Write-Up Methods

Methods:

To begin the replication process, I performed data cleaning by dropping missing or "no answers" values for "hrs1", "numpets" and "realrinc", then checking the remaining number of observations in the dataset to make sure that I have the amount of observations needed for the replication process. Next, I generated dummy variables for the needed categories based on the listed variables in Table 1. To replicate Table 1, I calculated summary statistics for both the Model Sample and Tenure Sample, focusing on mean and standard deviation across each variable. For my replication of Table 2, starting off with column 1, regressing "ln_realrinc" on the mentioned independent variables from the original Table 2 with probability sampling weight. The same process was done for columns 2,3, and 4 in Table 2, except column 2's regression has the combination of "havepets" and "educ, column 3's regression combines "havepets" and "rent", and column 4's regression has two duos, one between "havepets" and "black", the other between "havepets" and "otherrace". Quite similarly for Table 3, I regressed "ln_realrinc" on specified independent variables from the original Table 3 and region indicators with probability sampling weight. The same process was done for columns 2,3, and 4 in Table 3, except column 2's regression has the combination of "havepets" and "educ, column 3's regression combines "havepets" and "rent", and column 4's regression has two duos, one between "havepets" and "black", the other between "havepets" and "otherrace".

Findings:

My replication of Table 1 closely resembled the initial version in terms of mean and standard deviation values across the model and tenure samples. In Table 2's columns 1 and 2, for the "childs" category, the original table contained coefficient values -0.0939 and -0.0941 at $p<0.01$, while my replication contained coefficient values -0.092 at $p<0.05$ significance. The coefficient value for the "havepets*renthome" category differed between the original table (-0.542 at $p<0.1$) and my replication (-0.537 with no statistical significance). Column 4 of Table 2 in the "Other Race" category had a coefficient value of -0.323 at $p<0.1$ significant. My replication did not yield a statistically significant coefficient value, which is -0.265, for that category's column. The original Table 3's " mntlhlth" category had statistically significant coefficient values ranging from $p<0.05$ to $p<0.01$, but my replication did not. The original table's coefficient values for each column of the "childs" category were not statistically significant, however my replication's coefficient values ranged from $p<0.1$ to $p<0.05$ significance. Also, the initial table's coefficient value for the "numpets*black" category was -0.189 at $p<0.1$ significant, whereas my replication's coefficient value was -0.208 at $p<0.01$.

Replicated Tables

Table 1

	Model Sample (N=561)		Tenure Sample(N=192)	
Variable	Mean	Std Dev	Mean	Std Dev
Real Income(1986 USD)	26985.46	28992.13	30082.58	31777.54
Number of Pets	1.729055	2.779008	1.729167	2.736142
Has any pets	61.14%	48.79%	60.94%	48.92%
Education (School years)	14.24107	2.738598	14.32292	2.703478
Experience	24.45259	13.66867	28.46316	14.14835
Number of children	1.682709	1.578608	1.776042	1.502824
Hours worked a week	42.52941	14.82552	43.0625	16.10262
Male	53.83%	49.90%	56.77%	49.67%
Female	46.17%	49.90%	43.23%	49.67%
Black	16.58%	37.22%	17.71%	38.27%
White	71.12%	45.36%	69.27%	46.26%
Other Race	12.30%	32.87%	13.02%	33.74%
Own Home	65.79%	47.57%	65.79%	47.57%
Rent Home	34.21%	47.57%	34.21%	47.57%
Married	45.81%	45.81%	50.52%	50.13%
Widowed	2.67%	2.67%	4.69%	21.19%
Divorced	18.89%	18.89%	18.23%	38.71%
Separated	4.10%	4.10%	2.60%	15.97%
Never Married	28.52%	28.52%	23.96%	42.79%
Trailer	4.46%	4.46%	4.17%	20.03%
One family house	68.09%	68.09%	69.27%	46.26%
Unit	5.17%	5.17%	4.17%	20.03%
Three-four family house	1.07%	1.07%	2.08%	14.32%

Table 2

Table 2. OLS regression results for regressions of real income on pet ownership

	1	2	3	4
havepets	0.015	0.199	0.068	0.146
	(0.099)	(0.525)	(0.112)	(0.122)
highest year of school completed	0.121 ***	0.129 ***	0.113 ***	0.122 ***
	(0.019)	(0.024)	(0.020)	(0.019)
black	0.029	0.031	0.007	0.257
	(0.131)	(0.132)	(0.136)	(0.158)
otherrace	-0.445 ***	-0.447 ***	-0.407 ***	-0.265
	(0.146)	(0.146)	(0.137)	(0.171)
female	-0.523 ***	-0.524 ***	-0.514 ***	-0.540 ***
	(0.095)	(0.095)	(0.091)	(0.093)
exp	0.058 ***	0.058 ***	0.057 ***	0.059 ***
	(0.015)	(0.015)	(0.014)	(0.015)
exp_sqr	-0.001 ***	-0.001 ***	-0.001 ***	-0.001 ***
	(0.000)	(0.000)	(0.000)	(0.000)
widowed	-0.305	-0.308	-0.188	-0.291
	(0.397)	(0.396)	(0.348)	(0.403)
divorced	-0.136	-0.134	-0.148	-0.144
	(0.119)	(0.119)	(0.122)	(0.118)
separated	0.027	0.030	0.046	0.018
	(0.182)	(0.184)	(0.173)	(0.177)
nevermarried	-0.563 ***	-0.564 ***	-0.555 ***	-0.545 ***
	(0.129)	(0.129)	(0.125)	(0.127)
days of poor mental health past 30 days	-0.003	-0.003	-0.003	-0.002
	(0.007)	(0.007)	(0.006)	(0.007)
number of children	-0.092 **	-0.092 **	-0.087 **	-0.086 **
	(0.038)	(0.038)	(0.035)	(0.038)
region of interview				
middle atlantic	0.036	0.042	-0.079	0.043
	(0.302)	(0.302)	(0.252)	(0.303)
east north central	0.119	0.124	0.035	0.109
	(0.272)	(0.273)	(0.220)	(0.273)
west north central	0.286	0.295	0.162	0.343
	(0.288)	(0.288)	(0.242)	(0.290)
south atlantic	0.102	0.108	-0.014	0.093
	(0.270)	(0.270)	(0.214)	(0.271)
east south atlantic	-0.105	-0.094	-0.152	-0.101
	(0.316)	(0.317)	(0.281)	(0.316)
west south central	0.266	0.270	0.169	0.256
	(0.275)	(0.274)	(0.219)	(0.276)
mountain	-0.105	-0.101	-0.163	-0.104
	(0.326)	(0.327)	(0.277)	(0.325)
pacific	0.064	0.068	-0.058	0.072
	(0.276)	(0.276)	(0.227)	(0.280)

havepets # highest year of school completed				
1		-0.013		
		(0.034)		
renthome			0.164	
			(0.153)	
havepets # renthome				
1 # 1			-0.537 **	
			(0.257)	
trailer			-0.752 ***	
			(0.285)	
onefamilyhouse			0.038	
			(0.117)	
unit			-0.126	
			(0.232)	
rowhouse			-0.765	
			(0.465)	
threefourfamilyhouse			0.597 **	
			(0.261)	
havepets # black				
1 # 1				-0.596 **
				(0.253)
havepets # otherrace				
1 # 1				-0.286
				(0.263)
Intercept	7.791 ***	7.670 ***	7.998 ***	7.665 ***
	(0.449)	(0.505)	(0.411)	(0.457)
Number of observations	557	557	557	557

*** p<.01, ** p<.05, * p<.1

Table 3

Table 3. OLS regression results for regressions of real income on number of pets

	1	2	3	4
how many pets r's family has	-0.019	0.170 **	-0.012	-0.018
	(0.021)	(0.078)	(0.019)	(0.022)
highest year of school completed	0.118 ***	0.142 ***	0.111 ***	0.123 ***
	(0.019)	(0.021)	(0.020)	(0.019)
black	-0.004	-0.013	-0.028	0.227
	(0.125)	(0.122)	(0.130)	(0.140)
otherrace	-0.479 ***	-0.470 ***	-0.430 ***	-0.282 *
	(0.145)	(0.146)	(0.137)	(0.169)
female	-0.529 ***	-0.530 ***	-0.512 ***	-0.572 ***
	(0.093)	(0.092)	(0.090)	(0.093)
exp	0.057 ***	0.059 ***	0.056 ***	0.058 ***
	(0.016)	(0.015)	(0.015)	(0.015)
exp_sqr	-0.001 ***	-0.001 ***	-0.001 ***	-0.001 ***
	(0.000)	(0.000)	(0.000)	(0.000)
widowed	-0.276	-0.290	-0.200	-0.269
	(0.397)	(0.393)	(0.349)	(0.404)
divorced	-0.124	-0.139	-0.135	-0.126
	(0.127)	(0.124)	(0.130)	(0.122)
separated	0.034	0.051	0.092	0.070
	(0.184)	(0.193)	(0.180)	(0.193)
nevermarried	-0.569 ***	-0.557 ***	-0.558 ***	-0.574 ***
	(0.129)	(0.129)	(0.126)	(0.128)
days of poor mental health past 30 days	-0.002	-0.002	-0.002	-0.002
	(0.007)	(0.007)	(0.006)	(0.007)
number of children	-0.088 **	-0.084 **	-0.086 **	-0.086 **
	(0.036)	(0.034)	(0.033)	(0.036)
region of interview				
middle atlantic	-0.015	0.033	-0.147	-0.035
	(0.306)	(0.300)	(0.268)	(0.310)
east north central	0.080	0.126	-0.026	0.052
	(0.277)	(0.269)	(0.235)	(0.278)
west north central	0.250	0.318	0.106	0.391
	(0.293)	(0.287)	(0.252)	(0.301)

south atlantic	0.058	0.109	-0.075	0.034
	(0.278)	(0.270)	(0.230)	(0.280)
east south atlantic	-0.155	-0.085	-0.219	-0.083
	(0.325)	(0.317)	(0.301)	(0.315)
west south central	0.223	0.265	0.108	0.217
	(0.282)	(0.275)	(0.237)	(0.283)
mountain	-0.141	-0.107	-0.226	-0.163
	(0.330)	(0.322)	(0.286)	(0.330)
pacific	0.026	0.068	-0.110	0.027
	(0.286)	(0.278)	(0.246)	(0.288)
how many pets r's family has # highest year of school completed		-0.015 **		
		(0.006)		
renthome			-0.026	
			(0.149)	
renthome # how many pets r's family has 1			-0.091	
			(0.089)	
trailer			-0.692 **	
			(0.277)	
onefamilyhouse			0.057	
			(0.111)	
unit			-0.116	
			(0.235)	
rowhouse			-0.756	
			(0.473)	
threefourfamilyhouse			0.585 **	
			(0.250)	
black # how many pets r's family has 1				-0.208 ***
				(0.071)
havepets 1				0.188
				(0.120)

havepets # otherrace 1				-0.277
				(0.259)
Intercept	7.938 ***	7.540 ***	8.150 ***	7.741 ***
	(0.461)	(0.457)	(0.430)	(0.471)
Number of observations	557	557	557	557

*** p<.01, ** p<.05, * p<.1