

## Basic Experimental Design

---

- Form versus content
- Single-factor experiments
  - Treatment versus control group design
- Multi-factor experiments
  - Full factorial designs
  - Interaction effects
- Within-subjects experiments
  - Counterbalancing

## Exotic Experimental Design

---

- Treatment-by-block designs
- Mixed designs
- Partial designs

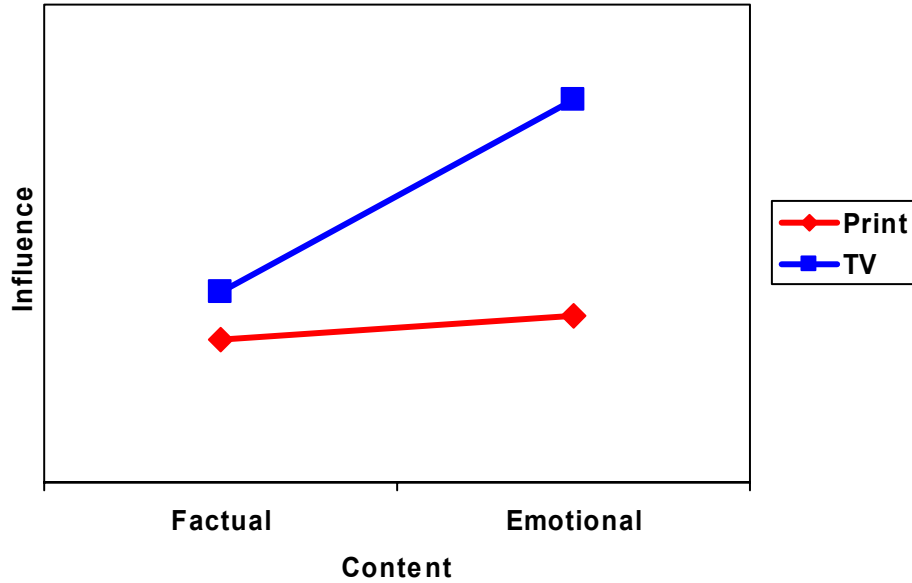
## Experiments versus pseudo-experiments

---

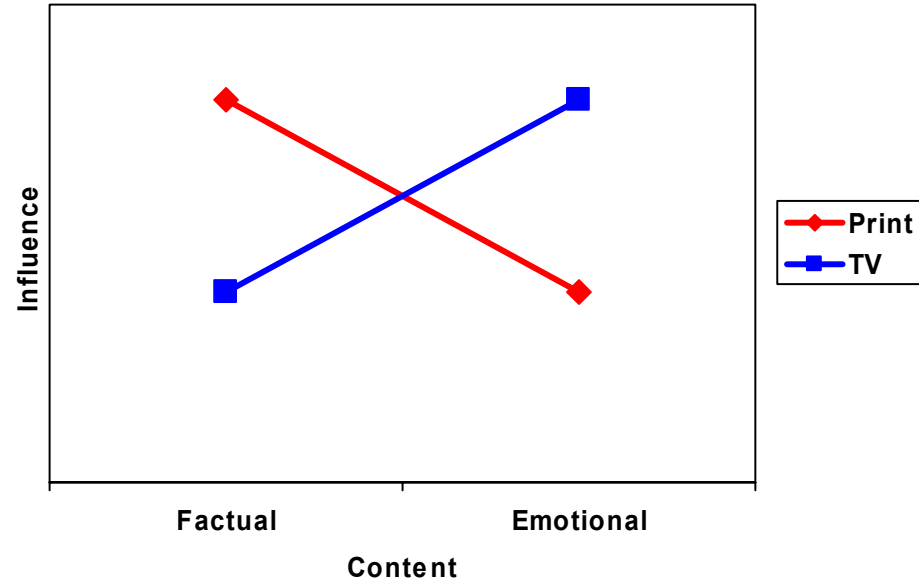
- Threats to internal validity
- Threats to external validity
- Campbell & Stanley's designs

## Interaction types

---



Ordinal, or “Spreading”



Disordinal, or “Crossover”

## Campbell & Stanley's Designs

Pseudoexperimental Designs				
	X	Y		One-shot case study
	Y	X	Y	One group pretest - posttest
	X	Y	Y	Static group comparison
True Experimental Designs				
R	X	Y	Y	Randomized posttest only
R	Y	X	Y	Randomized pretest - posttest
	Y		Y	
R	X-Y	X-Y	R	Between-participants factorial
	X-Y	X-Y		
	Y <sub>1</sub>	Y <sub>2</sub>		Within-participants (repeated measures)