COMPLEMENTARY COVARIATE ANALYSIS

Motivation for Cognitive Effort

```
> # GENDER
> group1 <- base$M_GEND_CF
> group2 <- base$M_GEND_TF
> group3 <- base$M_GEND_CM
> group4 <- base$M_GEND_TM
>
> # FEMALE (1) vs. MALE (2) / (low complexity)
> t_test_result13 <- t.test(group1, group3, var.equal = TRUE)
> print(t_test_result13)

        Two Sample t-test

data:  group1 and group3
t = -0.55751, df = 88, p-value = 0.5786
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
 -0.486098  0.273111
sample estimates:
mean of x mean of y
 3.556364  3.662857

>
> # FEMALE (1) vs. MALE (2)/ (high complexity)
> t_test_result24 <- t.test(group2, group4, var.equal = TRUE)
> print(t_test_result24)

        Two Sample t-test

data:  group2 and group4
t = -0.71103, df = 92, p-value = 0.4789
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
 -0.568987  0.268987
sample estimates:
mean of x mean of y
     3.55      3.70
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```
> # AGE
> group5 <- base$M_AGE_CY
> group6 <- base$M_AGE_TY
> group7 <- base$M_AGE_CO
> group8 <- base$M_AGE_TO
>
> # YOUNG (22-35) vs. MATURE (36-68) / (low complexity)
> t_test_result57 <- t.test(group5, group7, var.equal = TRUE)
> print(t_test_result57)

        Two Sample t-test

data:  group5 and group7
t = -2.195, df = 89, p-value = 0.03077
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
 -0.75344646 -0.03747142
sample estimates:
mean of x mean of y
 3.395652  3.791111

>
> # YOUNG (22-35) vs. MATURE (36-68) / (high complexity)
> t_test_result68 <- t.test(group6, group8, var.equal = TRUE)
> print(t_test_result68)

        Two Sample t-test

data:  group6 and group8
t = -2.4407, df = 93, p-value = 0.01655
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
 -0.92200644 -0.09475439
sample estimates:
mean of x mean of y
 3.430508  3.938889
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```
> # EDUCATION
> group9 <- base$M_EDUC_CU
> group10 <- base$M_EDUC_TU
> group11 <- base$M_EDUC_CG
> group12 <- base$M_EDUC_TG
>
> # UNDERGRADUATE (2-3) vs. GRADUATE (4-6) / (low complexity)
> t_test_result911 <- t.test(group9, group11, var.equal = TRUE)
> print(t_test_result911)

        Two Sample t-test

data:  group9 and group11
t = 1.5401, df = 89, p-value = 0.1271
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
 -0.08158812  0.64390696
sample estimates:
mean of x mean of y
 3.733333  3.452174

>
> # UNDERGRADUATE (2-3) vs. GRADUATE (4-6) / (high complexity)
> t_test_result1012 <- t.test(group10, group12, var.equal = TRUE)
> print(t_test_result1012)

        Two Sample t-test

data:  group10 and group12
t = 2.1224, df = 93, p-value = 0.03646
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
 0.02826215 0.85012613
sample estimates:
mean of x mean of y
 3.882051  3.442857
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```
> # FAMILIARITY WITH AI
> group13 <- base$M_FAMI_CB
> group14 <- base$M_FAMI_TB
> group15 <- base$M_FAMI_CA
> group16 <- base$M_FAMI_TA
>
> # BASIC (1-2) VS. ADVANCED (3-5) / (low complexity)
> t_test_result1315 <- t.test(group13, group15, var.equal = TRUE)
> print(t_test_result1315)

        Two Sample t-test

data:  group13 and group15
t = -1.5724, df = 89, p-value = 0.1194
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
 -0.71081147  0.08280221
sample estimates:
mean of x mean of y
 3.370370  3.684375

>
> # BASIC (1-2) VS. ADVANCED (3-5)  / (high complexity)
> t_test_result1416 <- t.test(group14, group16, var.equal = TRUE)
> print(t_test_result1416)

        Two Sample t-test

data:  group14 and group16
t = -2.5002, df = 93, p-value = 0.01416
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
 -1.0729799 -0.1230351
sample estimates:
mean of x mean of y
 3.163636  3.761644
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Intention to Delegate Decisions to AI

```
> # GENDER
> group1 <- base$Y_GEND_CF
> group2 <- base$Y_GEND_TF
> group3 <- base$Y_GEND_CM
> group4 <- base$Y_GEND_TM
>
> # FEMALE (1) vs. MALE (2) / (low complexity)
> t_test_result13 <- t.test(group1, group3, var.equal = TRUE)
> print(t_test_result13)

        Two Sample t-test

data:  group1 and group3
t = 0.14727, df = 88, p-value = 0.8833
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
 -0.4608358  0.5346020
sample estimates:
mean of x mean of y
 2.745455  2.708571

>
> # FEMALE (1) vs. MALE (2)/ (high complexity)
> t_test_result24 <- t.test(group2, group4, var.equal = TRUE)
> print(t_test_result24)

        Two Sample t-test

data:  group2 and group4
t = 0.44949, df = 93, p-value = 0.6541
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
 -0.3903939  0.6188375
sample estimates:
mean of x mean of y
 3.165385  3.051163
```

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```
> # AGE
> group5 <- base$Y_AGE_CY
> group6 <- base$Y_AGE_TY
> group7 <- base$Y_AGE_CO
> group8 <- base$Y_AGE_TO
>
> # YOUNG (22-35) vs. MATURE (36-68) / (low complexity)
> t_test_result57 <- t.test(group5, group7, var.equal = TRUE)
> print(t_test_result57)

        Two Sample t-test

data:  group5 and group7
t = -0.3519, df = 89, p-value = 0.7257
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
 -0.5715317  0.3995510
sample estimates:
mean of x mean of y
 2.669565  2.755556

>
> # YOUNG (22-35) vs. MATURE (36-68) / (high complexity)
> t_test_result68 <- t.test(group6, group8, var.equal = TRUE)
> print(t_test_result68)

        Two Sample t-test

data:  group6 and group8
t = 1.5789, df = 93, p-value = 0.1178
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
 -0.1048158  0.9181868
sample estimates:
mean of x mean of y
 3.267797  2.861111
```

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```
> # EDUCATION
> group9 <- base$Y_EDUC_CU
> group10 <- base$Y_EDUC_TU
> group11 <- base$Y_EDUC_CG
> group12 <- base$Y_EDUC_TG
>
> # UNDERGRADUATE (2-3) vs. GRADUATE (4-6) / (low complexity)
> t_test_result911 <- t.test(group9, group11, var.equal = TRUE)
> print(t_test_result911)

        Two Sample t-test

data:  group9 and group11
t = 1.7094, df = 89, p-value = 0.09086
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
 -0.06678969  0.88939838
sample estimates:
mean of x mean of y
 2.920000  2.508696

>
> # UNDERGRADUATE (2-3) vs. GRADUATE (4-6) / (high complexity)
> t_test_result1012 <- t.test(group10, group12, var.equal = TRUE)
> print(t_test_result1012)

        Two Sample t-test

data:  group10 and group12
t = -1.441, df = 93, p-value = 0.1529
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
 -0.8723790  0.1386793
sample estimates:
mean of x mean of y
 2.897436  3.264286
```

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```
> # FAMILIARITY WITH AI
> group13 <- base$Y_FAMI_CB
> group14 <- base$Y_FAMI_TB
> group15 <- base$Y_FAMI_CA
> group16 <- base$Y_FAMI_TA
>
> # BASIC (1-2) VS. ADVANCED (3-5) / (low complexity)
> t_test_result1315 <- t.test(group13, group15, var.equal = TRUE)
> print(t_test_result1315)

        Two Sample t-test

data:  group13 and group15
t = -0.67592, df = 89, p-value = 0.5008
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
 -0.7108717  0.3499921
sample estimates:
mean of x mean of y
 2.585185  2.765625

>
> # BASIC (1-2) VS. ADVANCED (3-5)  / (high complexity)
> t_test_result1416 <- t.test(group14, group16, var.equal = TRUE)
> print(t_test_result1416)

        Two Sample t-test

data:  group14 and group16
t = 0.6913, df = 93, p-value = 0.4911
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
 -0.3875676  0.8015153
sample estimates:
mean of x mean of y
 3.272727  3.065753
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