Candidate 3 evidence

SWEETS IN A JAR

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Conformity Study

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Introduction

This research paper will cover the topic of conformity. Conformity falls under Social Psychology which is the study of the interaction between two or more of the same species (Firth 2015). Conformity itself can be described as social pressure, to change our behaviour whether that be through peer pressure, influence by multimedia or the pressure to go along with groups of strangers. It is usually unspoken, typically in order for a person to 'fit in' or feel accepted they will change their behaviour.

In their dual – process theory, Deutsch and Gerard (1955) noted two types of conformity, these being Informational social influence (ISI) where a person is motivated to be right and normative social influence (NSI) when a person is motivated by the desire to be liked and accepted. ISI refers to those who are unsure about something and look to others, possibly experts or who they perceive to be an expert for reliable or valid information. It is the copying of others when looking for certainty and using others as an informational resource when we think 'they know what they are doing'. ISI helps people to feel in charge and in control of their lives. NSI, on the other hand, is linked to compliance and identification. When a person will conform to a majority point of view due to pressure and the need of acceptance even though they internally may not agree. The ability for others to influence people to conform to social norms.

Jenness (1932) carried out an ISI experiment to examine conformity, which involved a glass bottle containing 811 white beans. The aim was to check if the influence of discussion could change participant's original estimates on the amount of beans in the jar. The experiment was carried out in a laboratory with 101 participants (51 males, 50 females) where variables could be controlled and manipulated. Participants were asked individually and in private to estimate the amount of beans in the jar. They were then split into groups of three to discuss and provide a group estimate, after which were given a chance to change their original guess. The researchers found, after the group discussion, most participants changed their

estimate closer to the group estimate. The results demonstrated participants changed their results as they believed the group estimate was more likely to be right than over their own. The results show the power of conformity in an ambiguous situation, a result of informational social influence.

A further study supporting Deutsch and Gerard's (1995) theory is Asch (1951) normative social influence. Asch's' study addressed the ambiguity of Jenness's study by using a clear way to measure conformity, where there was only one right answer, something that could be seen clearly with their eyes. The line experiment where participants were asked to indicate which line matched one of three examples given on a series of cards. The aim was to see if participants would confirm to other incorrect estimates even though the correct answer was obvious. 50 male participants (true participants) took part in the experimental condition with a further 37 males in the controlled condition. The 50 true participants were placed in groups with seven males, unknown to them. These males were actors and had been prepped prior to the experiment to give false answers. All answers were spoken out loud and the true participant was always last or second last to answer, giving them the opportunity to answer correctly or confirm to the majority answer. Asch found the majority group had a large influence on the true participant, with 75% giving at least one wrong answer and only 25% not confirming at all, despite seeing the correct answer. Asch believed the true participants conformed so that they were not ridiculed or made fun of by the majority group. It was concluded that for some the pressure to conform to majority influence was powerful and for others it was easier to withstand social pressure.

The aim was to find out whether participants will conform to social pressure when given false high estimates. The experimental hypothesis was that participants who were presented with false high estimates of the number of sweets in a jar would guess higher than those who had no false estimates.

Method

Design

The design was of an independent measures design, the method used was a laboratory experiment which allowed for control over variables and to minimise the time allowed for participants. These were used as there were two groups involved, one experimental and the other a control group, therefore appropriate for the experiment. Using two similar rooms, set up as a laboratory, in a community centre environment. The extraneous variables controlled were lighting and room temperature. The experiment was carried out at the same time to allow for similar background noise with other distractions removed. Both rooms were set up with ten chairs 3 meters from a table, where there was placed a jar of 350 different coloured smarties (sweeties). The independent variable (IV) was the use false estimates; control condition; no false estimates and experimental condition; false high estimates. The dependent variable was the participants guesses of the number of sweets in the jar.

Sample/ Participants

Twenty participants took part in the experiment. These were a selection of opportunity sampling participants, meaning readily available participants, who regularly used the community centre for leisure and fitness activities. The ages ranged from 17 to 55, with a mean age of 29.8. There was an equal number of males to female ratio, 1:1. Participants were randomly separated into two groups, with an equal number of females and males in each.

Materials

Brief (Appendix 1), consent form (Appendix 2), standardised instructions (Appendix 3), blank estimate sheet (Appendix 4), false high estimate sheet (Appendix 5), de-brief (Appendix 6).

Procedure

Participants were split into two groups and asked to take a seat in the rooms. They were briefed in groups about the experiment, instructions were given, and each participant was handed a consent form to complete and sign. Each participant was then handed an estimate sheet, the blank estimate sheet to the control group and a false estimate sheet to the experimental group. Participants were supervised and given 30 seconds to quietly look at the jar from their seat, situated 3 meters away from them, without conferring and guess the amount of sweets in the jar and write down their estimates. Participants were allowed to take in their glasses if required. On completion of the task the estimate forms were collected, and all participants were bought together were thanked for their participation and given a de brief of the experiment. Participants were reminded of their rights to retract from the experiment and were given the opportunity to ask any questions.

Ethics

British Psychological Society ethical codes of conduct are in place when research is carried out for any purpose (2009). Their four primary ethical principles are centred around respect, competence, responsibility and integrity. Regarding this experiment the ethical guidelines were fully met. Each participant was given a brief outlining their rights to withdraw at any time without explanation. Instructions were given to make clear what is expected of them and a consent form to sign in order to ensure each participant was aware of what they were taking part in and to check the age of the participants complies with the guidelines. Although participants were initially advised of a different aim of the experiment, following completion, all the participants were de briefed and advised of the true aim, hypothesis and conditions and the reasons for doing so. Confidentiality was maintained throughout, with names removed from the data. Following full analysis of the data, all paperwork relating to the experiment was destroyed.

Results

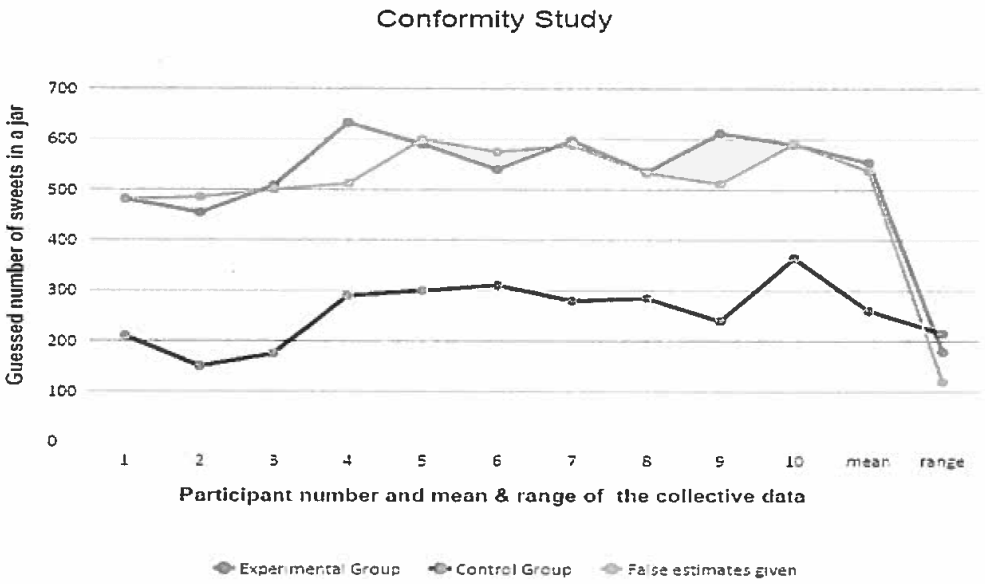
On completion the data was collated and prepped for further analysis to see if the hypothesis of the experiment matched the results. The results are broken down, table below, to show the mean and range of the estimates. The mean shows the average number of the estimates and the range shows by how much the estimates are spread. Using the mean and range together allows us to see whether the results are close to the mid-point.

	Mean	Range
Experimental group	554.1	179
Control Group	**260.6**	**215**
False estimates	537.7	120

Table 1 Mean and range of control and experimental group data

The difference in the mean figures suggests the experimental group chose, on average, an estimate that was nearly fifty percent more than the control group. Showing the signs of agreement to social norm as they are also very similar to false estimate mean, however as there is a difference in the range figures of the false estimates and experimental group figures, this would suggest individual differences in the experimental group.

The graph below shows the spread of data across the participants alongside the mean and range of the collective figures. Raw data in Appendix 7.



Line graph 1 - showing the pattern of data alongside the mean and average figures.

The results indicate that the false high estimates given to the experimental group influenced their decision when making an estimate, their guesses were in comparison to the group who were not given the false high estimates, similar to false high estimate figures given, thus concluding that the experiment supports the experimental hypothesis. In this case the null hypothesis can be refuted as using this line graph gives a clear indication of the trend to conform when a false estimate is given and the difference in the figures without the false estimates.

Discussion

These findings seem to support the hypothesis, that when presented with false high estimates people are likely to feel social pressure and can be influenced to conform. The control group had estimates that were much more varied and a lot less than the experimental group with a mean of 260.6, which was a lot closer to the actual amount of sweets in the jar. The false estimates presented to the experimental group had a mean figure of 537.7, actual mean of the estimates given by the experimental participants was 554.1 showing a much closer relationship to the false figures provided rather than the sweets in the jar.

Variables controlled in the experiment was to ensure both groups experienced the same conditions, same room size, lighting, background noise and time. However due to the busy location not all distractions could be removed, i.e. general foot traffic outside the room and activities taking place at the same time in other rooms. Although there was a variety of ages and an even mix of gender the study does not consider individual differences or those who are aged over 55, both of which could affect results of the experiment. The participant sampling was done in a community centre where people went to keep fit and take part in activities, thus not taking into account society as a whole, as not everyone has access to those facilities. Random sampling and making use of a different location would prevent bias and gives an effective representation of society. There would also be the opportunity to carry out the experiment with a larger group of people.

As with Jenness' (1932) study, the results showed a similar pattern, in that a person is likely to conform when given a false estimate and more likely to be influenced by others, however there were a few variations, some of which are unethical to use in current day research experiments. Participants were offered an incentive of an 'A' grade for the closest guess. Participants were also asked to read out their estimates, opening them up to psychological harm, another ethical violation. This study offered no incentive and the participants estimates were all kept confidential. Jenness' study,

did, however have a larger number of participants, 101, in comparison to the 20 used in this experiment but the differences between them were that Jenness' participants were all students studying a variety of psychology courses, who could already have been aware of the type of experiment they are taking part in, whereas this study had participants that were from different backgrounds.

The findings also suggest Deutsch and Gerard's (1955) Informational Social Influence had taken place, as the participants were unsure of the amount of sweets/beans in the jars, they used the false estimates as expert answers, and they wanted to be right so copied others. The results of this study do not support the idea of Normative Social Influence or Asch's (1951) study, which addressed the ambiguity of Jenness' by trying to get a clear measure of conformity, however the groups were not required to work together so acceptance of group norms was not an issue.

The study was carried out as a lab experiment, this meant it had poor ecological validity, people may not react the same way if they were in a real-life situation. Still the lab condition allows researchers to control the variables and gain a definitive outcome of the experiment. They can control all factors including the environment, group sizes, ages and genders and individual differences.

This study, alongside Jenness' and Aschs' studies, support the idea of conformity and how it can relate to real life circumstances. From wanting to be accepted into a friendship circle to following an 'idol' or famous person or popular band, society can show a change in response in order to be liked, even though sometimes their own private beliefs are different. Typically unspoken we observe what others are doing and change our behaviour to fit in. Conformity is not when a person is asked to have another drink or stay out a little longer but when an individual chooses a course of action that is considered socially acceptable.

In conclusion, this study evidently illustrates that conformity can take place when a person is unsure of an answer and will confidently use information provided by others, to be sure of themselves. By studying the results of this experiment and by making comparisons in the data, the results support both previous studies and the experimental hypothesis. Clearly rejecting the idea that the false high estimates would have made no difference to the findings.

References

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Appendices

Appendix 1 – brief

BRIEF

Thank you for agreeing to participate in this study on visual perception. Standardised instructions will be issued to you prior to starting. Take your time and read through them thoroughly, once you are happy you understand what is required and are ready to proceed then please inform the experimenter. Please ask any questions, prior to commencement of the study if you wish. You will be de-briefed at the end.

Appendix 2 – Consent form

CONSENT FORM

This social psychology study is concerned with visual perception by estimating the number of sweets in a jar. In compliance with British Psychological Society (BPS) ethical standards (2009), as a participant your attention is drawn to your rights, both verbally and in writing. At any stage, these rights include withdrawal from the study, without an explanation. Any personal data which had been collected, prior to, during and at the point of withdrawal shall be destroyed. As the participant you will remain anonymous and non-identifiable. Personal data are classified and stored as 'confidential'.

As the participant, during the study you will be exposed to a short period of time looking at a jar of sweets. Please alert the experimenter prior to participation in the study if for any reason, this could be in any way harmful to your health or if you require glasses.

At the end of the study you will receive both a written and verbal debrief, along with contact details, if you have any issues which you may wish to address at a later time.

Please read the declaration below signing and dating it in the presence of a witness.

I have read and understood the brief and have been given the opportunity to ask any questions concerning me about my role as the participant in the aforementioned study.

I _____(PRINT NAME) have agreed to participate in the aforementioned study completely of my own free will. I have neither received nor been offered payment nor gift aid as an incentive for doing so. I understand that this is not a test of intelligence. I am over 16 years of age and of sound mind and accept that it is my responsibility to make the experimenter aware of any medical conditions which may impact on my full participation.

MALE / FEMALE (CIRCLE YOUR ANSWER)

AGE _____

_____ (SIGNATURE OF PARTICIPANT)

_____ (DATE)

_____ (SIGNATURE OF WITNESS)

_____ (DATE)

Appendix 3 – instructions

Standardised instructions

Please start when instructed by experimenter.

* Please take a seat.

* Please begin when instructed by the experimenter.

* After the experimenter has given you the go ahead, you may wish to start.

* You will be allocated 30 seconds to look at the jar and estimate the number of sweets.

* Please write down your estimate on the answer sheet provided. Do not discuss answers with other participants.

* Thank you for taking part in our study.

Thank you for taking part.

Appendix 4 – Blank answer sheet (control)

Participant number	Participant guess

Appendix 5 – False Estimate Sheet (experimental group)

Previous participant number			
	Previous participant guess	Participant number	Participant guess
1		11	
2		12	
3		13	
4		14	
5		15	
6		16	
7		17	
8		18	
9		19	
10		20	

Appendix 6 – De-brief

DE-BRIEF

Thank you for taking part. The experimental aim of today, was not to study visual perception but to investigate conformity in a group. If the true reason of the experiment had been revealed this could have affected the behaviour and results so an element of deception was used. This is in accordance with the British Psychological Society (2009).

This study was a replication of the Jenness (1932) conformity study. Jenness' study was to analyse if people responded to social pressures and conformed to group estimations when exposed to discussion. The method he used was a glass bottle, similar to this experiment, which contained 811 beans, for a group of people to make individual estimates and then a collective estimate. Participants were then given the opportunity to change their result. The results showed that people had made a change to their results when unsure of what to do, this was conforming by using others as sources of information. This is called informational social influence which is part of the dual-process theory by Deutsch and Gerard (1955).

The aim of this study was to show whether people conformed to higher false estimates when unsure of what to do and within a given time limit. Participants took part in two conditions: condition 1 (control group) had a blank answer sheet. Condition 2 (experimental group) had an answer sheet which contained ten false high estimates of sweets in a jar. The independent variable was the false high estimates and the dependent variable was participant guesses of the amount of sweets in the jar.

In order to discover if the hypothesis of the experiment was shown to be correct, your results will be analysed along with the other participants.

Are you happy for your results to be used? Do you have any questions? The results will remain confidential and once analysed you may request a copy. Please contact the research supervisor on the number issued, prior to the study, if at you would like to discuss anything further.

Appendix 7 - Raw data

Control condition – No false high estimates

Actual Number of sweets = 350

Participant number	Participant guess	Gender	Age
1	210	M	18
2	150	F	23
3	175	F	17
4	290	F	28
5	300	M	17
6	311	M	18
7	280	F	21
8	285	M	37
9	240	F	52
10	365	M	41

Experimental condition – False high estimates

Previous participant number	Previous participant guess	Participant number	Participant guess	Gender	Age
1	480	11	481	M	17
2	485	12	454	M	16
3	500	13	508	F	45
4	512	14	633	M	37
5	600	15	590	F	40
6	575	16	540	F	51
7	588	17	598	F	21
8	533	18	535	M	23
9	512	19	612	M	19
10	592	20	590	F	55