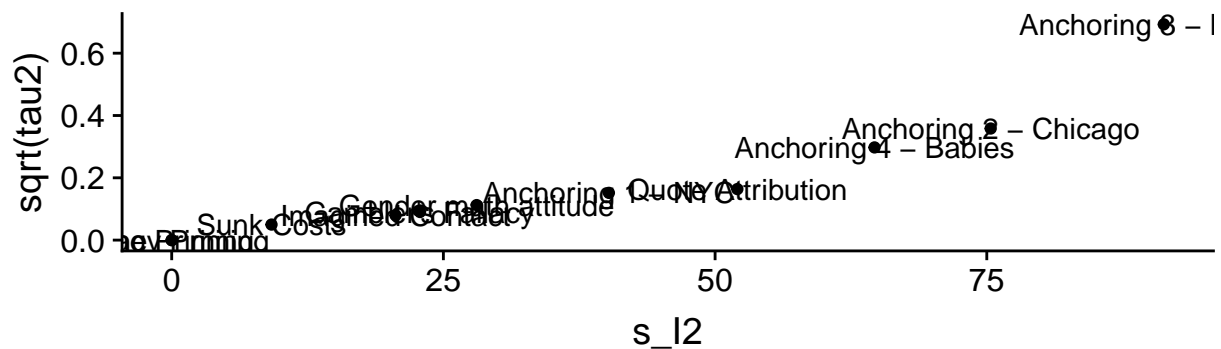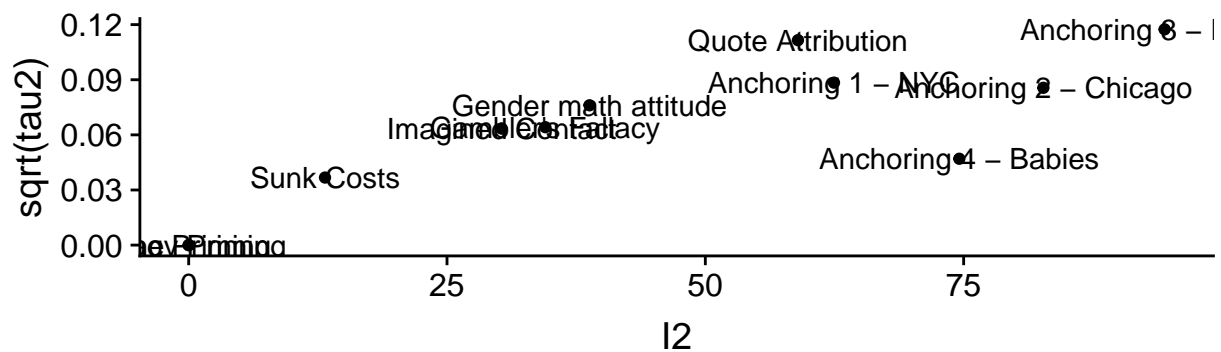# Troubleshooting tau2

Anton Olsson Collentine

7 mei 2019
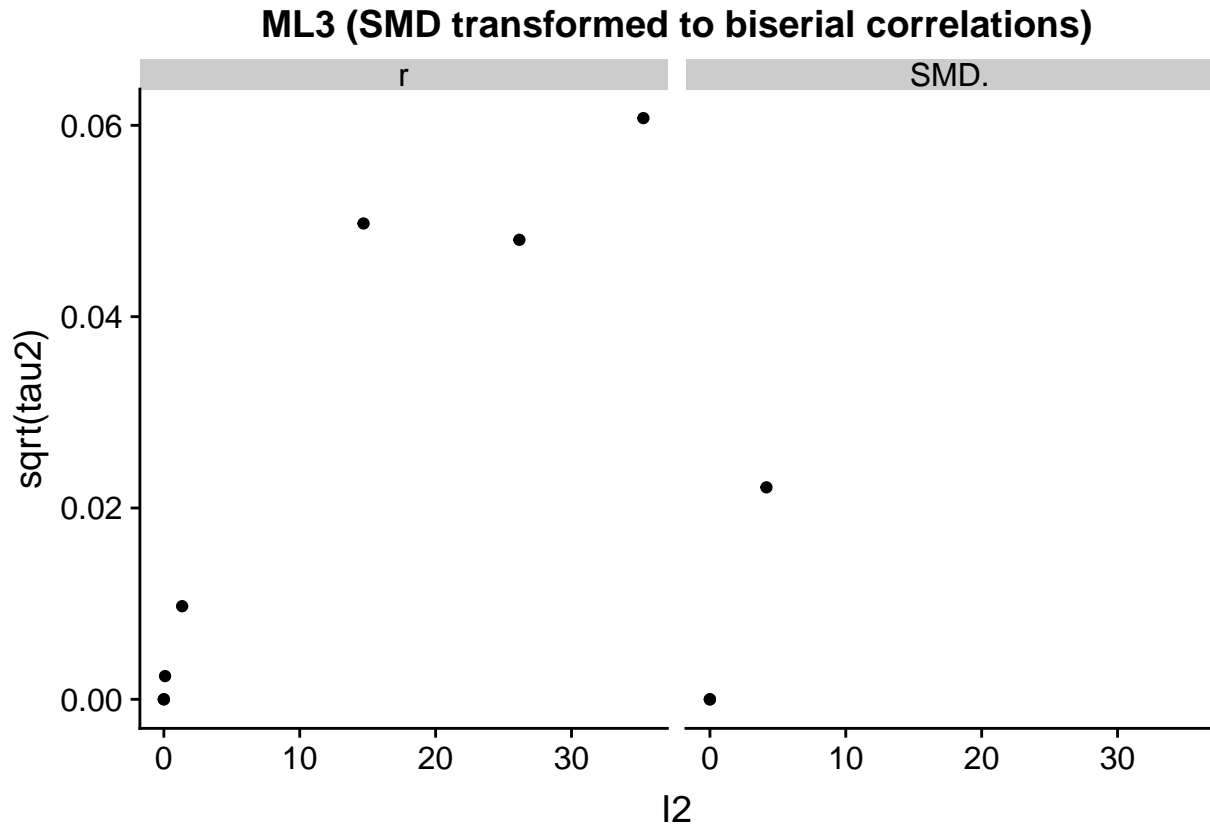
ML1 SMD – untransformed effect sizes

ML1 biserial r – transformed SMD effect sizes

The four effects at the end are Anchoring 1,2,3,4

ML3 (SMD transformed to biserial correlations)

The one non-increasing effect in the left plot above is 'Credentials interaction'. However, note that all the ML3 'correlations' are either transformed partial eta-squared of 2x2 tables in the first table (we can't fix this, would have to get into the raw data which seems liek too much work, I mentioned this in the revised draft)

Check which effects get truncated:

```
dat %>%
  split(.$effect) %>%
  map_dfr(transform_MA, .id = "effect") %>%
  filter(r > 1)
```
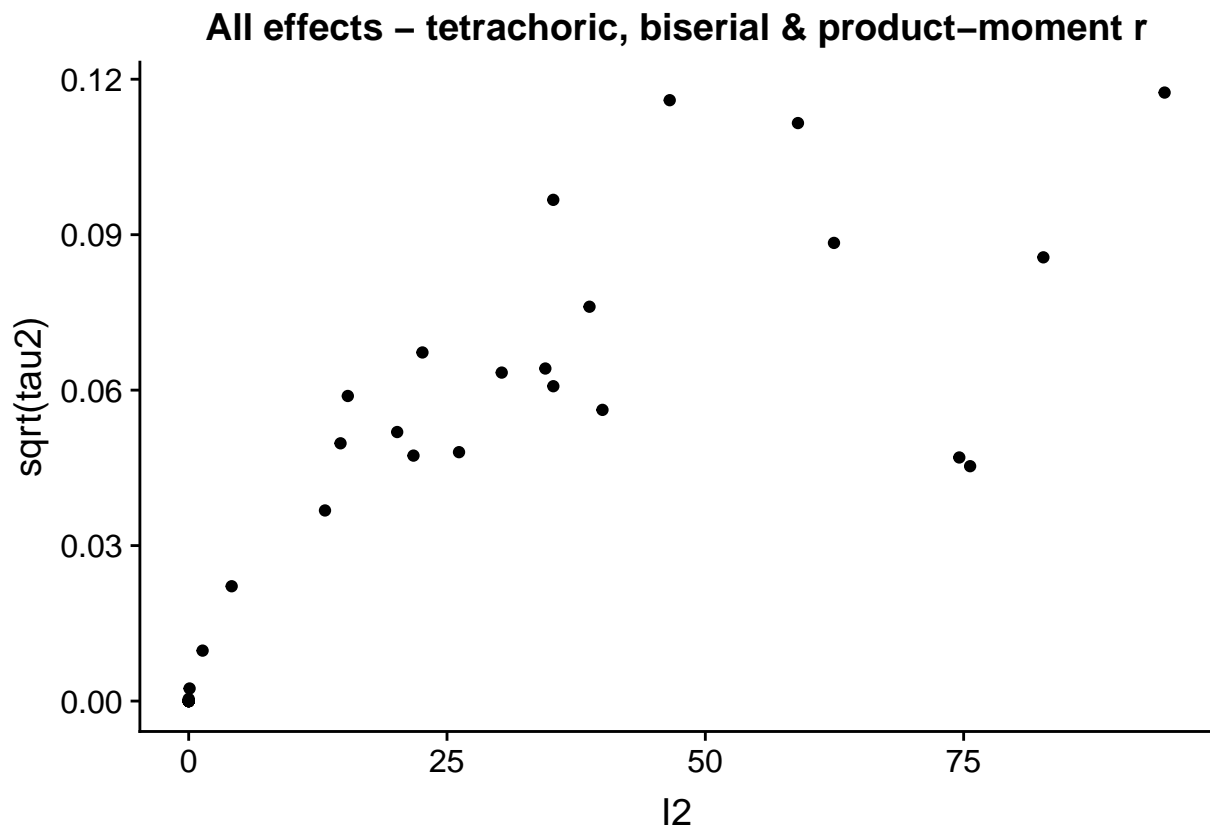
```
##                     effect        r          vi  n
## 1   Anchoring 2 - Chicago 1.037239 0.0009615220 NA
## 2   Anchoring 2 - Chicago 1.023831 0.0009003590 NA
## 3   Anchoring 2 - Chicago 1.034815 0.0009406875 NA
## 4   Anchoring 2 - Chicago 1.070713 0.0013542127 NA
## 5   Anchoring 3 - Everest 1.003413 0.0011468637 NA
## 6   Anchoring 3 - Everest 1.100490 0.0008669169 NA
## 7   Anchoring 3 - Everest 1.045074 0.0008877424 NA
## 8   Anchoring 3 - Everest 1.012695 0.0002738024 NA
## 9   Anchoring 3 - Everest 1.168396 0.0018200691 NA
## 10  Anchoring 3 - Everest 1.098721 0.0008235548 NA
## 11  Anchoring 3 - Everest 1.070460 0.0007698048 NA
## 12  Anchoring 3 - Everest 1.011212 0.0009320243 NA
## 13  Anchoring 3 - Everest 1.030118 0.0004800473 NA
## 14  Anchoring 3 - Everest 1.065253 0.0009301704 NA
```

```
## 15 Anchoring 3 - Everest 1.003478 0.0006001020 NA
## 16 Anchoring 3 - Everest 1.114616 0.0007160133 NA
## 17 Anchoring 3 - Everest 1.015831 0.0007893139 NA
## 18 Anchoring 3 - Everest 1.027750 0.0007539286 NA
## 19  Anchoring 4 - Babies 1.017014 0.0009290498 NA
## 20  Anchoring 4 - Babies 1.017783 0.0008520000 NA
## 21  Anchoring 4 - Babies 1.064677 0.0008235548 NA
## 22  Anchoring 4 - Babies 1.002945 0.0006317964 NA
## 23  Anchoring 4 - Babies 1.092992 0.0008590549 NA
## 24  Anchoring 4 - Babies 1.048956 0.0007941040 NA
## 25  Anchoring 4 - Babies 1.033880 0.0005749757 NA
## 26  Anchoring 4 - Babies 1.046186 0.0010923186 NA
## 27  Anchoring 4 - Babies 1.015629 0.0010798194 NA
## 28  Anchoring 4 - Babies 1.116764 0.0006360040 NA
## 29  Anchoring 4 - Babies 1.060034 0.0010004780 NA
## 30  Anchoring 4 - Babies 1.042027 0.0007675570 NA
## 31  Anchoring 4 - Babies 1.067667 0.0008256784 NA
## 32  Anchoring 4 - Babies 1.076853 0.0009239412 NA
```

Basically the anchoring effects.

All effects – tetrachoric, biserial & product–moment r

The effect that is close to one of the anchoring effects (I2 ~75, tau ~.05) is Allowed vs. forbidden which also has r = .90.