

# Experiments: IV, DV, controls & operational definitions

You are learning how to...	In the context of...
<ul style="list-style-type: none"> <li>Identify IV and DV in experiments</li> <li>Identify extraneous variables and suggest controls</li> <li>Operationally define psychological processes</li> </ul>	<ul style="list-style-type: none"> <li>Studies from social &amp; cognitive psychology</li> </ul>

## Analysing experimental studies

In an experimental study, the researcher manipulates an **independent variable** (IV) whilst measuring a **dependent variable** (DV). All other **extraneous variables** that might affect the DV are held constant, to prevent them from becoming **confounding variables** and making the experiment invalid. The variables the researcher is actually interested in are typically psychological ones, which cannot be manipulated or measured directly. In order that the research can be considered **empirical**, the researcher must come up with **operational definitions** of each variable, which specify how they will be measured.

Study	Aim	Variables	Operational definitions	Controls
Bickman (1974)	To investigate the effect of perceived legitimacy on obedience to authority	IV: perceived legitimacy	Whether a request came from a researcher wearing (1) a uniform or (2) civilian clothes.	Same researcher Same location Same time of day Same request
		DV: obedience	Whether or not the PP carried out the request from the researcher.	

**Copy and complete the table above, adding an analysis of the following studies:**

- Michaels et al (1982)<sup>1</sup>; Craik & Tulving (1975)<sup>2</sup>; Jenkins & Dallenbach (1924); Godden & Baddeley (1975).

**Suggest how a researcher might operationally define the following psychological variables:**

- Aggression; (2) self esteem; (3) anxiety; (4) prejudice.

<sup>1</sup>This study had two IVs.

<sup>2</sup>This study had one IV but four conditions.