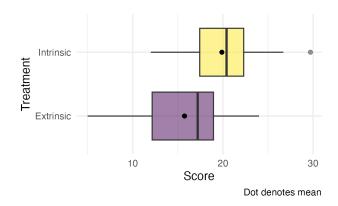
# **02: PERMUTATION TESTS**

Reference: MSwRR Ch 3

Prof Amanda Luby

### 1 Example: Motivation Experiment



Treatment	min	Q1	median	Q3	max	mean	sd	n	missing
Extrinsic	5	12.2	17.2	19.0	24.0	15.7	5.3	23	0
Intrinsic	12	17.4	20.4	22.3	29.7	19.9	4.4	24	0

## 2 Logic of Hypothesis Testing

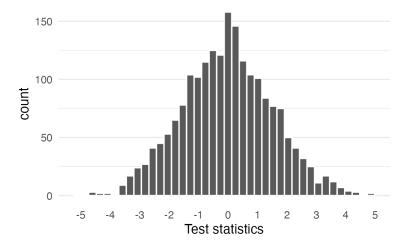
1.	Formulate two competing	about the
2.	Calculate a	summarizing the relevant information to the claims
3.	Look at the	assuming that the initial claim is true
4.		the observed test statistic to the expected behavior (the distribution cre-
	ated in step 3).	

**Example:** Write down the competing hypotheses being tested by the researchers, both in words and using proper notation.



# Distribution of difference in means

Assuming equal means, based on 1,999 trials



#### 3 R Code

Use this space to jot down any notes about the R code we talked through