

```
1
2 log using 506_ERLT.log, text replace
3
4 *Import data*
5
6 cd "/Users/guhanxi/Desktop/AEE/Field Experiment/Project/Data"
7 import delimited "506+project+C.csv", clear
8 save "506+project+C.dta",replace
9
10 import delimited "506+project+T1.csv", clear
11 save "506+project+T1.dta",replace
12
13 import delimited "506+project+T2.csv", clear
14 save "506+project+T2.dta",replace
15
16 import delimited "506+project+T3.csv", clear
17 save "506+project+T3.dta",replace
18
19 *Append datasets*
20
21 use "506+project+C.dta", clear
22 append using "506+project+T1.dta" "506+project+T2.dta"
23 "506+project+T3.dta"
24 save "506+project+merged.dta",replace
25
26 use 506+project+merged.dta, clear
27
28 *Encode categorical data*
29
30 encode group, generate(group_code)
31 encode preference, generate(pref_code)
32 encode degree, generate(degree_code)
33 encode os_frequency, generate(osf_code)
34 encode gender, generate(gender_code)
35 encode age, generate(age_code)
36
37 * Recode the string variable
38
39 recode group_code 1=0 2=1 3=2 4=3
40 recode pref_code 3=0 1=1 2=2 4=3
41 recode degree_code 1=0 6=1 3=2 5=3 2=4 4=5
42 recode osf_code 5=0 6=4
43 recode gender_code 1=0 2=1 3=2
44 recode age_code 1=0 2=1 3=2 4=3 5=4 6=5 7=6
45 recode age_code 0=18 1=19 2=20 3=21 4=22 5=23 6=24
46
47 **
```

```
48 drop preference reason gender age degree usc_email os_frequency
   group
49
50 save "506+project+merged.dta",replace
51
52 ** Summary table
53 sort group_code
54 by group_code: summarize
55
56 ** Balance table
57 by group_code: summarize gender_code age_code degree_code osf_code
58
59 *T test
60 oneway gender_code group_code if group_code==0 | group_code==1
61 oneway gender_code group_code if group_code==0 | group_code==2
62 oneway gender_code group_code if group_code==0 | group_code==3
63 oneway gender_code group_code if group_code==1 | group_code==2
64 oneway gender_code group_code if group_code==1 | group_code==3
65 oneway gender_code group_code if group_code==2 | group_code==3
66
67 oneway age_code group_code if group_code==0 | group_code==1
68 oneway age_code group_code if group_code==0 | group_code==2
69 oneway age_code group_code if group_code==0 | group_code==3
70 oneway age_code group_code if group_code==1 | group_code==2
71 oneway age_code group_code if group_code==1 | group_code==3
72 oneway age_code group_code if group_code==2 | group_code==3
73
74 oneway degree_code group_code if group_code==0 | group_code==1
75 oneway degree_code group_code if group_code==0 | group_code==2
76 oneway degree_code group_code if group_code==0 | group_code==3
77 oneway degree_code group_code if group_code==1 | group_code==2
78 oneway degree_code group_code if group_code==1 | group_code==3
79 oneway degree_code group_code if group_code==2 | group_code==3
80
81 oneway osf_code group_code if group_code==0 | group_code==1
82 oneway osf_code group_code if group_code==0 | group_code==2
83 oneway osf_code group_code if group_code==0 | group_code==3
84 oneway osf_code group_code if group_code==1 | group_code==2
85 oneway osf_code group_code if group_code==1 | group_code==3
86 oneway osf_code group_code if group_code==2 | group_code==3
87
88
89
90 *Joint test
91 oneway gender_code group_code, anova
92 oneway age_code group_code, anova
93 oneway degree_code group_code, anova
94 oneway osf_code group_code, anova
95
```

```
95
96 *****Main Analysis test treatment
97 * OLS Between groups_a price
98
99 clear
100 use 506+project+merged.dta
101 keep if group_code == 0 | group_code == 2
102 regress a_price group_code
103
104 clear
105 use 506+project+merged.dta
106 keep if group_code == 0 | group_code == 2
107 regress a_price group_code degree
108
109
110 clear
111 use 506+project+merged.dta
112 keep if group_code == 1 | group_code == 3
113 regress a_price group_code
114
115 clear
116 use 506+project+merged.dta
117 keep if group_code == 1 | group_code == 3
118 regress a_price group_code degree
119
120
121
122 * OLS Between groups_b price
123
124 clear
125 use 506+project+merged.dta
126 keep if group_code == 0 | group_code == 3
127 regress b_price group_code
128
129 clear
130 use 506+project+merged.dta
131 keep if group_code == 0 | group_code == 3
132 regress b_price group_code degree
133
134
135 clear
136 use 506+project+merged.dta
137 keep if group_code == 1 | group_code == 2
138 regress b_price group_code
139
140 clear
141 use 506+project+merged.dta
142 keep if group_code == 1 | group_code == 2
143 regress b_price group_code degree
```

```
143 regress pref_code group_code degree
144
145
146 * OLS Between groups preference
147
148 clear
149 use 506+project+merged.dta
150 keep if group_code == 0 | group_code == 2
151 regress pref_code group_code
152
153 clear
154 use 506+project+merged.dta
155 keep if group_code == 0 | group_code == 2
156 regress pref_code group_code degree
157
158
159 clear
160 use 506+project+merged.dta
161 keep if group_code == 0 | group_code == 3
162 regress pref_code group_code
163
164 clear
165 use 506+project+merged.dta
166 keep if group_code == 0 | group_code == 3
167 regress pref_code group_code degree_code
168
169 clear
170 use 506+project+merged.dta
171 keep if group_code == 1 | group_code == 2
172 regress pref_code group_code
173
174 clear
175 use 506+project+merged.dta
176 keep if group_code == 1 | group_code == 2
177 regress pref_code group_code degree_code
178
179 clear
180 use 506+project+merged.dta
181 keep if group_code == 1 | group_code == 3
182 regress pref_code group_code
183
184 clear
185 use 506+project+merged.dta
186 keep if group_code == 1 | group_code == 3
187 regress pref_code group_code degree_code
188
189
190 * Histograms
191 clear
```

```
192 use 506+project+merged.dta
193 graph bar (mean) a_less_20 a_21_30 a_31_40 a_more_40, over(
group_code)
194 legend(label(1 "Control") label(2 "Treatment 1") label(3
"Treatment 2"))///
195 label(4 "Treatment 3"))
196 ytitle("Mean Value") xtitle("Groups")
197 title("Comparison of probabilistic distribution of Product A
across Groups")
198
199
200 graph bar (mean) b_less_20 b_21_30 b_31_40 b_more_40, over(
group_code)
201 legend(label(1 "Control") label(2 "Treatment 1") label(3
"Treatment 2"))///
202 label(4 "Treatment 3"))
203 ytitle("Mean Value") xtitle("Groups")
204 title("Comparison of probabilistic distribution of Product B
across Groups")
205
206
207
208 *****
209 ***** Heterogeneity
210 gen gg=group_code*gender_code
211 gen ga=group_code*age_code
212 gen gd=group_code*degree_code
213 gen go=group_code*osf_code
214
215 save 506+project+merged.dta, replace
216
217 **
218
219 clear
220 use 506+project+merged.dta
221 keep if group_code == 0 | group_code == 2
222 regress a_price group_code gender_code gg
223
224 clear
225 use 506+project+merged.dta
226 keep if group_code == 1 | group_code == 3
227 regress a_price group_code gender_code gg
228
229
230 **
231
232 clear
233 use 506+project+merged.dta
```

```
234 keep if group_code == 0 | group_code == 2
235 regress a_price group_code osf_code go
236
237 clear
238 use 506+project+merged.dta
239 keep if group_code == 1 | group_code == 3
240 regress a_price group_code osf_code go
241
242 **
243
244 clear
245 use 506+project+merged.dta
246 keep if group_code == 0 | group_code == 3
247 regress b_price group_code gender_code gg
248
249 clear
250 use 506+project+merged.dta
251 keep if group_code == 1 | group_code == 2
252 regress b_price group_code gender_code gg
253
254 **
255
256 clear
257 use 506+project+merged.dta
258 keep if group_code == 0 | group_code == 3
259 regress b_price group_code osf_code go
260
261 clear
262 use 506+project+merged.dta
263 keep if group_code == 1 | group_code == 2
264 regress b_price group_code osf_code go
265
266 ***
267 **
268
269 clear
270 use 506+project+merged.dta
271 keep if group_code == 0 | group_code == 2
272 regress pref_code group_code gender_code gg
273
274 clear
275 use 506+project+merged.dta
276 keep if group_code == 0 | group_code == 3
277 regress pref_code group_code gender_code gg
278
279 clear
280 use 506+project+merged.dta
281 keep if group_code == 1 | group_code == 2
```

```
282 regress pret_code group_code gender_code gg
283
284 clear
285 use 506+project+merged.dta
286 keep if group_code == 1 | group_code == 3
287 regress pref_code group_code gender_code gg
288
289
290
291 **
292
293
294 clear
295 use 506+project+merged.dta
296 keep if group_code == 0 | group_code == 2
297 regress pref_code group_code age_code ga
298
299 clear
300 use 506+project+merged.dta
301 keep if group_code == 0 | group_code == 3
302 regress pref_code group_code age_code ga
303
304 clear
305 use 506+project+merged.dta
306 keep if group_code == 1 | group_code == 2
307 regress pref_code group_code age_code ga
308
309 clear
310 use 506+project+merged.dta
311 keep if group_code == 1 | group_code == 3
312 regress pref_code group_code age_code ga
313
314
315 **
316 clear
317 use 506+project+merged.dta
318 graph bar (mean) b_price , over(group_code) by(osf_code, col(2))
319     title("Comparison of Price of B by Group and Online Shopping
Frequency")///
320     ytitle("Price")
321     xtitle("Group") legend(label(1 "Control") label(2 "Treatment 1")
322     label(3 "Treatment 2") label(4 "Treatment 3"))
323
324
325
326 **log close
327 log close
328
```