the science of mind and behaviour. Sixth edition. Dubai: Hodder education.

BBC Future, Robson, D. (2019) *The '3.5% rule: How a small minority can change the world'*, 14th May.

Available at: <https://www.bbc.com/future/article/20190513-it-only-takes-35-of-people-to-change-the-world>

(Accessed 16th November 2019)

Appendix

CONSENT FORM:

Thank you for volunteering to take part in our research to aid us in the completion of our coursework. The task today will involve sitting in a dark room for a short period of time and estimating the movement of a red light. It is important for us to disclose that the room will be pitch black, and you will not be able to see anything other than the light.

The whole process will take no more than 30 minutes in total. Some of you will only be required for the first 15 minutes. You are welcome to withdraw at any point during the process, without further explanation, if you feel uncomfortable, or for any other reason. The purpose of the investigation will be explained at the end of the procedure.

In order to protect your privacy, all of your responses will be kept anonymously. You will be allocated a number with which you will be referred to throughout.

Please sign below to confirm that you have read and understood the above, that you have no medical conditions which might affect your participation, and that you agree to take part.

Signature: _____ Date: _____

Standardised Instructions 1:

Please turn off all mobile phones.

You will be guided into the dark room, one by one, by one of our researchers by torch, where each of you will be seated.

Once inside the room, it is important that you remain silent – unless you feel uncomfortable being there, in which case please make yourself known and the procedure will be halted while you are guided back out of the room.

Once you have been seated, a red light will appear for a period of 2 minutes. Your task is to determine the furthest distance you think the light achieves from its starting point during the 2 minutes.

After the 2-minute period is over, you will then be guided back out of the room, where you will be required to write down your answers individually. For the purposes of this experiment it is vital that you do not discuss your estimates or experience with any of the other participants.

Some of you will be recalled to undertake the process again. The rest of you will be free to leave following a short debrief.

Standardised Instructions 2:

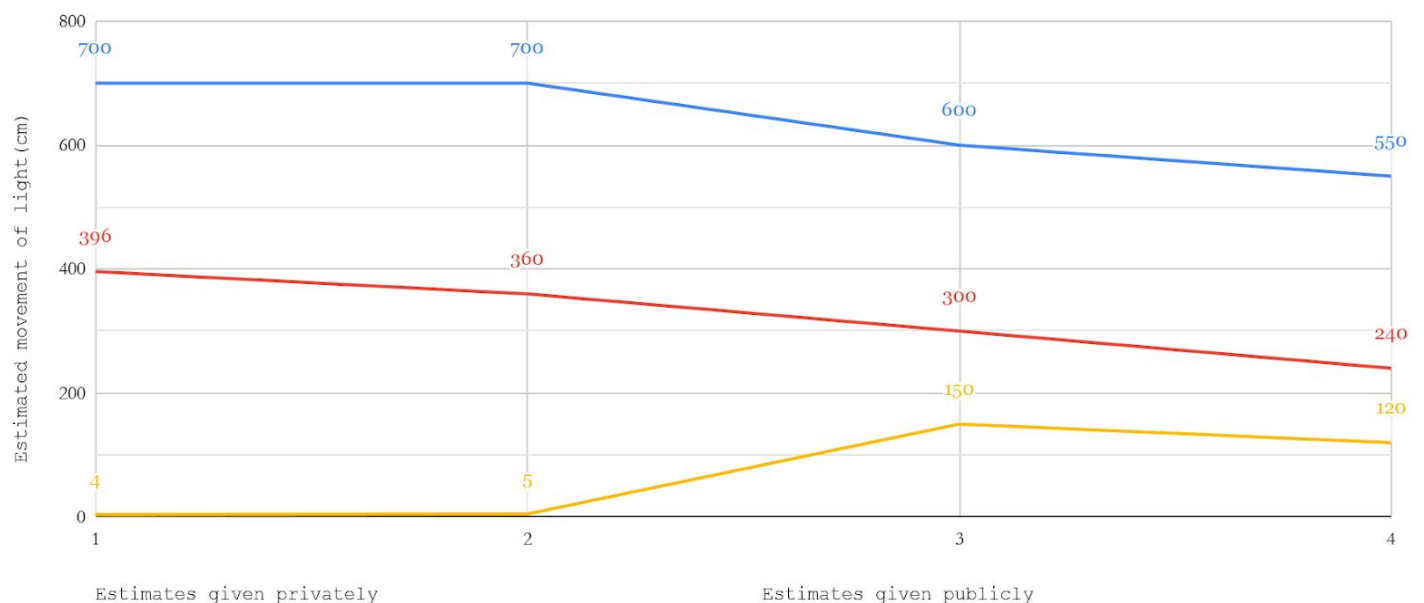
You will again be guided into the dark room, one by one, by one of our researchers by torch, where each of you will be seated.

Once you have been seated, a red light will appear for a period of 2 minutes. Your task, as before, is to determine the furthest distance you think the light achieves from its starting point during the 2 minutes. This process will be repeated 3 times.

After each presentation, you will be asked to give your estimate verbally, before recording on the card provided. One of the researchers will move along the line with a torch so that you are able to see enough to do this.

Once the 3 trials have been completed, the lights will be turned on and you will be asked to stay for a short debrief before being free to leave.

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Participant 1 Participant 2 Participant 3

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