```
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"
   "506+project+T3.dta"
23 save "506+project+merged.dta",replace
24
25 use 506+project+merged.dta, clear
26
27 *Encode categorical data*
28
29 encode group, generate(group_code)
30 encode preference, generate(pref_code)
31 encode degree, generate(degree_code)
32 encode os_frequency, generate(osf_code)
33 encode gender, generate(gender_code)
34 encode age, generate(age_code)
35
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 **
```

```
drop preference reason gender age degree usc_email os_frequency
group

save "506+project+merged.dta",replace

** Summary table
sort group_code
by group_code: summarize

** Balance table
by group_code: summarize gender_code age_code degree_code osf_code

*T test
oneway gender_code group_code if group_code==0 | group_code==1
oneway gender_code group_code if group_code==0 | group_code==2
oneway gender_code group_code if group_code==0 | group_code==3
oneway gender_code group_code if group_code==1 | group_code==2
oneway gender_code group_code if group_code==1 | group_code==3
oneway gender_code group_code if group_code==2 | group_code==3

oneway age_code group_code if group_code==0 | group_code==1
oneway age_code group_code if group_code==0 | group_code==2
oneway age_code group_code if group_code==0 | group_code==3
oneway age_code group_code if group_code==1 | group_code==2
oneway age_code group_code if group_code==1 | group_code==3
oneway age_code group_code if group_code==2 | group_code==3

oneway degree_code group_code if group_code==0 | group_code==1
oneway degree_code group_code if group_code==0 | group_code==2
oneway degree_code group_code if group_code==0 | group_code==3
oneway degree_code group_code if group_code==1 | group_code==2
oneway degree_code group_code if group_code==1 | group_code==3
oneway degree_code group_code if group_code==2 | group_code==3

oneway osf_code group_code if group_code==0 | group_code==1
oneway osf_code group_code if group_code==0 | group_code==2
oneway osf_code group_code if group_code==0 | group_code==3
oneway osf_code group_code if group_code==1 | group_code==2
oneway osf_code group_code if group_code==1 | group_code==3
oneway osf_code group_code if group_code==2 | group_code==3



*Joint test
oneway gender_code group_code, anova
oneway age_code group_code, anova
oneway degree_code group_code, anova
oneway osf_code group_code, anova
```

```
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 b_price 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
```

```
use 506+project+merged.dta
graph bar (mean) a_less_20 a_21_30 a_31_40 a_more_40, over(
group_code)
legend(label(1 "Control") label(2 "Treatment 1") label(3
"Treatment 2")///
label(4 "Treatment 3"))
ytitle("Mean Value") xtitle("Groups")
title("Comparison of probabilistic distribution of Product A
across Groups")


graph bar (mean) b_less_20 b_21_30 b_31_40 b_more_40, over(
group_code)
legend(label(1 "Control") label(2 "Treatment 1") label(3
"Treatment 2")///
label(4 "Treatment 3"))
ytitle("Mean Value") xtitle("Groups")
title("Comparison of probabilistic distribution of Product B
across Groups")



**********************************************
********************************************** Heterogeneity
gen gg=group_code*gender_code
gen ga=group_code*age_code
gen gd=group_code*degree_code
gen go=group_code*osf_code

save 506+project+merged.dta, replace

**

clear
use 506+project+merged.dta
keep if group_code == 0 | group_code == 2
regress a_price group_code gender_code gg

clear
use 506+project+merged.dta
keep if group_code == 1 | group_code == 3
regress a_price group_code gender_code gg


**

clear
use 506+project+merged.dta
```

```
keep if group_code == 0 | group_code == 2
regress a_price group_code osf_code go

clear
use 506+project+merged.dta
keep if group_code == 1 | group_code == 3
regress a_price group_code osf_code go

**

clear
use 506+project+merged.dta
keep if group_code == 0 | group_code == 3
regress b_price group_code gender_code gg

clear
use 506+project+merged.dta
keep if group_code == 1 | group_code == 2
regress b_price group_code gender_code gg

**

clear
use 506+project+merged.dta
keep if group_code == 0 | group_code == 3
regress b_price group_code osf_code go

clear
use 506+project+merged.dta
keep if group_code == 1 | group_code == 2
regress b_price group_code osf_code go

***
**

clear
use 506+project+merged.dta
keep if group_code == 0 | group_code == 2
regress pref_code group_code gender_code gg

clear
use 506+project+merged.dta
keep if group_code == 0 | group_code == 3
regress pref_code group_code gender_code gg

clear
use 506+project+merged.dta
keep if group_code == 1 | group_code == 2
```

```
282  regress pref_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
```