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1 /Users/teebaobaid/PycharmProjects/pythonProject3/venv/bin/python "/Users/teebaobaid/PycharmProjects/pythonProject3/ANOVA &
  Tukey.py"
2 Index(['No_action', 'No_new_comparative_trial', 'Prediction_Current_same_rule',
3       'Prediction_Voltage_Drop_same_rule',
4       'Confidence_Current_verify_prediction',
5       'Confidence_Voltage_Drop_verify_prediction',
6       'Rule_Current_Confirming_Redundancy',
7       'Rule_Voltage_Drop_Confirming_Redundancy',
8       'Post_test_Current_non_normative',
9       'Post_test_Voltage_Drop_non_normative', 'New_comparative_trial',
10      'Prediction_Current_Fill_up_gaps',
11      'Prediction_Voltage_Drop_Fill_up_gaps',
12      'Confidence_Current_falsify_prediction',
13      'Confidence_Voltage_Drop_falsify_prediction',
14      'Identify_problem_goal_stated', 'Rule_Current_Simultaneous_scanning',
15      'Rule_Voltage_Drop_Simultaneous_scanning',
16      'Rule_Current_Successive_scanning',
17      'Rule_Voltage_Drop_Successive_scanning', 'Rule_Current_Focus_gambling',
18      'Rule_Voltage_Drop_Focus_gambling',
19      'Rule_Current_Conservative_Focusing',
20      'Rule_Voltage_Drop_Conservative_Focusing', 'Post_test_Current_partial',
21      'Post_test_Voltage_Drop_partial', 'Post_test_Current_1_Valid_link',
22      'Post_test_Voltage_Drop_1_Valid_link',
23      'Post_test_Current_2_Valid_links',
24      'Post_test_Voltage_Drop_2_Valid_links'],
25      dtype='object')
26
27 Results for No_action:
28 ANOVA Table
29 Source      Sum of Squares  Degrees of Freedom  Mean Squares    F        P-value
30 Group      18.533333333333335      2          9.266666666666667    8.892255892255893    0.0004353123585035812
31 Error      59.400000000000006      57          1.0421052631578949
32      Multiple Comparison of Means - Tukey HSD, FWER=0.05
33 =====
34      group1      group2      meandiff p-adj    lower    upper    reject
35 -----
36      Control Experimental 1      -1.3  0.001 -2.0768 -0.5232    True
37      Control Experimental 2      -1.0 0.0084 -1.7768 -0.2232    True
38 Experimental 1 Experimental 2      0.3  0.615 -0.4768  1.0768    False
39 -----
40      OLS Regression Results

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41 =====
42 Dep. Variable:          No_action      R-squared:          0.238
43 Model:                  OLS            Adj. R-squared:     0.211
44 Method:                 Least Squares  F-statistic:        8.892
45 Date:                   Wed, 17 Jul 2024 Prob (F-statistic):  0.000435
46 Time:                   04:35:06       Log-Likelihood:     -84.835
47 No. Observations:      60             AIC:               175.7
48 Df Residuals:          57             BIC:               182.0
49 Df Model:               2
50 Covariance Type:       nonrobust
51 =====
52                        coef      std err          t      P>|t|      [0.025      0.975]
53 -----
54 Intercept               1.8000      0.228        7.886     0.000        1.343        2.257
55 C(Group)[T.Experimental 1] -1.3000      0.323       -4.027     0.000       -1.946       -0.654
56 C(Group)[T.Experimental 2] -1.0000      0.323       -3.098     0.003       -1.646       -0.354
57 =====
58 Omnibus:                56.489      Durbin-Watson:      1.875
59 Prob(Omnibus):          0.000      Jarque-Bera (JB):   347.165
60 Skew:                   2.554      Prob(JB):           4.11e-76
61 Kurtosis:               13.619      Cond. No.           3.73
62 =====
63
64 Notes:
65 [1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
66

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