590 HW1

Austin Turvy Derek Holste Mason Carhart

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```
# Load packages
library(pacman)
p_load(readr, data.table, dplyr, janitor, haven, here,
       tidyverse, skimr, lfe, stargazer, quantreg, hrbrthemes)
```

```
# Load data
af = read_dta(here("afghanistan_anonymized_data.dta"))
```

1. An outlier observation is someone who had more than 50 sheep or goats owned by the household in 2007 and in the fall of 2007 or had more than 10 jeribs of land owned by the household in the fall of 2007 or had more than 20 poeple in the houdcount in fall of 2007 or a person that has number of people in a household greater than 20 and are observed in summer of 2008. Or if number of jerribs of land counted is more than 10 and are observed in summer of 2008. Lastly if the number of sheep and goats is above 50 and they are observed in summer of 2008.

```
# Create nonoutlier column
af <- af %>% mutate(nonoutlier= ifelse((f07_num_ppl_hh_cnt > 20 & f07_observed == 1) |
                                       (f07_jeribs_cnt > 10 & f07_observed == 1)|
                                       (f07_num_sheep_cnt > 50 & f07_observed == 1)|
                                         (s08_num_ppl_hh_cnt > 20 & s08_observed == 1)|
                                         (s08_jeribs_cnt > 10 & s08_observed == 1) |
                                         (s08_num_sheep_cnt > 50 & s08_observed == 1)
                                         ,0,1))


# Tabulating nonoutliers
non_outlier_tab <- af %>% group_by(nonoutlier) %>%
    summarise(count = n(), percentage = n()/nrow(.))
```

```
mytable <- table(af$nonoutlier,af$nonoutlier)
mytable
```

```
##
##        0    1
##   0   76    0
##   1    0 1728
```

There are 76 non-outliers in the data given the specifications prior.

Table 1: Regression Results

	Dependent variable:	
	Girl Enrolled in Formal School Fall 2007	
	(1)	(2)
Treatment	0.517***	0.372***
	(0.091)	(0.094)
chagcharan	0.178**	0.086
	(0.085)	(0.090)
Constant	0.087*	0.328***
	(0.051)	(0.057)
Observations	667	707
R^2	0.335	0.167
Note:		*p<0.1; **p<0.05; ***p<0.01
		S.E Clustered by village

```
# Run girls regression table 4 column 1 including outliers
reg3 = felm(f07_formal_school ~ treatment + chagcharan | 0 | 0 | clustercode,
            data = af %>% filter(f07_girl_cnt == 1 &
                                 f07_test_observed == 1))

# Run boys regression table 4 column 1including outliers
reg4 = felm(f07_formal_school ~ treatment + chagcharan | 0 | 0 | clustercode,
            data = af %>% filter(f07_girl_cnt == 0 &
                                 f07_test_observed == 1))
```

```
# Run girls regression table 4 column 1 with controls
reg5 = felm(f07_formal_school ~ treatment + chagcharan + f07_heads_child_cnt +
              f07_age_cnt + f07_duration_village_cnt +
              f07_farsi_cnt + f07_tajik_cnt + f07_farmer_cnt +
              f07_age_head_cnt + f07_yrs_ed_head_cnt + f07_num_ppl_hh_cnt +
              f07_jeribs_cnt + f07_num_sheep_cnt +
              f07_nearest_scl| 0 | 0 | clustercode,
            data = af %>% filter(f07_girl_cnt == 1 &
                                 nonoutlier == 1 &
                                 f07_test_observed == 1))

# Run girls regression table 4 column 1 with controls
reg6 = felm(f07_formal_school ~ treatment + chagcharan + f07_heads_child_cnt +
              f07_age_cnt + f07_duration_village_cnt +
              f07_farsi_cnt + f07_tajik_cnt + f07_farmer_cnt +
              f07_age_head_cnt + f07_yrs_ed_head_cnt + f07_num_ppl_hh_cnt +
              f07_jeribs_cnt + f07_num_sheep_cnt +
              f07_nearest_scl| 0 | 0 | clustercode,
            data = af %>% filter(f07_girl_cnt == 0 &
                                 nonoutlier == 1 &
                                 f07_test_observed == 1))
```

```
# Create table with regressions with controls
stargazer(reg1, reg2, reg5, keep.stat = c('n', 'rsq'),title = "Regression Results",
          covariate.labels = c('Treatment', "chagcharan"),
          dep.var.labels = c('Girls', 'Boys', 'Girls'),
          omit = c("f07_heads_child_cnt", "f07_girl_cnt", "f07_age_cnt", "f07_duration_village_cnt", "f
          type = 'latex', header = FALSE, float = TRUE,  notes = "S.E Clustered by village")
```

Table 2: Regression Results

	Dependent variable:		
	Girls		
	(1)	(2)	(3)
Treatment	0.517***	0.372***	0.511***
	(0.091)	(0.094)	(0.083)
chagcharan	0.178**	0.086	0.156*
	(0.085)	(0.090)	(0.082)
Constant	0.087*	0.328***	−0.159
	(0.051)	(0.057)	(0.256)
Observations	667	707	667
R^2	0.335	0.167	0.366
Note:	*p<0.1; **p<0.05; ***p<0.01		
	S.E Clustered by village		

Question 3:

```
# girls regression for column 3
reg7 = felm(f07_both_norma_total ~ treatment + chagcharan | 0 | 0 | clustercode,
            data = af %>% filter(f07_girl_cnt == 1 &
                                 nonoutlier == 1 &
                                 f07_test_observed == 1))

# boys regression for column 3
reg8 = felm(f07_both_norma_total ~ treatment + chagcharan | 0 | 0 | clustercode,
            data = af %>% filter(f07_girl_cnt == 0 &
                                 nonoutlier == 1 &
                                 f07_test_observed == 1))
```

Question 4:

```
# girls regression column 4
reg9 = felm(f07_both_norma_total ~ treatment + chagcharan + f07_heads_child_cnt +
```

```
              f07_age_cnt + f07_duration_village_cnt +
              f07_farsi_cnt + f07_tajik_cnt + f07_farmer_cnt +
              f07_age_head_cnt + f07_yrs_ed_head_cnt + f07_num_ppl_hh_cnt +
              f07_jeribs_cnt + f07_num_sheep_cnt +
              f07_nearest_scl| 0 | 0 | clustercode,
            data = af %>% filter(f07_girl_cnt == 1 &
                                 nonoutlier == 1 &
                                 f07_test_observed == 1))

# boys regression column 4
reg10 = felm(f07_both_norma_total ~ treatment + chagcharan + f07_heads_child_cnt +
              f07_age_cnt + f07_duration_village_cnt +
              f07_farsi_cnt + f07_tajik_cnt + f07_farmer_cnt +
              f07_age_head_cnt + f07_yrs_ed_head_cnt + f07_num_ppl_hh_cnt +
              f07_jeribs_cnt + f07_num_sheep_cnt +
              f07_nearest_scl| 0 | 0 | clustercode,
            data = af %>% filter(f07_girl_cnt == 0 &
                                 nonoutlier == 1 &
                                 f07_test_observed == 1))
```

Question 4b:

```
# girls regression for column 6
reg11 = felm(s08_both_norma_total ~ treatment + chagcharan | 0 | 0 | clustercode,
            data = af %>% filter(s08_girls_cnt == 1 &
                                 nonoutlier == 1 &
                                 s08_test_observed == 1))

# boys regression for column 6
reg12 = felm(s08_both_norma_total ~ treatment + chagcharan | 0 | 0 | clustercode,
            data = af %>% filter(s08_girls_cnt == 0 &
                                 nonoutlier == 1 &
                                 s08_test_observed == 1))
# girls regression for column 7
reg13 = felm(s08_both_norma_total ~ treatment + chagcharan +
               s08_heads_child_cnt + s08_age_cnt +
               s08_duration_village_cnt + s08_farsi_cnt + s08_tajik_cnt +
               s08_farmer_cnt + s08_age_head_cnt + s08_yrs_ed_head_cnt +
               s08_num_ppl_hh_cnt + s08_jeribs_cnt + s08_num_sheep_cnt +
               s08_nearest_scl | 0 | 0 | clustercode,
            data = af %>% filter(s08_girls_cnt == 1 &
                                 nonoutlier == 1 &
                                 s08_test_observed == 1))

# boys regression for column 7
reg14 = felm(s08_both_norma_total ~ treatment + chagcharan +
               s08_heads_child_cnt  + s08_age_cnt +
               s08_duration_village_cnt + s08_farsi_cnt + s08_tajik_cnt +
               s08_farmer_cnt + s08_age_head_cnt + s08_yrs_ed_head_cnt +
               s08_num_ppl_hh_cnt + s08_jeribs_cnt + s08_num_sheep_cnt +
               s08_nearest_scl | 0 | 0 | clustercode,
```

```
            data = af %>% filter(s08_girls_cnt == 0 &
                                 nonoutlier == 1 &
                                 s08_test_observed == 1))
```

```
# Getting mean values for column 1
col_1 = af %>%
  filter(treatment == 1 & nonoutlier == 1 & f07_observed == 1) %>%
  select(
    c(f07_heads_child_cnt, f07_girl_cnt, f07_age_cnt, f07_duration_village_cnt,
                  f07_farsi_cnt,  f07_tajik_cnt,  f07_farmer_cnt,
                  f07_age_head_cnt, f07_yrs_ed_head_cnt, f07_jeribs_cnt,
                  f07_num_sheep_cnt, f07_nearest_scl)
  ) %>%
  mutate(
  across(.cols = c(f07_heads_child_cnt, f07_girl_cnt, f07_age_cnt, f07_duration_village_cnt,
                  f07_farsi_cnt,  f07_tajik_cnt,  f07_farmer_cnt,
                  f07_age_head_cnt, f07_yrs_ed_head_cnt, f07_jeribs_cnt,
                  f07_num_sheep_cnt, f07_nearest_scl), mean, na.rm = TRUE)
  ) %>% head(., 1) %>% unlist(.)

# Getting mean values for column 2
col_2 = af %>%
  filter(treatment == 0 & nonoutlier == 1 & f07_observed == 1) %>%
  select(
    c(f07_heads_child_cnt, f07_girl_cnt, f07_age_cnt, f07_duration_village_cnt,
                  f07_farsi_cnt,  f07_tajik_cnt,  f07_farmer_cnt,
                  f07_age_head_cnt, f07_yrs_ed_head_cnt, f07_jeribs_cnt,
                  f07_num_sheep_cnt, f07_nearest_scl)
  ) %>%
  mutate(
  across(.cols = c(f07_heads_child_cnt, f07_girl_cnt, f07_age_cnt, f07_duration_village_cnt,
                  f07_farsi_cnt,  f07_tajik_cnt,  f07_farmer_cnt,
                  f07_age_head_cnt, f07_yrs_ed_head_cnt, f07_jeribs_cnt,
                  f07_num_sheep_cnt, f07_nearest_scl), mean, na.rm = TRUE)
  ) %>% head(., 1) %>% unlist(.)



# Create regression functions for column 3
reg_function_coef = function(x){
    reg = felm(x ~ treatment | 0 | 0 | clustercode,
               data = af %>% filter(nonoutlier == 1 & f07_observed == 1))
    coef = coef(reg)[2]
    return(coef)
}


# Regression function for SE
reg_function_se = function(x){
  reg = felm(x ~ treatment | 0 | 0 | clustercode,
             data = af %>% filter(nonoutlier == 1 & f07_observed == 1))
  se = sqrt(diag(vcov(reg)))[2]
  return(se)
```

```
}



# Obtain column 3 coefficients
col_3_coefs = af %>%
  filter(nonoutlier == 1 & f07_observed == 1) %>%
  select(
    c(f07_heads_child_cnt, f07_girl_cnt, f07_age_cnt, f07_duration_village_cnt,
                  f07_farsi_cnt,  f07_tajik_cnt,  f07_farmer_cnt,
                  f07_age_head_cnt, f07_yrs_ed_head_cnt, f07_jeribs_cnt,
                  f07_num_sheep_cnt, f07_nearest_scl)
  ) %>%
  mutate(
  across(.cols = c(f07_heads_child_cnt, f07_girl_cnt, f07_age_cnt, f07_duration_village_cnt,
                  f07_farsi_cnt,  f07_tajik_cnt,  f07_farmer_cnt,
                  f07_age_head_cnt, f07_yrs_ed_head_cnt, f07_jeribs_cnt,
                  f07_num_sheep_cnt, f07_nearest_scl), reg_function_coef)
  ) %>% head(., 1) %>% unlist(.)

# Obtain column 3 SE
col_3_se = af %>%
  filter(nonoutlier == 1 & f07_observed == 1) %>%
  select(
    c(f07_heads_child_cnt, f07_girl_cnt, f07_age_cnt, f07_duration_village_cnt,
                  f07_farsi_cnt,  f07_tajik_cnt,  f07_farmer_cnt,
                  f07_age_head_cnt, f07_yrs_ed_head_cnt, f07_jeribs_cnt,
                  f07_num_sheep_cnt, f07_nearest_scl)
  ) %>%
  mutate(
  across(.cols = c(f07_heads_child_cnt, f07_girl_cnt, f07_age_cnt, f07_duration_village_cnt,
                  f07_farsi_cnt,  f07_tajik_cnt,  f07_farmer_cnt,
                  f07_age_head_cnt, f07_yrs_ed_head_cnt, f07_jeribs_cnt,
                  f07_num_sheep_cnt, f07_nearest_scl), reg_function_se)
  ) %>% head(., 1) %>% unlist(.)

# Regression for column 7
col_7 = felm(f07_formal_school ~ f07_heads_child_cnt +
               f07_girl_cnt + f07_age_cnt + f07_duration_village_cnt +
               f07_farsi_cnt + f07_tajik_cnt + f07_farmer_cnt +
               f07_age_head_cnt + f07_yrs_ed_head_cnt + f07_num_ppl_hh_cnt +
               f07_jeribs_cnt + f07_num_sheep_cnt + f07_nearest_scl
             | 0 | 0 | clustercode,
             data = af %>%
               filter(nonoutlier == 1 & f07_observed == 1 & treatment == 0))

# Regression for column 8
col_8 = felm(f07_both_norma_total ~ f07_heads_child_cnt +
               f07_girl_cnt + f07_age_cnt + f07_duration_village_cnt +
               f07_farsi_cnt + f07_tajik_cnt + f07_farmer_cnt +
               f07_age_head_cnt + f07_yrs_ed_head_cnt + f07_num_ppl_hh_cnt +
               f07_jeribs_cnt + f07_num_sheep_cnt + f07_nearest_scl
             | 0 | 0 | clustercode,
```

```
            data = af %>%
              filter(nonoutlier == 1 & f07_observed == 1 &
                       f07_test_observed == 1 & treatment == 0))
```

```
# further analysis regression
reg_fa = felm(f07_formal_school ~ f07_girl_cnt +
         f07_nearest_scl + f07_girl_cnt*f07_nearest_scl +
         I(f07_nearest_scl^2) | 0 | 0 | clustercode,
         data = af %>% filter(treatment==0 &
                              f07_observed == 1 &
                              nonoutlier == 1))
```

```
# ggplot(af, aes(x = f07_nearest_scl, fill = as.factor(f07_girl_cnt))) +
#   geom_histogram(color = "grey", bins = 60, alpha = .9) +
#   scale_fill_viridis_d(option = "C") +
#   theme_modern_rc(ticks = TRUE, plot_title_size = 13) +
#   labs(x = "Miles From School", y = "Count", fill = "Is Girl",
#        title = "Distribution of Distance from School By Gender")
```

```
af = af %>% mutate(dist_near = if_else(f07_nearest_scl < 2, 1, 0),
               dist_close = if_else(f07_nearest_scl >= 2 & f07_nearest_scl < 3, 1, 0),
               dist_nclose = if_else(f07_nearest_scl >= 3 & f07_nearest_scl < 4, 1, 0),
               dist_far = if_else(f07_nearest_scl >= 4, 1, 0))

# Regression for near individuals
reg_near_g = felm(f07_formal_school ~ treatment +
                    chagcharan | 0 | 0 | clustercode,
         data = af %>% filter(
                              f07_observed == 1 &
                              nonoutlier == 1 &
                              f07_girl_cnt == 1 &
                              dist_near == 1
                              ))

# Regression for close individuals
reg_close_g = felm(f07_formal_school ~ treatment +
                    chagcharan | 0 | 0 | clustercode,
         data = af %>% filter(
                              f07_observed == 1 &
                              nonoutlier == 1 &
                              f07_girl_cnt == 1 &
                              dist_close == 1
                              ))

# Regression for not close individuals
reg_nclose_g = felm(f07_formal_school ~ treatment +
                    chagcharan | 0 | 0 | clustercode,
         data = af %>% filter(
                              f07_observed == 1 &
                              nonoutlier == 1 &
                              f07_girl_cnt == 1 &
                              dist_nclose == 1
                              ))
```

```
# Regression for far individuals
reg_far_g = felm(f07_formal_school ~ treatment +
                   chagcharan | 0 | 0 | clustercode,
         data = af %>% filter(
                              f07_observed == 1 &
                              nonoutlier == 1 &
                              f07_girl_cnt == 1 &
                              dist_far == 1
                              ))

# Regression for near individuals
reg_near_b= felm(f07_formal_school ~ treatment +
                   chagcharan | 0 | 0 | clustercode,
         data = af %>% filter(
                              f07_observed == 1 &
                              nonoutlier == 1 &
                              f07_girl_cnt == 0 &
                              dist_near == 1
                              ))

# Regression for close individuals
reg_close_b = felm(f07_formal_school ~ treatment +
                   chagcharan | 0 | 0 | clustercode,
         data = af %>% filter(
                              f07_observed == 1 &
                              nonoutlier == 1 &
                              f07_girl_cnt == 0 &
                              dist_close == 1
                              ))

# Regression for not close individuals
reg_nclose_b = felm(f07_formal_school ~ treatment +
                   chagcharan | 0 | 0 | clustercode,
         data = af %>% filter(
                              f07_observed == 1 &
                              nonoutlier == 1 &
                              f07_girl_cnt == 0 &
                              dist_nclose == 1
                              ))

# Regression for far individuals
reg_far_b = felm(f07_formal_school ~ treatment +
                   chagcharan | 0 | 0 | clustercode,
         data = af %>% filter(
                              f07_observed == 1 &
                              nonoutlier == 1 &
                              f07_girl_cnt == 0 &
                              dist_far == 1
                              ))
```

```
# Regression for near individuals
reg_test_near_g = felm(f07_both_norma_total ~ treatment +
                   chagcharan | 0 | 0 | clustercode,
```

```
         data = af %>% filter(
                              f07_observed == 1 &
                              nonoutlier == 1 &
                              f07_girl_cnt == 1 &
                              dist_near == 1
                              ))

# Regression for close individuals
reg_test_close_g = felm(f07_both_norma_total ~ treatment +
                    chagcharan | 0 | 0 | clustercode,
         data = af %>% filter(
                              f07_observed == 1 &
                              nonoutlier == 1 &
                              f07_girl_cnt == 1 &
                              dist_close == 1
                              ))

# Regression for not close individuals
reg_test_nclose_g = felm(f07_both_norma_total ~ treatment +
                    chagcharan | 0 | 0 | clustercode,
         data = af %>% filter(
                              f07_observed == 1 &
                              nonoutlier == 1 &
                              f07_girl_cnt == 1 &
                              dist_nclose == 1
                              ))

# Regression for far individuals
reg_test_far_g = felm(f07_both_norma_total ~ treatment +
                    chagcharan | 0 | 0 | clustercode,
         data = af %>% filter(
                              f07_observed == 1 &
                              nonoutlier == 1 &
                              f07_girl_cnt == 1 &
                              dist_far == 1
                              ))

# Regression for near individuals
reg_test_near_b= felm(f07_both_norma_total ~ treatment +
                    chagcharan | 0 | 0 | clustercode,
         data = af %>% filter(
                              f07_observed == 1 &
                              nonoutlier == 1 &
                              f07_girl_cnt == 0 &
                              dist_near == 1
                              ))

# Regression for close individuals
reg_test_close_b = felm(f07_both_norma_total ~ treatment +
                    chagcharan | 0 | 0 | clustercode,
         data = af %>% filter(
                              f07_observed == 1 &
                              nonoutlier == 1 &
```

```
                              f07_girl_cnt == 0 &
                              dist_close == 1
                              ))

# Regression for not close individuals
reg_test_nclose_b = felm(f07_both_norma_total ~ treatment +
                    chagcharan | 0 | 0 | clustercode,
          data = af %>% filter(
                              f07_observed == 1 &
                              nonoutlier == 1 &
                              f07_girl_cnt == 0 &
                              dist_nclose == 1
                              ))

# Regression for far individuals
reg_test_far_b = felm(f07_both_norma_total ~ treatment +
                    chagcharan | 0 | 0 | clustercode,
          data = af %>% filter(
                              f07_observed == 1 &
                              nonoutlier == 1 &
                              f07_girl_cnt == 0 &
                              dist_far == 1
                              ))
```

```
# Table 4.1
stargazer(reg1, reg2, reg5, reg6, reg7, reg8, reg9, reg10,
          keep.stat = c('n', 'rsq'),
          title = "Table 4: Treatment Effects by Gender",
          covariate.labels = c('Treatment', "chagcharan"),
          #dep.var.labels = c(""),
          type = 'latex', header = F, float = TRUE,
          notes =c("S.E Clustered by village"))
```

```
# Table 4b
stargazer(reg11, reg12, reg13, reg14,
          keep.stat = c('n', 'rsq'),
          title = "Table 4b: Treatment Effects by Gender",
          covariate.labels = c('Treatment', "chagcharan"),
          #dep.var.labels = c(""),
          omit = c("f07_heads_child_cnt", "f07_girl_cnt", "f07_age_cnt",
                   "f07_duration_village_cnt", "f07_farsi_cnt",
                   "f07_tajik_cnt", "f07_farmer_cnt", "f07_age_head_cnt",
                   "f07_yrs_ed_head_cnt", "f07_num_ppl_hh_cnt",
                   "f07_jeribs_cnt", "f07_num_sheep_cnt", "f07_nearest_scl"),
          type = 'latex', header = F, float = TRUE,
          notes =c("S.E Clustered by village"))
```

```
# Table 2
stargazer(col_1, col_2, col_3_coefs, col_3_se, col_7, col_8,
          keep.stat = c('n', 'rsq'),
          title = "Table 4: Treatment Effects by Gender",
          covariate.labels = c("Household head's child", "Girl",
```

Table 3: Table 4: Treatment Effects by Gender

	Dependent variable:							
	f07_formal_school				f07_both_norma_total			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(
Treatment	0.517***	0.372***	0.511***	0.351***	0.691***	0.424***	0.654***	0.40
	(0.091)	(0.094)	(0.083)	(0.088)	(0.130)	(0.107)	(0.123)	(0.0
chagcharan	0.178**	0.086	0.156*	0.094	0.282**	0.113	0.275**	0.1
	(0.085)	(0.090)	(0.082)	(0.083)	(0.123)	(0.104)	(0.117)	(0.0
f07_heads_child_cnt			−0.049	0.028			−0.156	0.1
			(0.057)	(0.051)			(0.168)	(0.0
f07_age_cnt			0.035**	0.064***			0.243***	0.36
			(0.016)	(0.019)			(0.030)	(0.0
f07_duration_village_cnt			−0.001	−0.001			−0.003	−0
			(0.001)	(0.002)			(0.002)	(0.0
f07_farsi_cnt			−0.084	0.009			−0.115	0.0
			(0.051)	(0.069)			(0.097)	(0.1
f07_tajik_cnt			−0.070	0.087**			−0.005	0.17
			(0.069)	(0.037)			(0.079)	(0.0
f07_farmer_cnt			−0.016	−0.083*			0.0002	−0
			(0.035)	(0.044)			(0.076)	(0.1
f07_age_head_cnt			0.0001	−0.002			−0.001	0.0
			(0.002)	(0.002)			(0.004)	(0.0
f07_yrs_ed_head_cnt			0.002	0.004			0.026**	0.04
			(0.006)	(0.005)			(0.011)	(0.0
f07_num_ppl_hh_cnt			0.009	−0.002			0.007	−0
			(0.007)	(0.008)			(0.007)	(0.0
f07_jeribs_cnt			−0.009	0.020			0.016	0.0
			(0.013)	(0.013)			(0.030)	(0.0
f07_num_sheep_cnt			0.005	0.004			0.008	0.0
			(0.004)	(0.003)			(0.008)	(0.0
f07_nearest_scl			−0.005	−0.061***			0.001	−0
			(0.022)	(0.023)			(0.050)	(0.0
Constant	0.087*	0.328***	−0.159	0.060	−0.486***	0.267***	−2.421***	−3.0
	(0.051)	(0.057)	(0.256)	(0.254)	(0.097)	(0.091)	(0.600)	(0.2
Observations	667	707	667	707	667	707	667	7
R^2	0.335	0.167	0.366	0.251	0.167	0.045	0.357	0.4

Note: *p<0.1; **p<0.05; ***p<
S.E Clustered by v

Table 4: Table 4b: Treatment Effects by Gender

	Dependent variable:			
	s08_both_norma_total			
	(1)	(2)	(3)	(4)
Treatment	0.735***	0.380***	0.661***	0.413***
	(0.093)	(0.129)	(0.090)	(0.099)
chagcharan	0.182**	0.206	0.204**	0.228***
	(0.086)	(0.125)	(0.084)	(0.085)
s08_heads_child_cnt			−0.036	−0.064
			(0.136)	(0.154)
s08_age_cnt			0.273***	0.396***
			(0.033)	(0.025)
s08_duration_village_cnt			−0.001	−0.005
			(0.003)	(0.003)
s08_farsi_cnt			0.065	0.090
			(0.086)	(0.097)
s08_tajik_cnt			0.060	−0.083
			(0.052)	(0.095)
s08_farmer_cnt			−0.073	−0.104
			(0.092)	(0.081)
s08_age_head_cnt			0.001	0.001
			(0.003)	(0.004)
s08_yrs_ed_head_cnt			0.026**	0.065***
			(0.012)	(0.014)
s08_num_ppl_hh_cnt			0.030***	0.024
			(0.011)	(0.019)
s08_jeribs_cnt			−0.055***	−0.022
			(0.018)	(0.028)
s08_num_sheep_cnt			−0.001	0.011**
			(0.003)	(0.005)
s08_nearest_scl			0.013	−0.073*
			(0.040)	(0.040)
Constant	−0.458***	0.281***	−3.052***	−3.144***
	(0.066)	(0.089)	(0.460)	(0.302)
Observations	689	712	687	709
R^2	0.165	0.042	0.378	0.410

Note: *p<0.1; **p<0.05; ***p<0.01
S.E Clustered by village

```
                              "Age","Years family in village","Farsi",
                              "Tajik","Farmers","Age of household head",
                              "Years of education of household head",
                              "Jeribs of land","Number of sheep",
                              "Distance to nearest formal school"),
          #dep.var.labels = c(""),
          type = 'latex', header = F, float = TRUE,
          notes =c("S.E Clustered by village"))
```

Table 5: Table 4: Treatment Effects by Gender

Household head's child	Girl	Age	Years family in village	Farsi	Tajik	Farmers	Age of household head
0.935	0.474	8.321	30.302	0.208	0.243	0.717	40.142

S.E Clustered by village

Table 6: Table 4: Treatment Effects by Gender

Household head's child	Girl	Age	Years family in village	Farsi	Tajik	Farmers	Age of household head
0.911	0.455	8.312	27.594	0.209	0.208	0.727	39.970

S.E Clustered by village

Table 7: Table 4: Treatment Effects by Gender

Household head's child	Girl	Age	Years family in village	Farsi	Tajik	Farmers	Age of household head
0.024	0.020	0.009	2.709	-0.001	0.035	-0.010	0.172

S.E Clustered by village

Table 8: Table 4: Treatment Effects by Gender

Household head's child	Girl	Age	Years family in village	Farsi	Tajik	Farmers	Age of household head
0.015	0.020	0.040	1.605	0.054	0.049	0.034	1.101

S.E Clustered by village

```
stargazer(reg_near_g,reg_close_g,reg_nclose_g, reg_far_g,
          reg_near_b,reg_close_b,reg_nclose_b, reg_far_b,
          keep.stat = c('n', 'rsq'),title = "Regression Results",
          covariate.labels = c('Treatment', "chagcharan"),
          column.labels = c("Short", "Med-Short", "Med-Long",
                            "Long", "Short", "Med-Short", "Med-Long", "Long"),
          dep.var.labels = c("Whether or not the Individual is in a Formal School"),
          type = 'latex', header = F, float = TRUE,
          notes =c( "S.E Clustered by village 1-4 (Female), 5-8 (Male).",
          "Both groups have increasing distance as the number increases."))
```

Table 9: Table 4: Treatment Effects by Gender

	Dependent variable:	
	f07_formal_school	f07_both_norma_total
	(1)	(2)
Household head's child	0.038	−0.090
	(0.061)	(0.113)
Girl	−0.208***	−0.682***
	(0.080)	(0.102)
Age	0.046***	0.287***
	(0.017)	(0.018)
Years family in village	−0.001	−0.005**
	(0.001)	(0.002)
Farsi	−0.039	0.074
	(0.074)	(0.119)
Tajik	−0.006	0.042
	(0.078)	(0.065)
Farmers	−0.050	−0.020
	(0.081)	(0.120)
Age of household head	−0.004	−0.004**
	(0.003)	(0.002)
Years of education of household head	0.001	0.036***
	(0.006)	(0.007)
Jeribs of land	0.004	−0.004
	(0.006)	(0.011)
Number of sheep	0.022***	0.056***
	(0.008)	(0.011)
Distance to nearest formal school	0.010***	0.016**
	(0.002)	(0.007)
f07_nearest_scl	−0.060	−0.089**
	(0.043)	(0.037)
Constant	0.246	−1.649***
	(0.324)	(0.369)
Observations	708	653
R^2	0.155	0.401
Note:		*p<0.1; **p<0.05; ***p<0.01
		S.E Clustered by village

Table 10: Regression Results

	Dependent variable:							
	Whether or not the Individual is in a Formal School							
	Short	Med-Short	Med-Long	Long	Short	Med-Short	Med-Long	Long
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Treatment	0.448***	0.528***	0.696***	0.481***	0.319*	0.447***	0.235**	0.504***
	(0.122)	(0.140)	(0.073)	(0.066)	(0.190)	(0.160)	(0.093)	(0.092)
chagcharan	0.404***	0.192	−0.156	0.368***	0.377**	0.028	0.058	0.153
	(0.069)	(0.117)	(0.126)	(0.064)	(0.150)	(0.152)	(0.111)	(0.094)
Constant	0.128	0.022	0.072	0.049	0.357*	0.332***	0.414***	0.094
	(0.124)	(0.026)	(0.067)	(0.046)	(0.203)	(0.063)	(0.060)	(0.084)
Observations	94	272	204	123	88	328	232	149
R^2	0.173	0.400	0.403	0.420	0.225	0.213	0.068	0.310

Note: *p<0.1; **p<0.05; ***p<0.01
S.E Clustered by village 1-4 (Female), 5-8 (Male).
Both groups have increasing distance as the number increases.

```
stargazer(reg_test_near_g, reg_test_close_g, reg_test_nclose_g,reg_test_far_g, reg_test_near_b, reg_tes
          covariate.labels = c('Treatment', "chagcharan"), column.labels = c("Short", "Med-Short", "Med
          dep.var.labels = c("Total Normalized Test Score, Fall 2007"),
          type = 'latex', header = F, float = TRUE,  notes =c( "S.E Clustered by village 1-4 (Female), 5
          "Both groups have increasing distance as the number increases."))
```

Table 11: Regression Results

	Dependent variable:							
	Total Normalized Test Score, Fall 2007							
	Short	Med-Short	Med-Long	Long	Short	Med-Short	Med-Long	Long
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Treatment	1.126***	0.789***	0.853***	0.563***	0.103*	0.512***	0.202*	0.895***
	(0.262)	(0.233)	(0.198)	(0.065)	(0.061)	(0.159)	(0.116)	(0.152)
chagcharan	0.773***	0.360*	−0.277	0.445***	−0.027	0.146	−0.111	0.371***
	(0.248)	(0.184)	(0.197)	(0.066)	(0.053)	(0.114)	(0.194)	(0.121)
Constant	−1.169***	−0.496***	−0.399**	−0.559***	0.396***	0.281***	0.497***	−0.351***
	(0.295)	(0.134)	(0.177)	(0.070)	(0.048)	(0.040)	(0.121)	(0.080)
Observations	91	259	196	121	81	290	198	138
R^2	0.217	0.212	0.174	0.193	0.002	0.069	0.006	0.221

Note: *p<0.1; **p<0.05; ***p<0.01
S.E Clustered by village 1-4 (Female), 5-8 (Male).
Both groups have increasing distance as the number increases.