**Method**

**Participants**

Might need a section here about power calculations? You used MorePower last time? Do you want to use this again?

72 students (64 females) from De Montfort University originally took part in the study and were rewarded with coursework credits. However, one participant had to be removed due to not provided all of the demographic information. Of the remaining 71 participants, the mean age was 20.12 (*SD* = 3.14, range = 18-37). 61 participants were right-handed, whilst 10 were left-handed. All participants reported to have normal or corrected-to-normal vision and were naïve about the purpose of the study. Written informed consent was obtained before participation. The study was approved by the Faculty of Health and Life Sciences Research Ethics Committee (Ref: 3488) and was conducted in accordance with the ethical standards established by the Declaration of Helsinki.

**Data preparation**

Reaction times less than 150ms were removed (Brenner & Smeets, 1997). Data from one participant was also removed for having a high number of errors (over 20%). The remaining sample made few errors (0.62-18.43%) with average error percentage being 6.88%. Because of this, accuracy was not analysed. 34 trials where participants failed to make a response were removed from the analysis alongside all incorrect responses. For outliers, we specified a threshold of 3 standard deviations and calculated the individual means and standard deviations within each condition. This approach detected 416 outlier trials, which were removed from the sample before analysis. The average number of outliers per participant was 5.85 (minimum was 1 and the maximum was 10). Finally, we investigated whether the number of valid trials within each participant was evenly spread amongst all of the 8 conditions. For one participant, the number of valid trials (after removing outliers and incorrect responses) within one condition was 57.5% whilst in the other 7 conditions, this ranged 80%-95%. All other participants had no condition where valid trials were less than 70% Fewer observations within a condition are more likely to generate variable mean values that might not truly be representative of the participants behaviour in given condition (CITE). Therefore, to avoid unreliable estimates contaminating the rest of the analysis, this participant was removed from the sample. Data and analysis scripts are available on the Open Science Framework (<https://osf.io/e7rj3/>).

**Results**

**Symbolic task**

The following analysis was the same as that proposed in Prpic et al (2023). Individual mean reaction times were entered into a response hand (left vs. right) X number magnitude (small vs large) X congruency (congruent vs incongruent) Repeated Measures ANOVA. A main effect of congruency [F(1, 68) = 8.16, *p* = 0.006, = .107] was found, suggesting that reaction times were faster when the numerical information was congruent (M = 548.02, SE = 2.73) versus incongruent (M = 558.02, SE = 2.84) (small/large digits were presented in small/large numerosity). Finally, a significant hand X magnitude interaction was found [F(1, 68) = 4.79, *p* = 0.032, = .066] which is clear evidence of a SNARC effect (Figure X). No other interactions were significant and there was no evidence of a 3-way interaction between hand, magnitude and congruency, suggesting that the SNARC effect was not modulated by congruent/incongruent non-symbolic numerals.

*Figure X: Mean reaction times with error bars representing standard error of the mean (SEM) for congruent (A) and incongruent (B) conditions in the symbolic task.*

**Non-symbolic task**

Individual mean reaction times for the numerosity were entered into a response hand (left vs right) X non-symbolic numerical magnitude (small vs large) X congruency (congruent vs incongruent) Repeated Measures ANOVA. A significant main effect of response hand [F(1, 68) = 8.32, p = 0.005, = .109]. This suggests that participants were significantly faster at responding when using their right (M = 574.03, SE = 3.26) versus left (M = 586.85, SE = 3.35) hand. Regarding interactions, we found a significant interaction between magnitude and congruency [F(1, 68) = 4.45, p = 0.039, = .061]. In the congruent condition, large magnitudes were responded to slower (M = 581.68, SE = 5.13) than smaller magnitudes (M = 575.87, SE = 4.47). Conversely, for the incongruent condition, this effect is flipped: large magnitudes are responded to faster (M = 574.67, SE= 4.39) than small magnitudes (M = 589.57, SE = 4.68.

Finally, there was evidence of a 3-way interaction between hand, magnitude, and congruency [F(1, 68) = 7.11, p = 0.01, = .095)]. Post-hoc pairwise comparisons found 2 significant contrasts. Firstly, when responding with the left hand to small magnitudes, congruent conditions were faster (M = 574.02, SE = 6.20) than the incongruent conditions (M = 599.84, SE = 6.95) [t(68) = -3.34, p = 0.02] (see Figure X). The second post-hoc contrast that was for the incongruent condition, responses with the right hand to large magnitudes were faster (M = 569.760, SE = 6.27) than left hand responses to small magnitudes (M = 599.84, SE = 6.95) [t(68) = -3.24, p = 0.03] (see Figure X).

*Figure X: Mean reaction times with error bars representing SEM for congruent (A) and incongruent (B) conditions in the non-symbolic task.*