

# Therapeutic Evolution Course 2.

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## Comments:

- Numerical Facts
- Review of trials against
- Why this approach is new?
- Present article loses on (d ??)
- Interest of Counterfactual approach
- Evidence to write a paper

of sensitivity.  
WSES (concordance)  
+ unmeasured effects?  
body & build & ...  
not as ...  
range of ... (with  
non-spec  
[in fact they just  
prob. large ...  
it's ...  
...]

Palmer & Metcalfe, 2016, Clinical Psychology & Psychotherapy

Verica: {Dealing with} medical treatment.

How to compare treatments? Edges = trials, weighted by ...  
Application of Millman's Theorem.

$V \rightarrow$  resistance.

$\frac{1}{V_a} \leftrightarrow$  conductance.

Serial connection  $\rightarrow$  By Independence of other Variables:  
 $V(\pi) \in \Sigma V(\pi_i)$ .

Ohm's Law:  $\frac{\pi}{V(\pi)} = \sum \frac{\pi_i}{V_a} \Rightarrow \frac{V}{R} = I = \sum I_i$

$\frac{\pi}{V} \rightarrow$  current.

potential in matrix B, weighted W.

Not Consistent: (No conservation law?).

"u" potentials?

$L = B^T W B$ .  $y \leq B^T I_{tot}$ .  $\begin{cases} y \leq W u \\ u \leq B a \end{cases}$

→ Should be a correlation  
positive

calculated by hand? (if not)

Change in input factor when about?

↳ More Work -

same → same

a better one way good at targeting the problem

building effort into it input factor

high input → good more generalised more more

critical only 47% reported

Maths game, Machine of the graph

Other input factors

for the machine of the graph

Validation by response rate

Input factors as available in the world

What in perspective with all other factors of process

in value only → Accuracy not median

quantifying the effects

large number of observations

by Procedural tooling } Project tooling

Clear Messages

Not too informed by others

Improve Quality

Control why input factor

Control factors

build copies, work out, and  
everything

Impact of doable heterogeneity in results

Can we make it more stable? (e.g. 1000000)

- Randomisation  
- The more randomisation, the more reliable the results  
- Min. difference in outcome expected as randomisation  
- Size of the sample depends on what you require

Comparing treatments  
5% difference in 100% is 10%?

Randomisation is a process of randomly allocating patients to treatment or control group  
(as a check of balance against the groups)

Relative difference in outcome and sample size  
function of the level of randomisation

Concealability of the allocation to treatment  
to control group flows it

to check for  
concealability in the trial

Following by treatment

Error if No correlation, influenced  
if you don't include time

Random Sequence & Allocation concealment

to be controlled in the trial  
if the trial is not controlled, the results will be biased

1993 - No money - No time to look for the results

Placebo response & Double-blind

- comparison group & control group  
- ability to know if you are in control group or treatment group

Example of a trial in which a double-blind trial is not possible  
to double-blind the trial

1) Maintain a high quality of the trial

Blind groups and analysis by intention to treat  
to avoid bias in the results

Protein & Glucose compared to non-habitual  
Ted Kuykendall

Relationship between amount of exercise & blood sugar

in order of importance of treatment

Concentration of glucose in blood is very low

Insulin is required for glucose to enter cells

→ Glucose is not a very effective fuel

Protein is a very effective fuel

Control the Glucose

Insulin is a hormone that controls blood sugar

When blood sugar is high, insulin is secreted by the pancreas

When blood sugar is low, insulin is not secreted

Too much insulin = hypo (low blood sugar)

Too little insulin = hyper (high blood sugar)