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| **Question** | **Hypothesis** | **Sampling plan (e.g. power analysis)** | **Analysis Plan** | **Interpretation given to different outcomes** |
| 1. Do objective and subjective measures of performance reflect an increase in task load with increasing n-back level? | 1a) The signal detection measure d’ declines with increasing n-back level. | F(1,122)=92, p<.01, eta²=.43  N=25 |  |  |
| 1b) Reaction time increases with increasing n-back level. | F(1,122)=5.10, p=0.03, eta²=.04 |  |  |
| 1c) Ratings on all NTLX subscales increase with increasing n-back level. | p<.01 |  |  |
| 2. Is the effort required for higher n-back levels less attractive, regardless of how well a person performs? | 2a) Subjective values decline with increasing n-back level. | F(1,122)=103, p<.01, eta²=.46 |  |  |
| 2b) Subjective values decline with increasing n-back level, even after controlling for declining task performance measured by signal detection d’ and reaction time. | d’: B=.05, SE=.03, df=72, t=1.7, p=.09  mRT: B=-.05, SE=.19, df=72, t=-.24, p=.81  n: B=-.13, SE=.02, df=72, t=-4.98, p<.01 |  |  |
| 2c) SVs decline stronger with increasing task load for individuals with low compared to high NFC scores. |  |  |  |
| 3. Is there a discrepancy between perceived task load and subjective value of effort depending on a person’s Need for Cognition? | 3a) Subjective values predict individual NFC scores. | B=11.07, SE=4.71, p=.02, R²=.10 |  |  |
| 3b) NTLX scores do not predict individual NFC scores. | p=.16 |  |  |