

Experimental methods

Social Influence

You are learning how to...	In the context of...
<ul style="list-style-type: none"> Apply your knowledge and understanding of experimental methods in psychology 	<ul style="list-style-type: none"> Social psychology/social influence

Question 1

A researcher wanted to find out if the characteristics of an audience affected performance of a skilled behaviour. Twenty student participants were recruited from a college of music. All were learning to play the violin. Before the experiment began the participants were independently rated on their musical ability and formed into pairs of similar ability. Each participant was given the task of sight-reading an unfamiliar piece of music in front of an audience of five people. One of each pair was told that the audience consisted of members of the public. The other participants were told the audience were all professional musicians and members of the city orchestra. The participants' performances were recorded and then analysed by a professional violinist who was unaware of the aims of the experiment. The number of errors made by each participant was recorded. The researcher presented her results as follows:

Sight-reading errors in front of an audience perceived to be expert or non-expert musicians

	Expert	Non-expert
Mean	3.2	1.6
Standard deviation	1.8	1.5

- State a suitable non-directional experimental hypothesis for this experiment.
- Identify the experimental design used in this experiment and explain why the researcher might have chosen this design.
- Identify an extraneous variable the researcher would need to control in this experiment and explain the effect it might have had on the results if it had been left uncontrolled.
- Why was it necessary that the judge who counted the participants' errors was 'unaware of the aims of the experiment'?
- Suggest what the researcher might have concluded from the results of this experiment.

Question 2

A researcher wanted to find out if recent experiences with an authority figure had an effect on a person's willingness to obey authority. Participants were recruited from a university Psychology department. They were sent to a room in the university where they were asked to complete a 'screening questionnaire'. The questionnaire was deliberately designed to be confusing. Once they had completed the questionnaire, a confederate wearing a badge reading 'Professor Jones: Senior Researcher' checked their answers. For half the participants the confederate thanked them for their responses. For the other half the confederate criticised the participant for filling in the questionnaire incorrectly. The participant was then taken to a laboratory where a different researcher gave them a series of meaningless, boring tasks to perform. The number of tasks the participant carried out before quitting was recorded.

- Explain how the IV and DV in this experiment were operationally defined.
- State a suitable directional hypothesis for this experiment.
- Suggest a suitable method for assigning the participants to the two conditions.
- Explain the problems raised by using two different groups of participants for the two conditions of this experiment.
- Outline one feature that might have affected the external validity of this experiment.
- Suggest why 'a different researcher' was used for the second phase of this experiment.