

# [The effects of semantic interference on object naming](https://assignbuster.com/the-effects-of-semantic-interference-on-object-naming/)

[Psychology](https://assignbuster.com/essay-subjects/psychology/)

Anova Analysis Affiliation Descriptives RecallTime N Mean Std. D Std. Error 95% CI Min Max LW Bound UP Bound Related Condition 15 10. 8667 3. 88549
1. 00323
8. 7150
13. 0184
6. 25
22. 25
Unrelated Condition
15
8. 8833
1. 70573
. 44042
7. 9387
9. 8279
6. 50
13. 25
Neutral Condition
15
7. 9500
1. 91610
. 49473
6. 8889
9. 0111
4. 75
11. 25
Total
45
9. 2333
2. 90004
. 43231
8. 3621
10. 1046
4. 75
22. 25
The descriptive analysis was considered for condition formality test between related condition which has a M= 10. 8667, unrelated condition which had a M= 8. 8833, and the natural condition which had a M= 7. 950. The analysis was performed under a sample of 45 participants. Among all the variables, there were 15 participants. A pre-determination of the significance is that it will be even since the sample used is the same all over the variable.
ANOVA
RecallTime
Sum of Squares
df
Mean Square
F
Sig.
Between Groups
66. 558
2
33. 279
4. 605
. 016
Within Groups
303. 492
42
7. 226
Total
370. 050
44
The analysis below is used to test the originality of variance and if the analysis or the data can be used for this study. The p-value of the study was less than . 05; the p-value was . 0. 16. Thus, it meets the significance level, which is less than . 05, meaning that the data is ideal for the study. The degree of freedom was also determined in the study; this was specifically done among the groups. In this case degree of freedom between groups is df= 2; this is groups less 1. The degree of freedom within groups df= 42; meaning, 45 participants less the three groups. The critical value was F= 4. 605 while the significance value p= 0. 016 which is less than 0. 05 meaning that there was a significant difference between the groups.
Multiple Comparisons
Dependent Variable: RecallTime
Tukey HSD
(I) Condition
(J) Condition
Mean Difference (I-J)
Std. Error
Sig.
95% CI
Lw Bound
Up Bound
Related Condition
Unrelated Condition
1. 98333
. 98156
. 120
-. 4014
4. 3680
Neutral Condition
2. 91667\*
. 98156
. 013
. 5320
5. 3014
Unrelated Condition
Related Condition
-1. 98333
. 98156
. 120
-4. 3680
. 4014
Neutral Condition
. 93333
. 98156
. 612
-1. 4514
3. 3180
Neutral Condition
Related Condition
-2. 91667\*
. 98156
. 013
-5. 3014
-. 5320
Unrelated Condition
-. 93333
. 98156
. 612
-3. 3180
1. 4514
\*. The mean difference is significant at the 0. 05 level.
The results of the post hoc revealed, that there was not significant relationship between related condition and unrelated condition p=. 012, but there was significant relations between related condition and neutral condition of the same group p= 0. 013. On the second group, there was not significant relationship between unrelated condition and both related and neutral condition P=. 120, p=. 612 respectively. On the third group, there was significant relationship between neutral condition and related condition p=. 013, but there was no significant relationship between neutral condition and unrelated condition p=. 612.
RecallTime
TukeyHSDa
Condition
N
Subset for alpha = 0. 05
1
2
Neutral Condition
15
7. 9500
Unrelated Condition
15
8. 8833
8. 8833
Related Condition
15
10. 8667
Sig.
. 612
. 120
The result of the homogenous analysis indicates that there was significant difference from each other; neutral condition p= 7. 9500, unrelated condition, p= 8. 8833 and related condition, p= 10. 8667. This means that related condition is far much related to both neutral and unrelated condition. With a p= 0. 612, the null hypothesis; related condition will not be faster to name than the unrelated condition was supported and the alternative hypothesis; My hypothesis is that the related condition will be faster to name than the unrelated condition was rejected.
The results of the graph indicated that there is a lower chance of naming in related condition than in unrelated condition and neutral condition. We can conclude that there was no significant main effect that related condition would be much faster to name than unrelated condition.