*Task Performance.*

Task data were analyzed for correctness in the lexical decision and letter search tasks individually. See Table XX for average proportions by condition and stimulus type. Participants were eliminated from conditions in which they performed 3 standard deviations below the mean. Error rates were tested with a 2X4 (task by stimulus) repeated measures ANOVA. Overall, performance in the letter search task (*M*=.97, *SD*=.02) was equal to the lexical decision task (*M*=.97, *SD*=.02), *F*(1,13)=1.54, *p*=.24. The interaction between task type and stimuli was also not significant *F*(3,39)=1.74, *p*=.18. The different types of stimuli showed a difference in performance, *F*(3,39)=9.85, *p*<.001, between non-words (*M*=.94, *SD*=.03, *t*(13)=-3.02, *p*=.01) and unrelated word pairs (*M*=.97, *SD*=.01); non-words and associative word pairs (*M*=.98, *SD*=.01, *t*(14)=-5.55, *p*<.001); and non-words and semantic word pairs (*M*=.98, *SD*=.02, *t*(14)=-3.45, *p*=.01). The other stimuli comparisons were all non-significant.

*Reaction Time Performance.*

Reaction time data were excluded for incorrect trials and participants with very low percent correct rates (as described above). Average reaction times were calculated for each task type and stimulus. Next, associative, semantic, and non-word conditions were subtracted from their matching unrelated word conditions. Figure XX depicts the priming differences for each condition. Each stimulus difference was analyzed with a single sample t-test against zero to examine for priming.

*Letter search task.* All conditions in the letter search task were significantly primed over unrelated words pairs, while non-words were significantly slower than unrelated word pairs. As shown in Figure XX, associative words pairs were almost 200 msecs faster than unrelated word pairs, *t*(16) = 3.54, *p* < .01, and semantic word pairs were also around 200 msec faster unrelated word pairs, *t*(15) = 6.38, *p*<.01. Non-words were significantly slower than unrelated word pairs by about 200 msec, *t*(14) = -5.18, *p*<.01. Given previous research, it is slightly surprising that semantic word pairs would be primed during a letter search task, however, the current word list has also shown this effect in Buchanan (2010).

*Lexical decision task.* Priming was found for associative word pairs in the lexical decision task, a marginal effect semantic word pairs, and slowing for non-word pairs when compared to unrelated word pairs. Associations were about 120 msec faster than unrelated word pairs, *t*(16) = 2.99, *p*<.01. Semantic word pairs were primed approximately 85 msec over unrelated pairs, which approached significance, *t*(16) = 1.93, *p*=.07. Semantic priming was expected in the lexical decision task, and this effect was most likely due to our small sample size. Non-words were again 200 msec slower than unrelated word pairs, *t*(14) = -5.24, *p*<.01.

Table XX.

|  |  |  |
| --- | --- | --- |
|  | *M* | SD |
| **Letter Search** |  |  |
| Non-Words | 0.95 | 0.02 |
| Unrelated Words | 0.97 | 0.02 |
| Associated Words | 0.97 | 0.03 |
| Semantic Words | 0.98 | 0.02 |
| **Lexical Decision task** |  |  |
| Non-Words | 0.94 | 0.05 |
| Unrelated Words | 0.98 | 0.02 |
| Associated Words | 0.99 | 0.01 |
| Semantic Words | 0.98 | 0.03 |