

The effects of semantic interference on object naming

Psychology



**ASSIGN
BUSTER**

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.