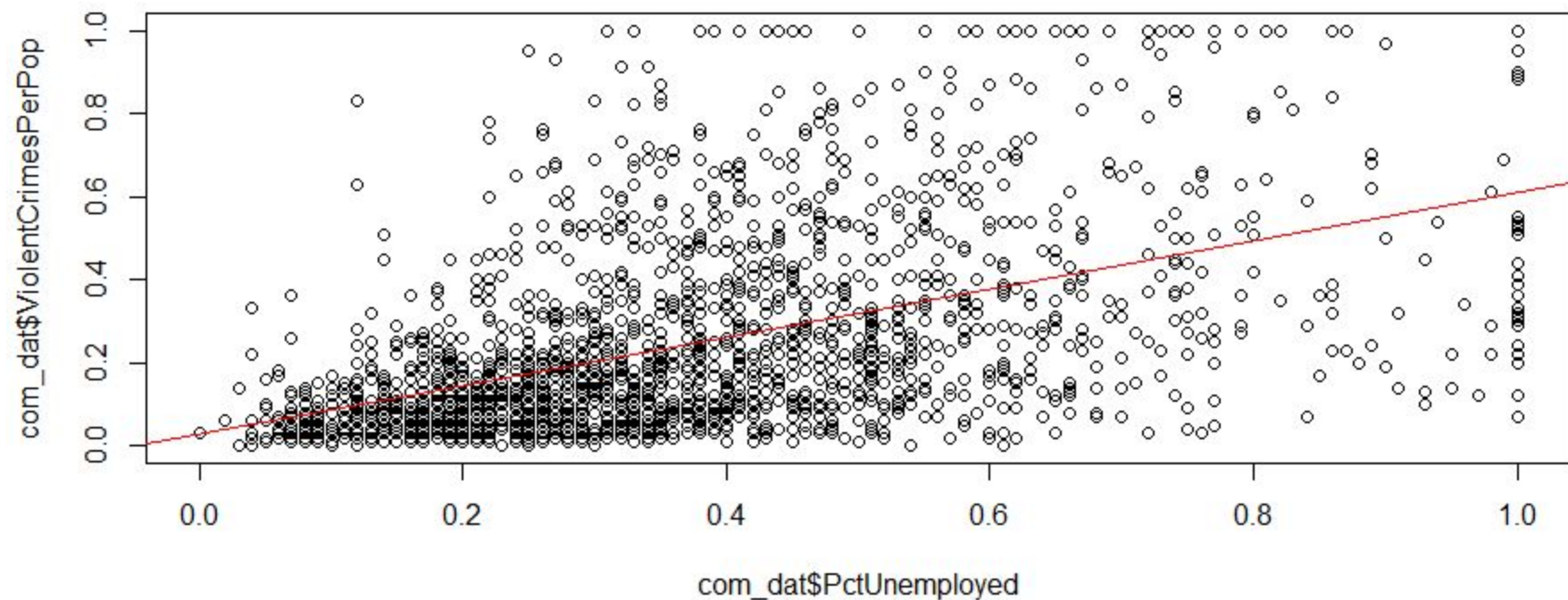


Crime Analysis

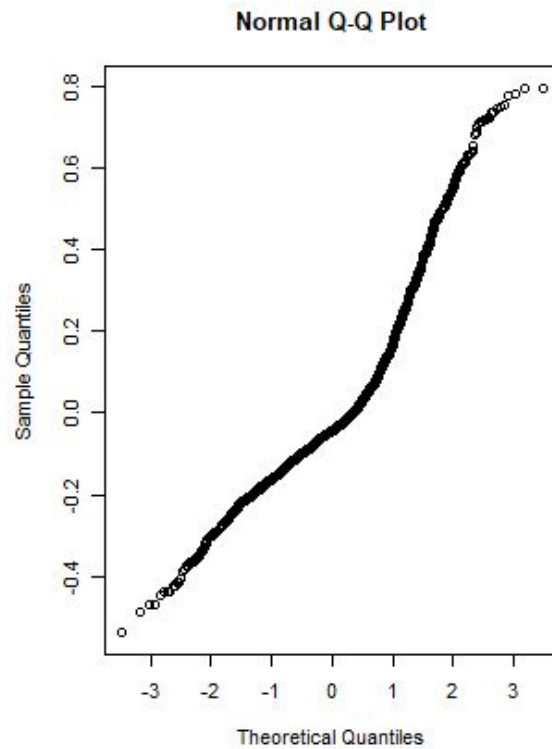
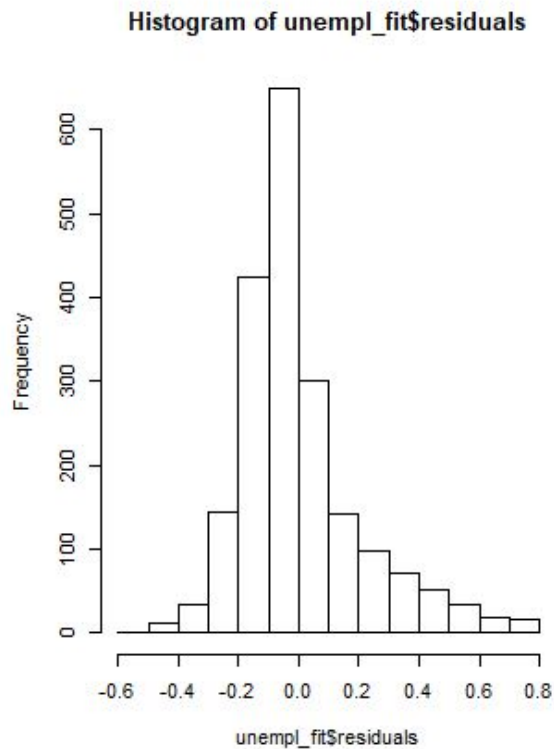
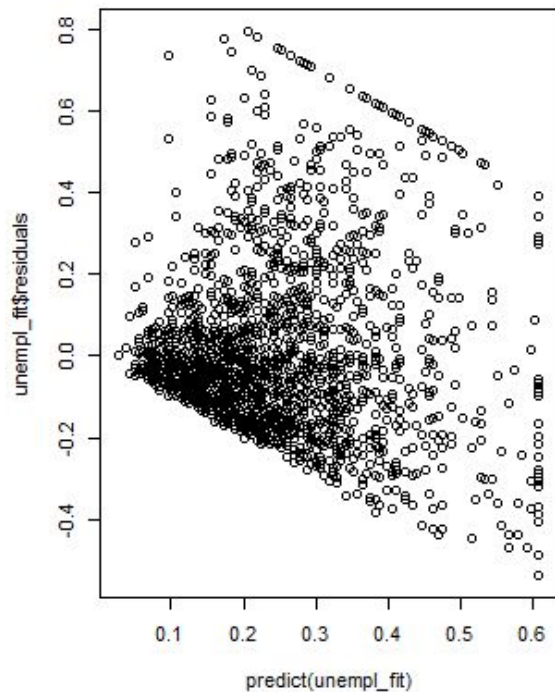
Daniella & Emrys

Unemployment vs Crime

Unemployment vs crime



Unemployment vs crime



Unemployment vs crime

```
Call:
lm(formula = com_dat$ViolentCrimesPerPop ~ com_dat$PctUnemployed)
```

Residuals:

Min	1Q	Median	3Q	Max
-0.53782	-0.12039	-0.04390	0.06705	0.79313

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)	
(Intercept)	0.026736	0.009275	2.883	0.00398	**
com_dat\$PctUnemployed	0.581087	0.022298	26.060	< 2e-16	***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.2012 on 1992 degrees of freedom
Multiple R-squared: 0.2543, Adjusted R-squared: 0.2539
F-statistic: 679.1 on 1 and 1992 DF, p-value: < 2.2e-16

Unemployment vs Crime

Analysis of Variance Table

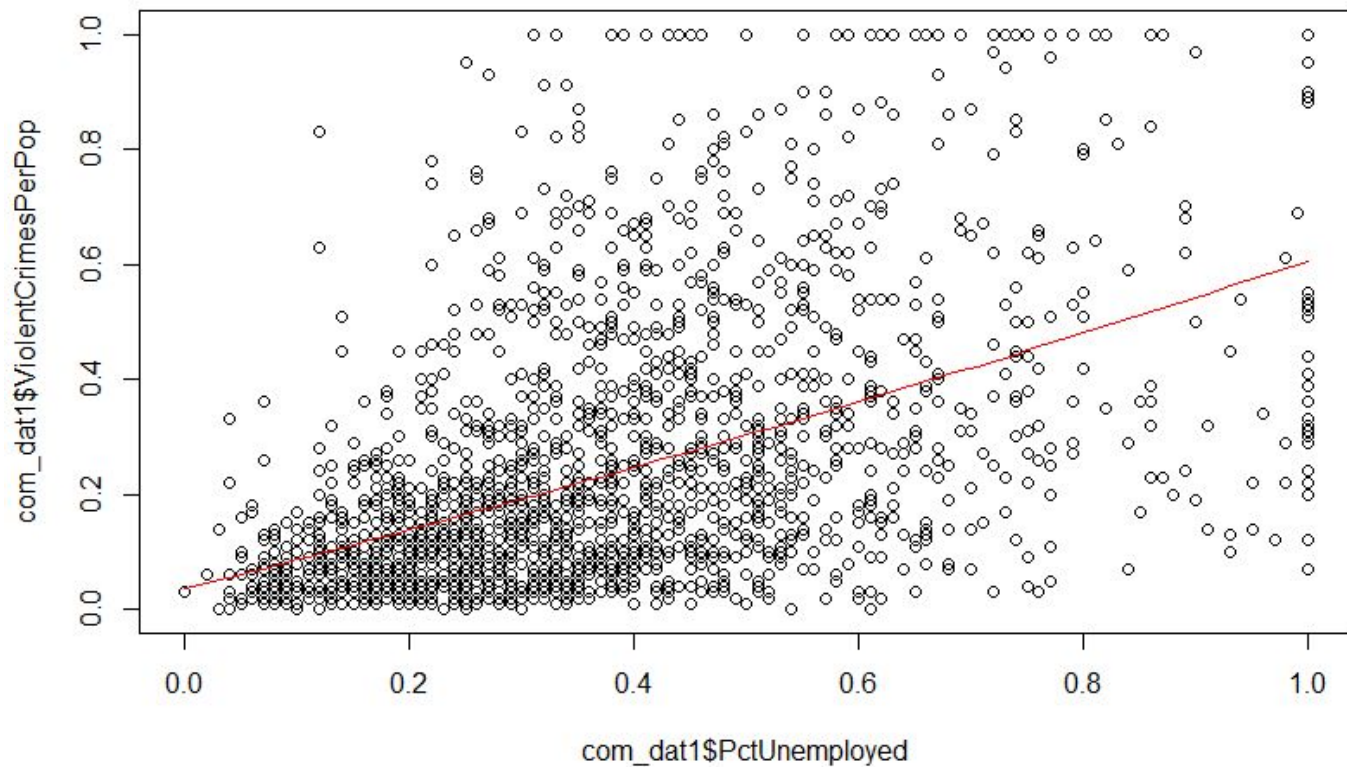
Response: com_dat\$ViolentCrimesPerPop

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
com_dat\$PctUnemployed	1	27.506	27.5060	679.15	< 2.2e-16 ***
Residuals	1992	80.678	0.0405		

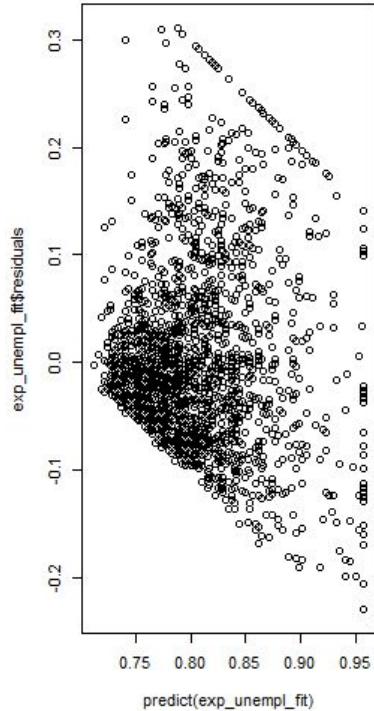
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

unemployment vs $\log(\text{crime})$

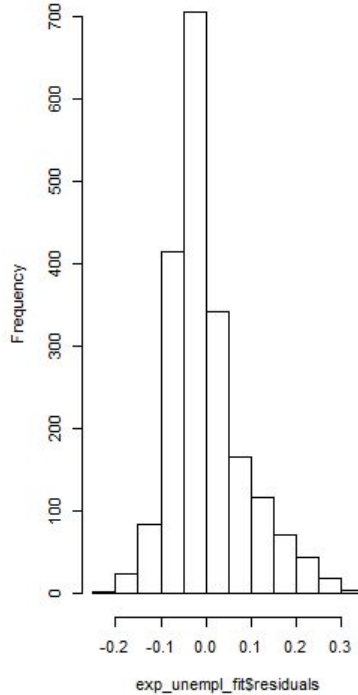
unemployment vs log(crime)



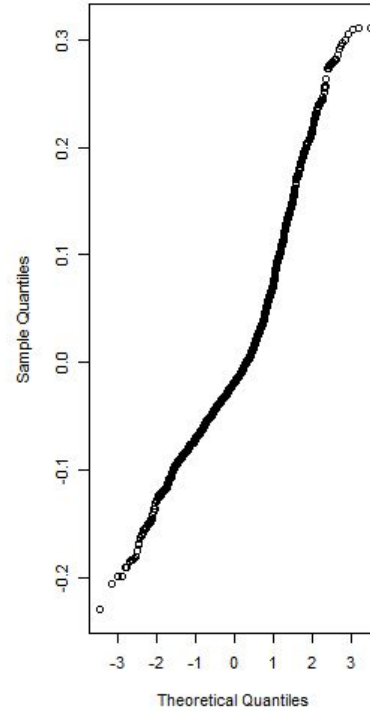
unemployment vs log(crime)



Histogram of exp_unempl_fit\$residuals



Normal Q-Q Plot



unemployment vs log(crime)

```
Call:
lm(formula = lnCrime ~ com_dat1$PctUnemployed)

Residuals:
    Min       1Q   Median       3Q      Max
-0.23039 -0.05224 -0.01763  0.03318  0.31123

Coefficients:
              Estimate Std. Error t value Pr(>|t|)
(Intercept)    0.710753   0.003861  184.10  <2e-16 ***
com_dat1$PctUnemployed 0.247187   0.009282   26.63  <2e-16 ***
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.08377 on 1992 degrees of freedom
Multiple R-squared:  0.2626,    Adjusted R-squared:  0.2622
F-statistic: 709.2 on 1 and 1992 DF,  p-value: < 2.2e-16
```

unemployment vs log(crime)

```
## com_dat1$PctUnemp ~ log(com_dat1$lnCrime)
Analysis of Variance Table
```

```
Response: lnCrime
```

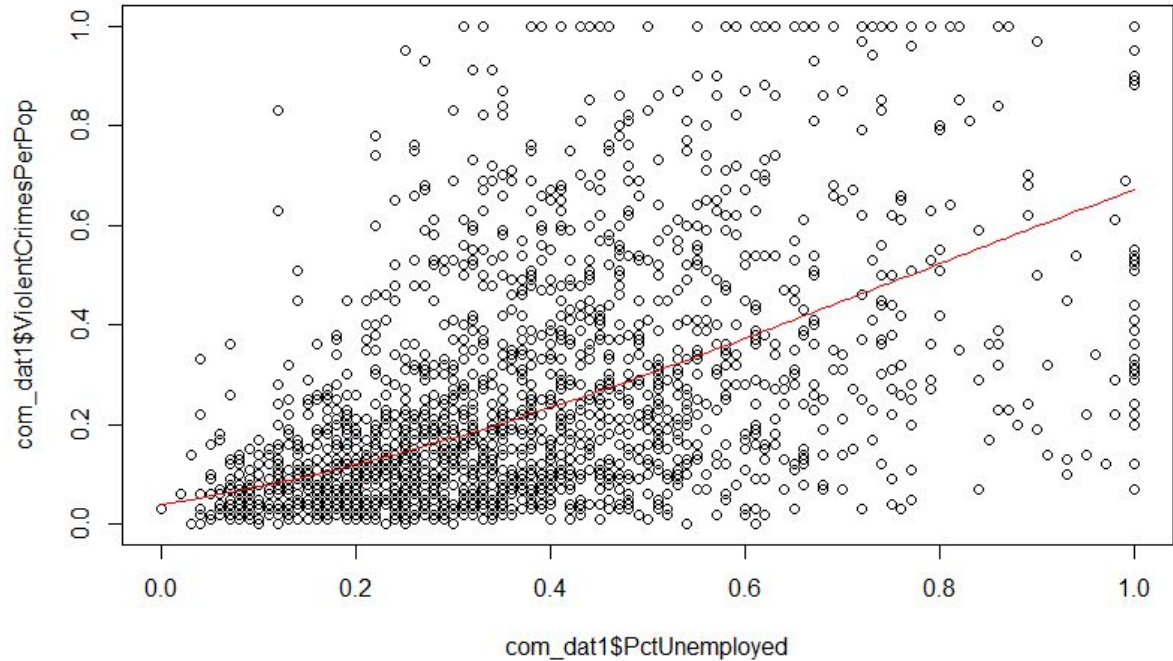
	Df	Sum Sq	Mean Sq	F value	Pr(>F)
com_dat1\$PctUnemployed	1	4.9774	4.9774	709.22	< 2.2e-16 ***
Residuals	1992	13.9800	0.0070		

```
---
```

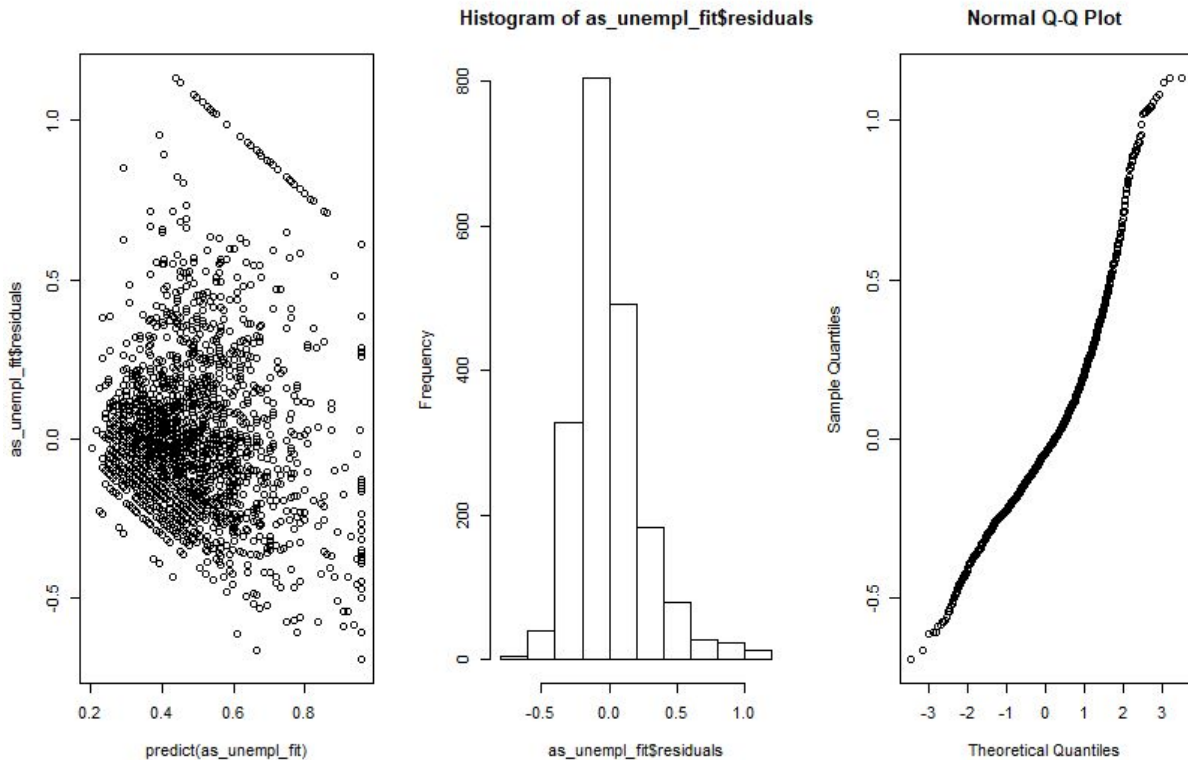
```
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Unemployment vs Asin(Crime)

Unemployment vs Asin(Crime)



Unemployment vs Asin(Crime)



Unemployment vs Asin(Crime)

```
call:
lm(formula = asCrime ~ com_dat1$PctUnemployed)

Residuals:
    Min       1Q   Median       3Q      Max
-0.69198 -0.16419 -0.03971  0.10818  1.13350

Coefficients:
              Estimate Std. Error t value Pr(>|t|)
(Intercept)    0.20257    0.01186   17.09  <2e-16 ***
com_dat1$PctUnemployed 0.75717    0.02851   26.56  <2e-16 ***
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.2573 on 1992 degrees of freedom
Multiple R-squared:  0.2616,    Adjusted R-squared:  0.2612
F-statistic: 705.6 on 1 and 1992 DF,  p-value: < 2.2e-16
```

Unemployment vs Asin(Crime)

Analysis of Variance Table

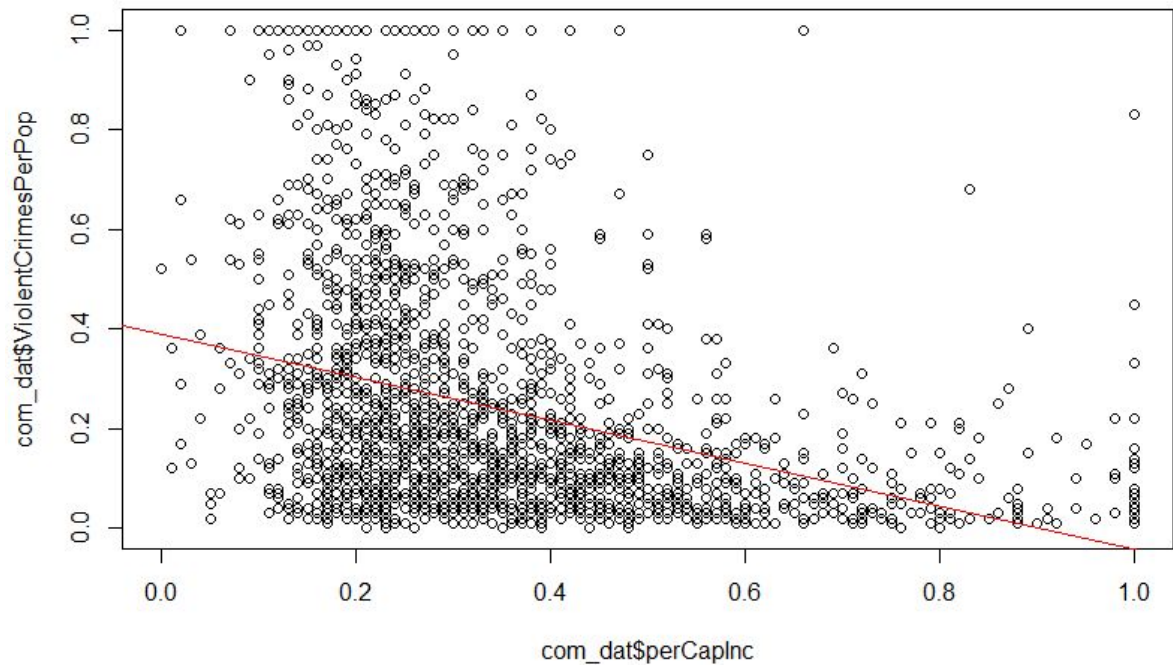
Response: asCrime

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
com_dat1\$PctUnemployed	1	46.701	46.701	705.55	< 2.2e-16 ***
Residuals	1992	131.853	0.066		

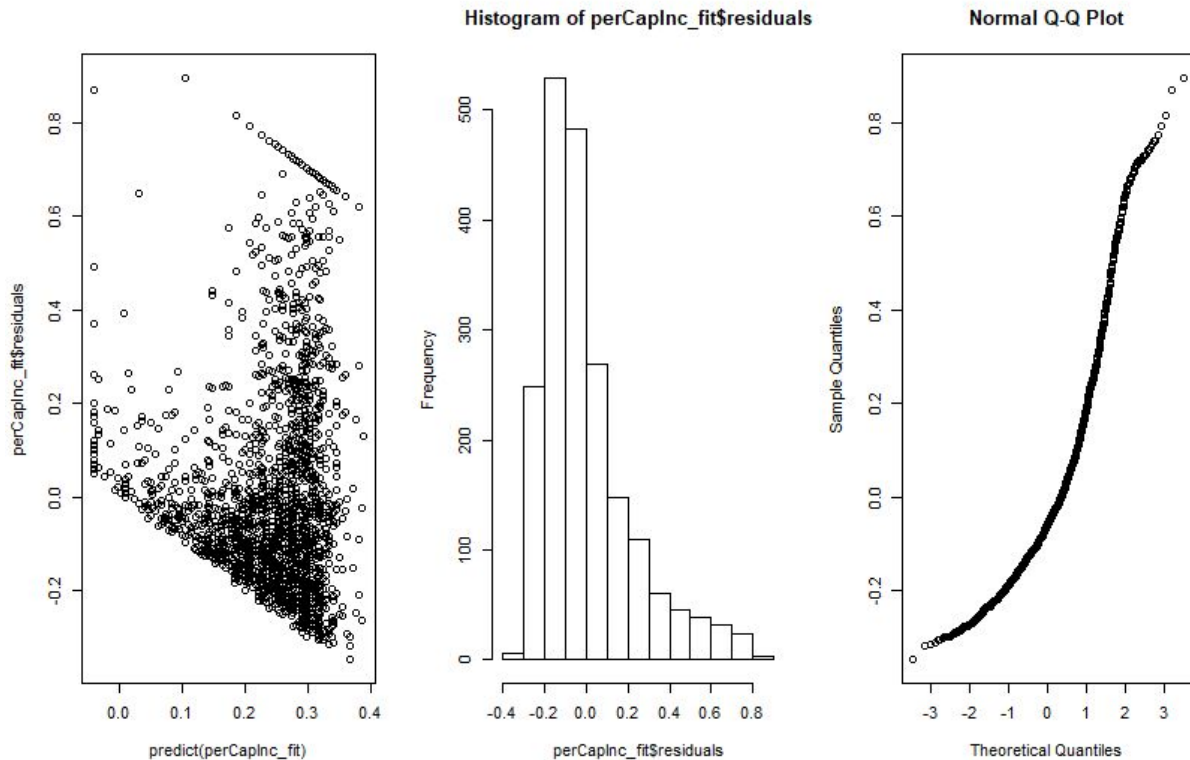
signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

PerCapInc vs Crime

PerCapInc vs Crime



PerCapInc vs Crime



PerCapInc vs Crime

```
Call:
lm(formula = com_dat$ViolentCrimesPerPop ~ com_dat$perCapInc)
```

Residuals:

	Min	1Q	Median	3Q	Max
	-0.34686	-0.14807	-0.05644	0.08039	0.89498

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	0.38832	0.01020	38.07	<2e-16 ***
com_dat\$perCapInc	-0.42923	0.02557	-16.79	<2e-16 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.2181 on 1992 degrees of freedom
Multiple R-squared: 0.124, Adjusted R-squared: 0.1235
F-statistic: 281.9 on 1 and 1992 DF, p-value: < 2.2e-16

PerCapInc vs Crime

Analysis of Variance Table

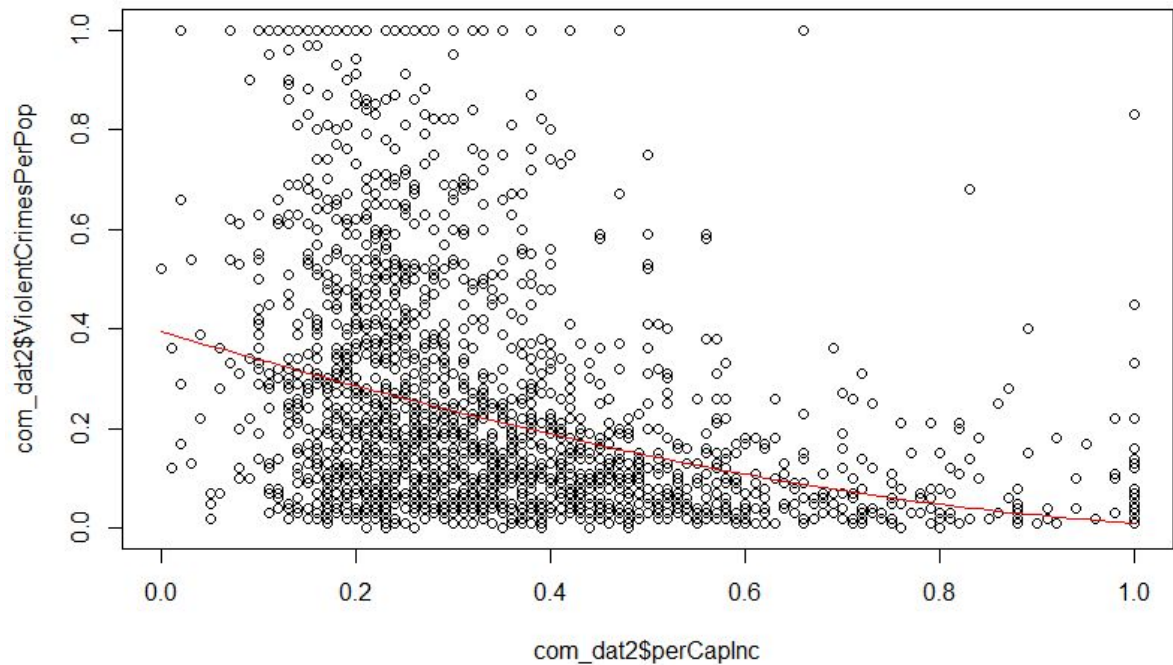
Response: com_dat\$ViolentCrimesPerPop

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
com_dat\$perCapInc	1	13.411	13.4109	281.88	< 2.2e-16 ***
Residuals	1992	94.773	0.0476		

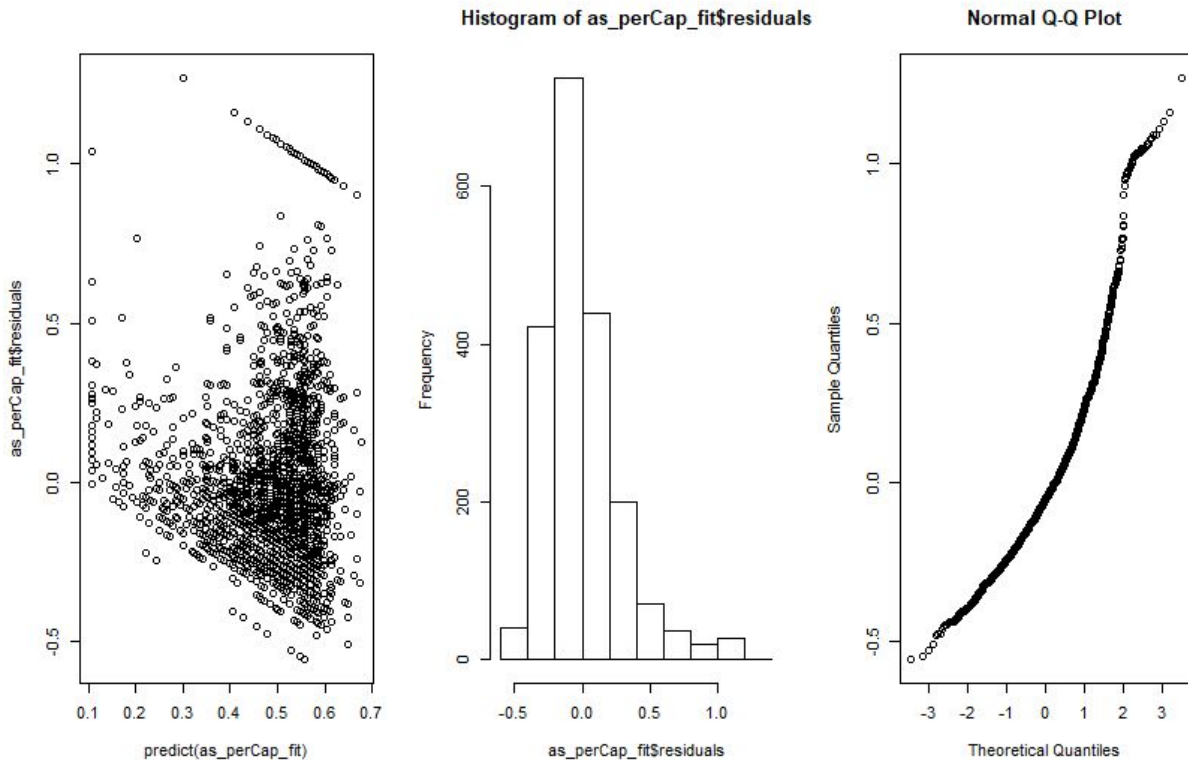
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

perCapInc vs asin(Crime)

perCapInc vs asin(Crime)



perCapIn vs asin(Crime)



perCapIn vs asin(Crime)

```
call:
lm(formula = asCrime ~ com_dat2$perCapInc)

Residuals:
    Min       1Q   Median       3Q      Max
-0.71717 -0.16626 -0.04552  0.10426  1.14780

Coefficients:
              Estimate Std. Error t value Pr(>|t|)
(Intercept)    0.20447    0.01214   16.84  <2e-16 ***
com_dat2$perCapInc 0.78047    0.03042   25.65  <2e-16 ***
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.2596 on 1992 degrees of freedom
Multiple R-squared:  0.2483,    Adjusted R-squared:  0.2479
F-statistic: 658.1 on 1 and 1992 DF,  p-value: < 2.2e-16
```

perCapIn vs asine(Crime)

`anova(lm(asCrime ~ perCapInc))`
Analysis of Variance Table

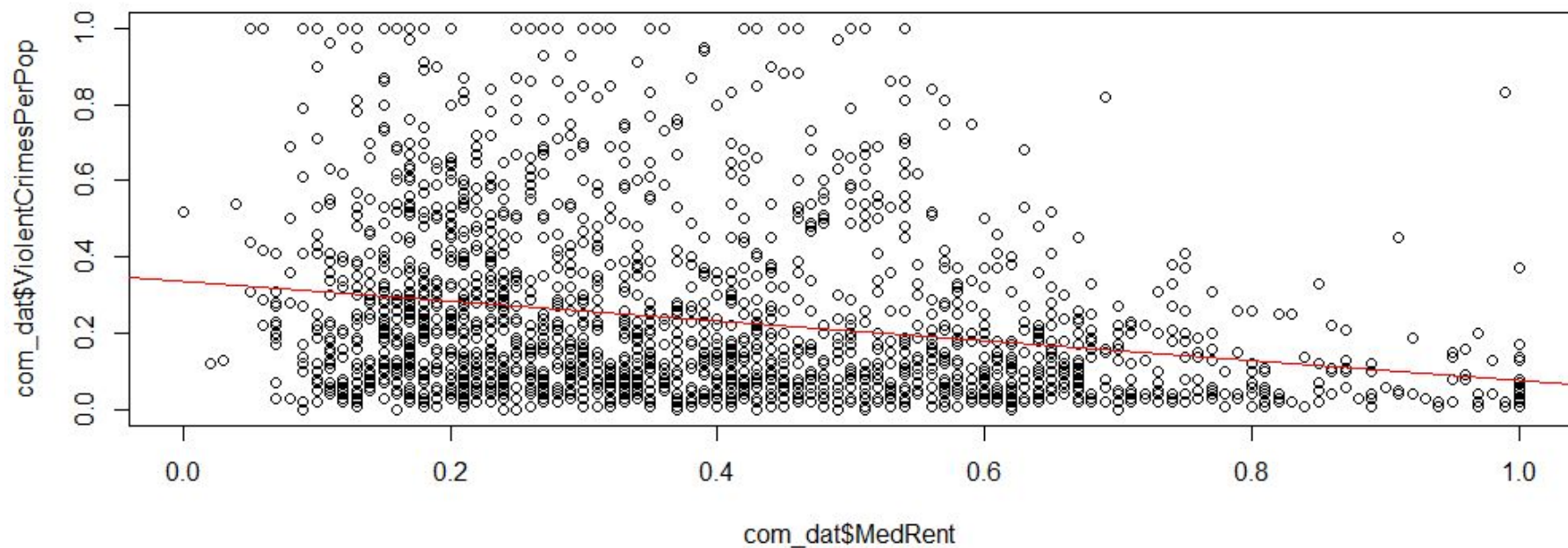
Response: asCrime

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
com_dat2\$perCapInc	1	44.338	44.338	658.06	< 2.2e-16 ***
Residuals	1992	134.216	0.067		

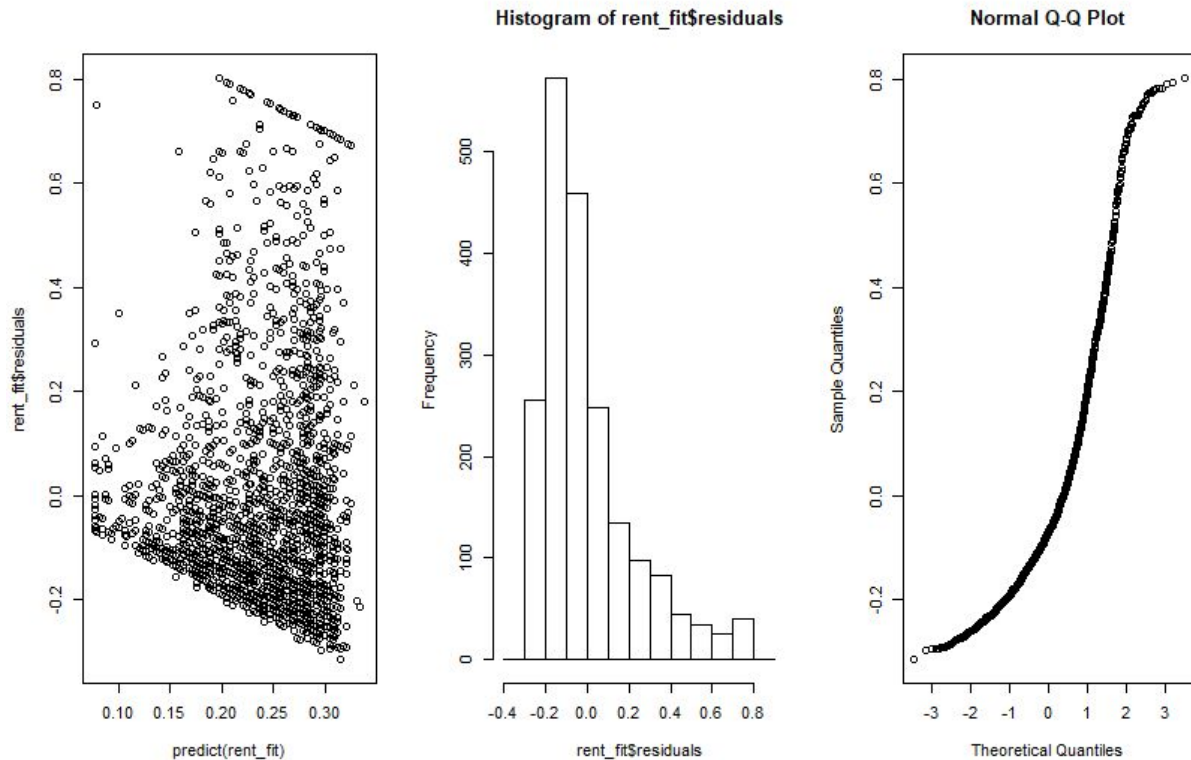
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

MedRent vs Crime

MedRent vs Crime



MedRent vs Crime



MedRent vs Crime

Call:

```
lm(formula = com_dat$ViolentCrimesPerPop ~ com_dat$MedRent)
```

Residuals:

	Min	1Q	Median	3Q	Max
	-0.31500	-0.15376	-0.06669	0.08148	0.80285

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	0.33856	0.01043	32.45	<2e-16 ***
com_dat\$MedRent	-0.26187	0.02375	-11.03	<2e-16 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.2262 on 1992 degrees of freedom

Multiple R-squared: 0.05753, Adjusted R-squared: 0.05706

F-statistic: 121.6 on 1 and 1992 DF, p-value: < 2.2e-16

MedRent vs Crime

Analysis of Variance Table

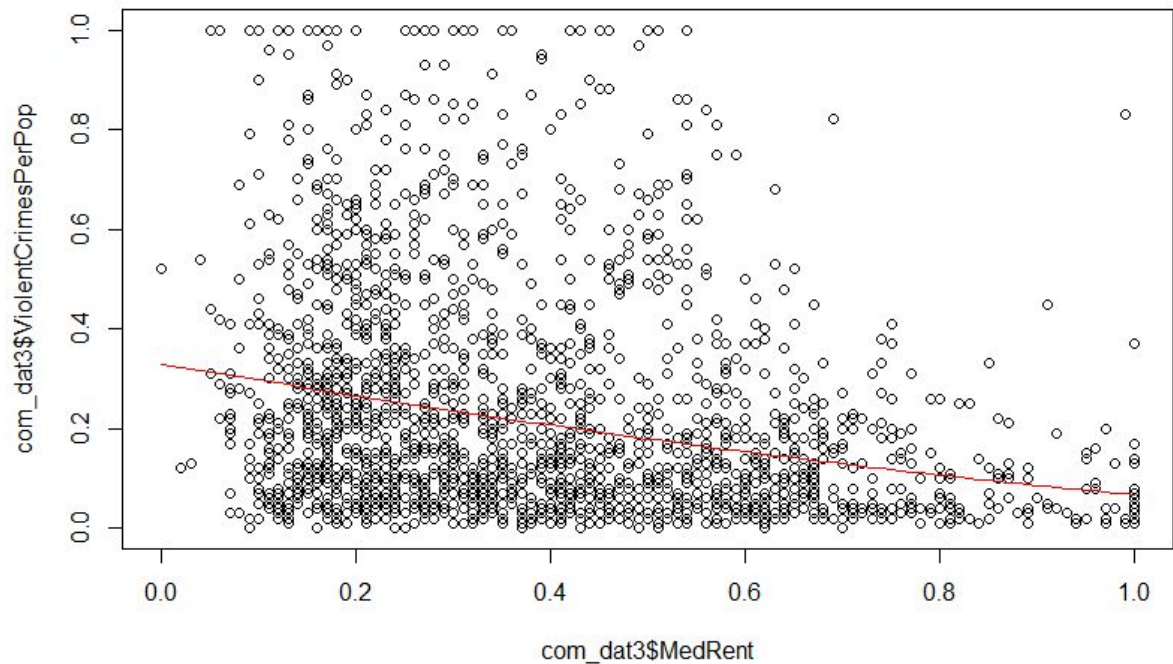
Response: com_dat\$ViolentCrimesPerPop

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
com_dat\$MedRent	1	6.224	6.2243	121.61	< 2.2e-16 ***
Residuals	1992	101.960	0.0512		

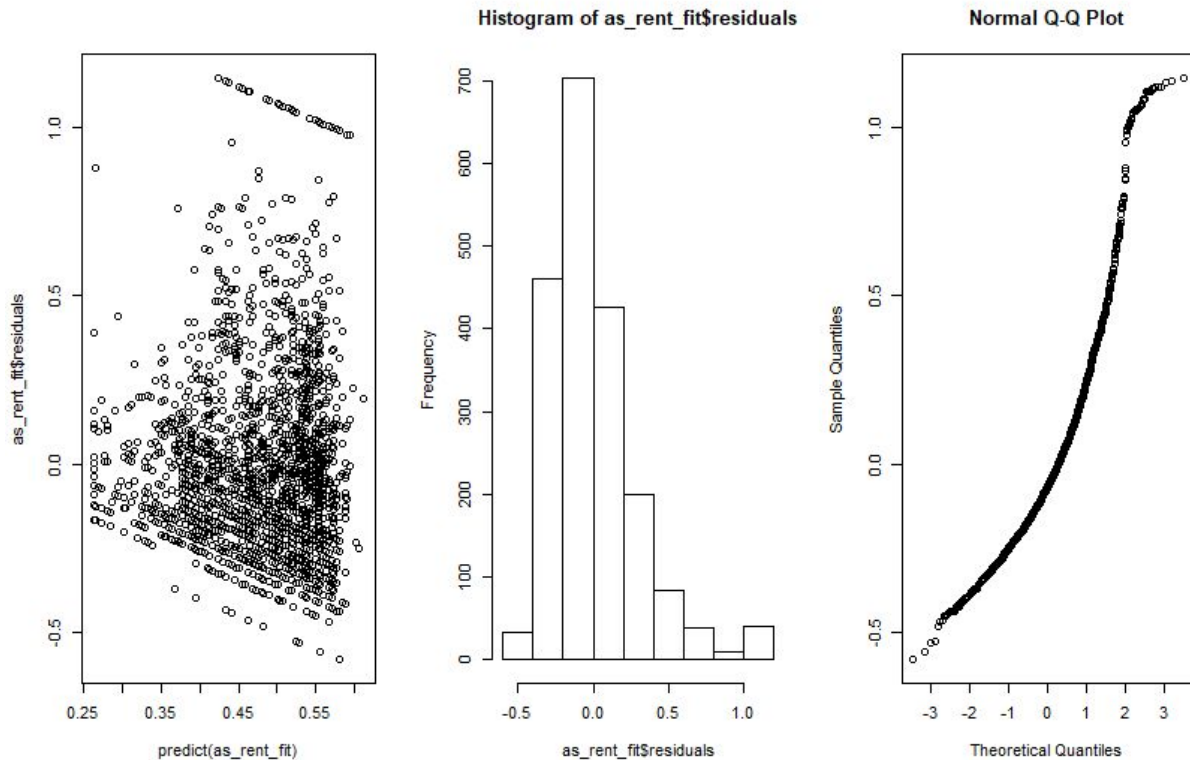
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

MedRent vs asin(Crime)

Medrent vs asin(Crime)



Medrent vs asin(Crime)



Medrent vs asin(Crime)

```
Call:
lm(formula = asCrime ~ com_dat3$MedRent)

Residuals:
    Min       1Q   Median       3Q      Max
-0.58035 -0.19853 -0.06461  0.12046  1.14731

Coefficients:
            Estimate Std. Error t value Pr(>|t|)
(Intercept)    0.61172    0.01337   45.74  <2e-16 ***
com_dat3$MedRent -0.34859    0.03044  -11.45  <2e-16 ***
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.29 on 1992 degrees of freedom
Multiple R-squared:  0.06177,    Adjusted R-squared:  0.0613
F-statistic: 131.1 on 1 and 1992 DF,  p-value: < 2.2e-16
```

medRent vs asin(Crime)

```
> aov(aCrime ~ medRent)
```

Analysis of Variance Table

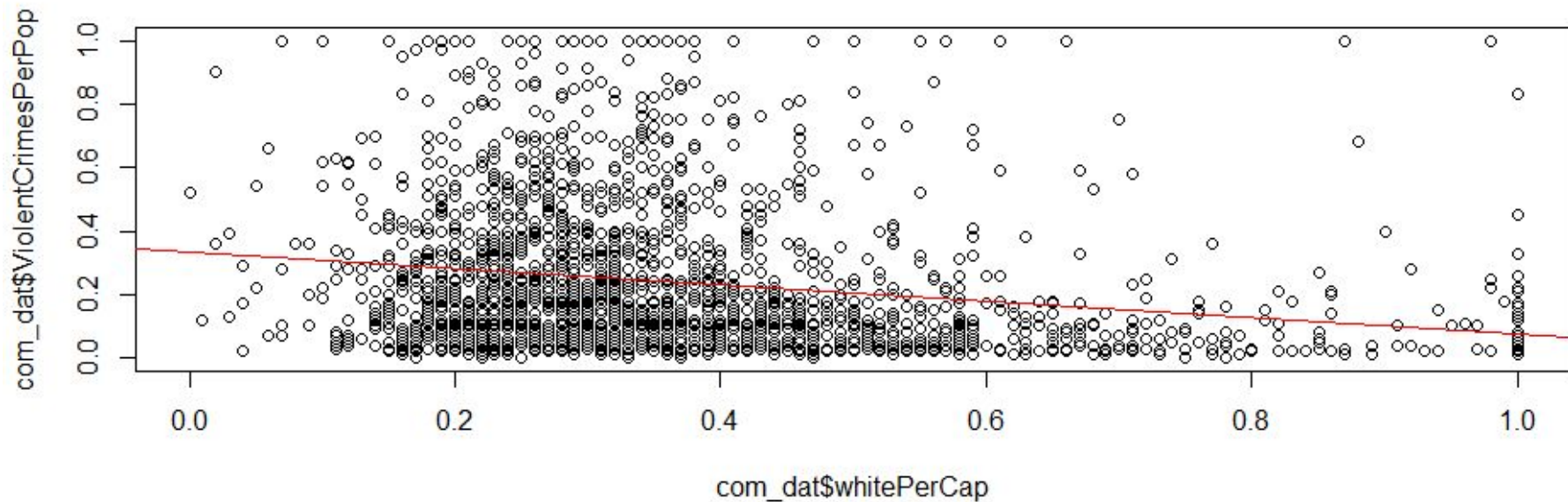
Response: asCrime

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
com_dat3\$MedRent	1	11.029	11.0289	131.14	< 2.2e-16 ***
Residuals	1992	167.526	0.0841		

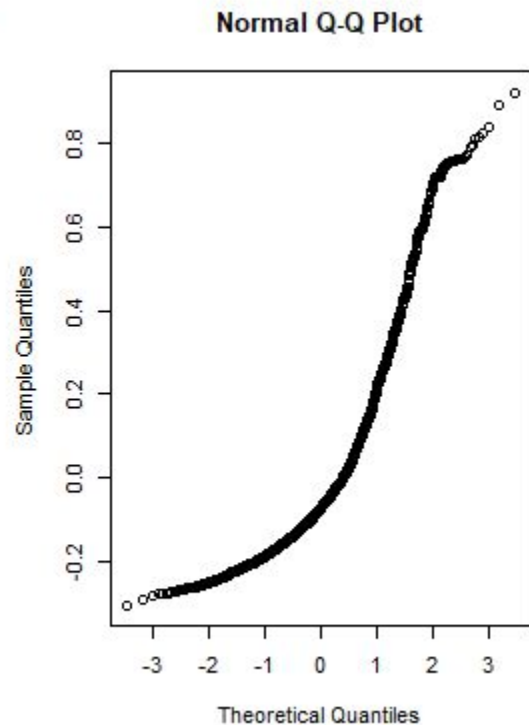
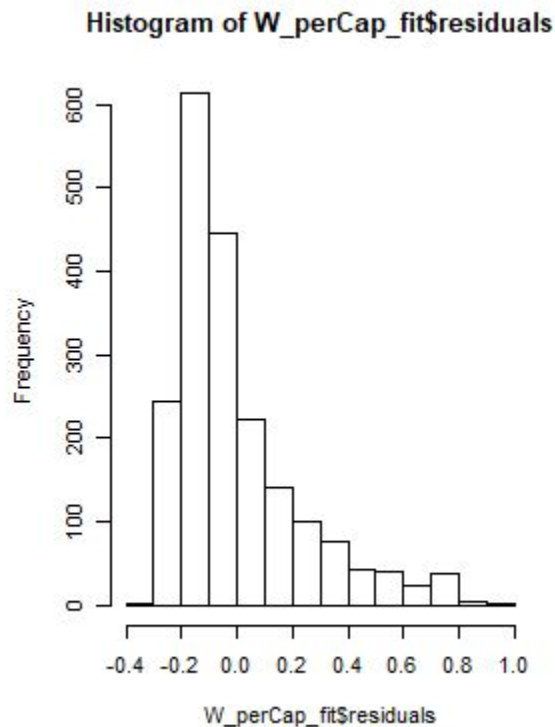
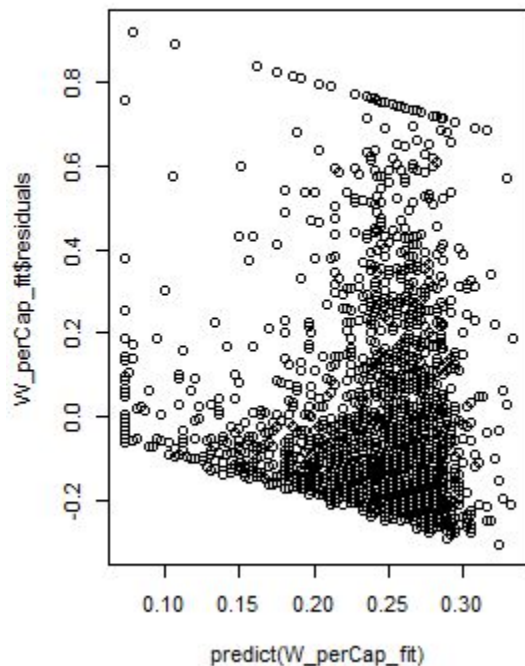
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

White perCap vs Crime

White perCap vs Crime



White perCap vs Crime



White perCap vs Crime

```
Call:
lm(formula = com_dat$ViolentCrimesPerPop ~ com_dat$whitePerCap)
```

Residuals:

Min	1Q	Median	3Q	Max
-0.30360	-0.15617	-0.07159	0.08317	0.92174

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)	
(Intercept)	0.33404	0.01128	29.619	<2e-16	***
com_dat\$whitePerCap	-0.26101	0.02733	-9.552	<2e-16	***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.2279 on 1992 degrees of freedom
Multiple R-squared: 0.04379, Adjusted R-squared: 0.04331
F-statistic: 91.23 on 1 and 1992 DF, p-value: < 2.2e-16

White perCap vs Crime

Analysis of Variance Table

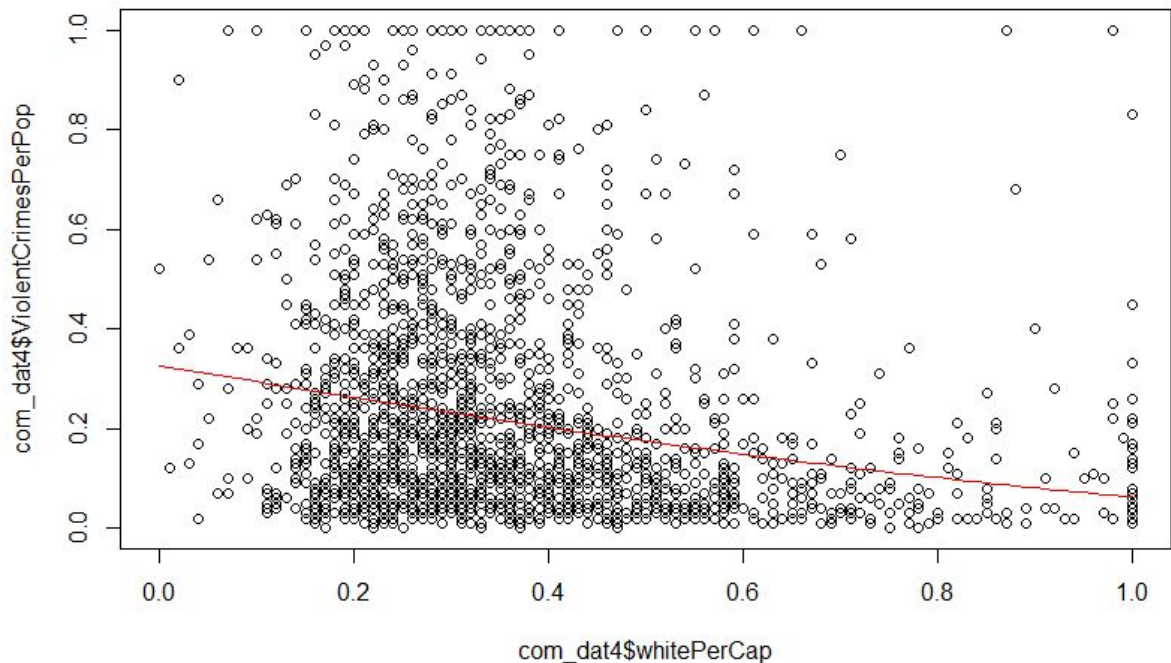
Response: com_dat\$ViolentCrimesPerPop

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
com_dat\$whitePerCap	1	4.738	4.7379	91.235	< 2.2e-16 ***
Residuals	1992	103.446	0.0519		

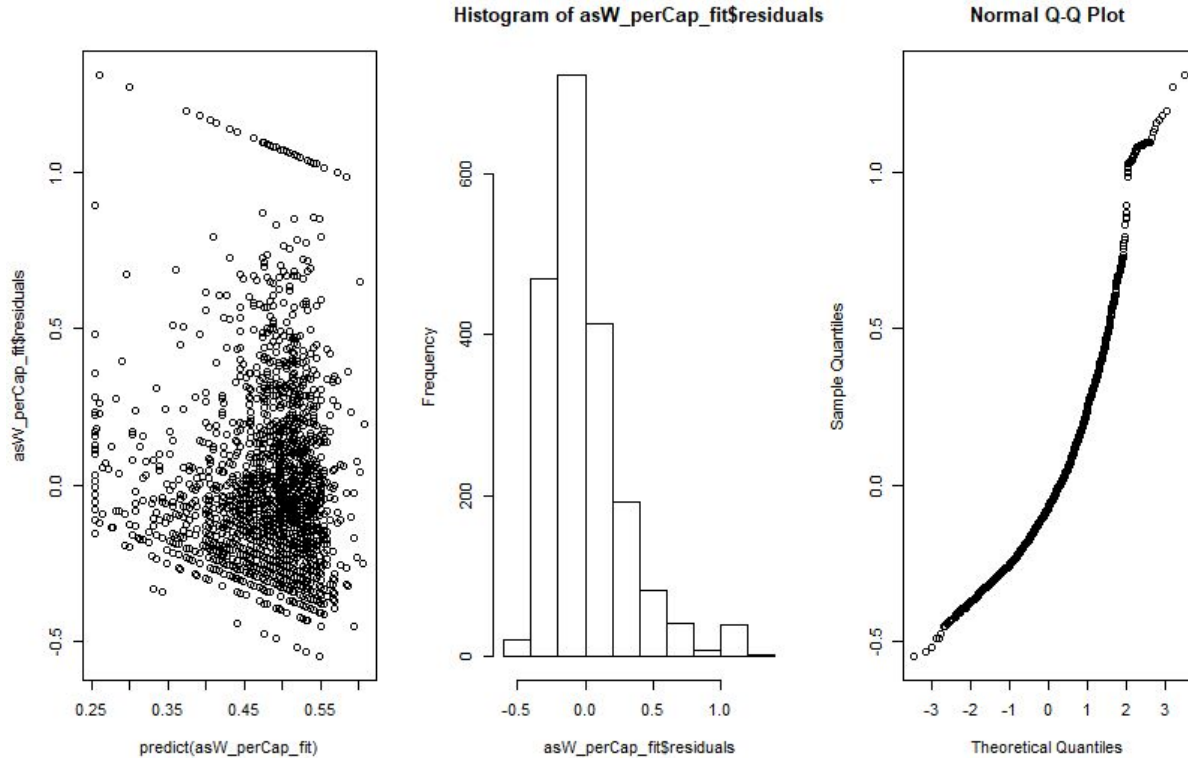
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

White per Cap vs asin(Crime)

White per Cap vs Asine(crime)



White per Cap vs Asine(crime)



White per Cap vs Asine(crime)

```
call:
lm(formula = asCrime ~ com_dat4$whitePerCap)

Residuals:
    Min       1Q   Median       3Q      Max
-0.5482 -0.1980 -0.0662  0.1234  1.3104

Coefficients:
              Estimate Std. Error t value Pr(>|t|)
(Intercept)    0.60859    0.01445   42.12  <2e-16 ***
com_dat4$whitePerCap -0.35530    0.03501  -10.15  <2e-16 ***
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.2919 on 1992 degrees of freedom
Multiple R-squared:  0.04917,    Adjusted R-squared:  0.04869
F-statistic: 103 on 1 and 1992 DF,  p-value: < 2.2e-16
```

White per cap as asin(crime)

```
> anova(asw_perCap ~ 1)
Analysis of Variance Table
```

Response: asCrime

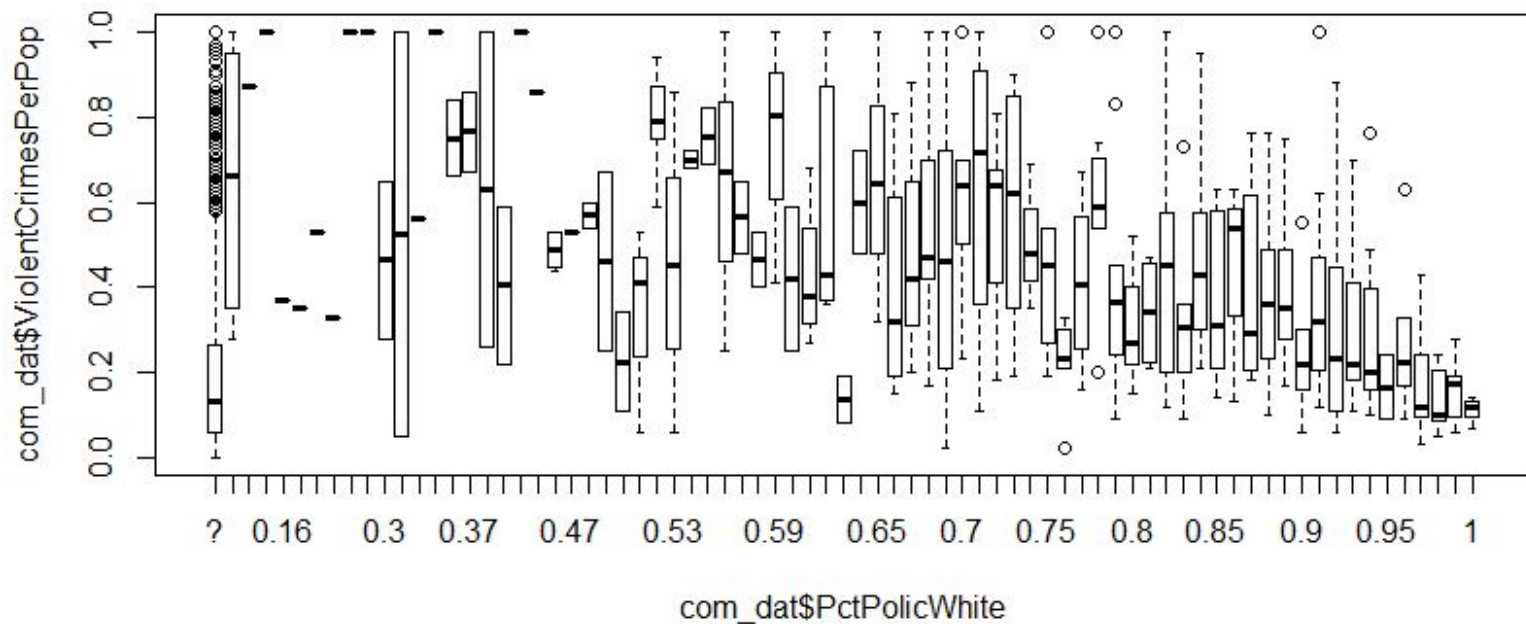
	Df	Sum Sq	Mean Sq	F value	Pr(>F)
com_dat4\$whitePerCap	1	8.779	8.7793	103.01	< 2.2e-16 ***
Residuals	1992	169.775	0.0852		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

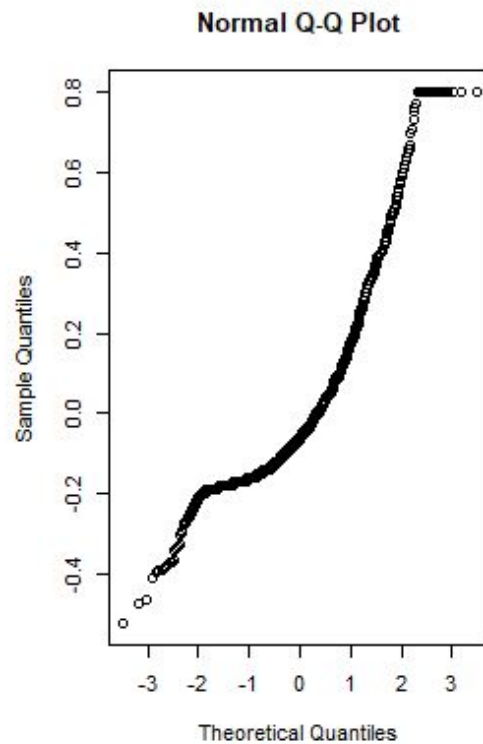
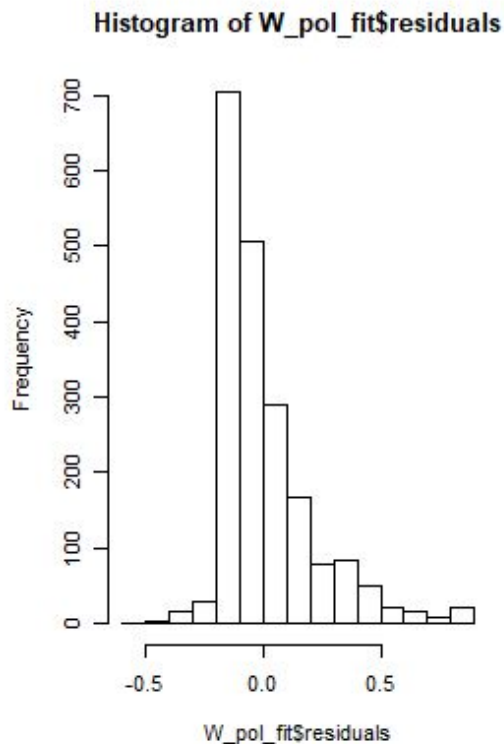
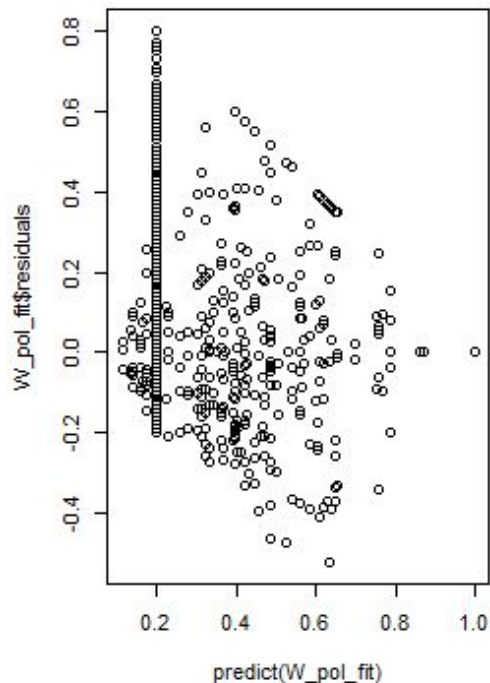
White Police vs Crime

*NEED TO GET CHECKED refer to summary table
for issues

White Police vs Crime



White Police vs Crime



White Police vs Crime

```
call:
lm(formula = com_dat$ViolentCrimesPerPop ~ com_dat$PctPolicwhite)
```

```
Residuals:
    Min       1Q   Median       3Q      Max
-0.52500 -0.13928 -0.05928  0.07625  0.80072
```

```
Coefficients:
            Estimate Std. Error t value Pr(>|t|)
(Intercept)  0.199278    0.005056   39.413 < 2e-16 ***
com_dat$PctPolicwhite0  0.450722    0.073335    6.146 9.64e-10 ***
com_dat$PctPolicwhite0.06  0.670722    0.206992    3.240 0.001214 **
com_dat$PctPolicwhite0.1  0.800722    0.206992    3.868 0.000113 ***
com_dat$PctPolicwhite0.16  0.170722    0.206992    0.825 0.409601
com_dat$PctPolicwhite0.21  0.150722    0.206992    0.728 0.466607
com_dat$PctPolicwhite0.23  0.330722    0.206992    1.598 0.110262
com_dat$PctPolicwhite0.27  0.130722    0.206992    0.632 0.527767
com_dat$PctPolicwhite0.28  0.800722    0.206992    3.868 0.000113 ***
com_dat$PctPolicwhite0.29  0.800722    0.146409    5.469 5.12e-08 ***
com_dat$PctPolicwhite0.3  0.265722    0.146409    1.815 0.069691 .
com_dat$PctPolicwhite0.32  0.325722    0.146409    2.225 0.026215 *
com_dat$PctPolicwhite0.33  0.360722    0.206992    1.743 0.081349 .
com_dat$PctPolicwhite0.35  0.800722    0.206992    3.868 0.000113 ***
com_dat$PctPolicwhite0.36  0.550722    0.146409    3.762 0.000174 ***
com_dat$PctPolicwhite0.37  0.565722    0.146409    3.864 0.000115 ***
com_dat$PctPolicwhite0.4  0.430722    0.146409    2.942 0.003301 **
com_dat$PctPolicwhite0.41  0.205722    0.146409    1.405 0.160148
com_dat$PctPolicwhite0.43  0.800722    0.206992    3.868 0.000113 ***
com_dat$PctPolicwhite0.44  0.660722    0.206992    3.192 0.001436 **
com_dat$PctPolicwhite0.46  0.288222    0.103589    2.782 0.005449 **
com_dat$PctPolicwhite0.47  0.330722    0.206992    1.598 0.110262
com_dat$PctPolicwhite0.48  0.370722    0.146409    2.532 0.011417 *
com_dat$PctPolicwhite0.49  0.260722    0.146409    1.781 0.075107 .
com_dat$PctPolicwhite0.5  0.025722    0.146409    0.176 0.860557
com_dat$PctPolicwhite0.51  0.134056    0.119578    1.121 0.262398
com_dat$PctPolicwhite0.52  0.588722    0.092680    6.352 2.64e-10 ***
com_dat$PctPolicwhite0.53  0.257389    0.119578    2.152 0.031484 *
com_dat$PctPolicwhite0.54  0.500722    0.146409    3.420 0.000639 ***
com_dat$PctPolicwhite0.55  0.555722    0.146409    3.796 0.000152 ***
com_dat$PctPolicwhite0.56  0.440722    0.119578    3.686 0.000234 ***
com_dat$PctPolicwhite0.57  0.365722    0.146409    2.498 0.012575 *
com_dat$PctPolicwhite0.58  0.265722    0.146409    1.815 0.069691 .
com_dat$PctPolicwhite0.59  0.555722    0.103589    5.365 9.09e-08 ***
com_dat$PctPolicwhite0.6  0.220722    0.146409    1.508 0.131829
com_dat$PctPolicwhite0.61  0.228222    0.103589    2.203 0.027702 *
com_dat$PctPolicwhite0.62  0.406722    0.092680    4.388 1.20e-05 ***
com_dat$PctPolicwhite0.63 -0.064278    0.146409   -0.439 0.660691
com_dat$PctPolicwhite0.64  0.400722    0.146409    2.737 0.006257 **
com_dat$PctPolicwhite0.65  0.453222    0.103589    4.375 1.28e-05 ***
com_dat$PctPolicwhite0.66  0.200722    0.103589    1.938 0.052808 .
com_dat$PctPolicwhite0.67  0.300722    0.119578    2.515 0.011989 *
com_dat$PctPolicwhite0.68  0.339056    0.084630    4.006 6.40e-05 ***
com_dat$PctPolicwhite0.69  0.284056    0.069162    4.107 4.17e-05 ***
com_dat$PctPolicwhite0.7  0.419056    0.084630    4.952 8.00e-07 ***
com_dat$PctPolicwhite0.71  0.435722    0.103589    4.206 2.72e-05 ***
com_dat$PctPolicwhite0.72  0.357995    0.062596    5.719 1.24e-08 ***
com_dat$PctPolicwhite0.73  0.382722    0.092680    4.129 3.79e-05 ***
com_dat$PctPolicwhite0.74  0.307389    0.119578    2.571 0.010227 *
com_dat$PctPolicwhite0.75  0.284056    0.084630    3.356 0.000805 ***
com_dat$PctPolicwhite0.76  0.029294    0.078376    0.374 0.708623
com_dat$PctPolicwhite0.77  0.210722    0.103589    2.034 0.042066 *
com_dat$PctPolicwhite0.78  0.412151    0.078376    5.259 1.61e-07 ***
com_dat$PctPolicwhite0.79  0.223722    0.065632    3.409 0.000666 ***
com_dat$PctPolicwhite0.8  0.112722    0.092680    1.216 0.224038
com_dat$PctPolicwhite0.81  0.140722    0.103589    1.358 0.174473
com_dat$PctPolicwhite0.82  0.246972    0.073335    3.368 0.000773 ***
com_dat$PctPolicwhite0.83  0.132389    0.084630    1.564 0.117906
com_dat$PctPolicwhite0.84  0.271972    0.073335    3.709 0.000214 ***
com_dat$PctPolicwhite0.85  0.161833    0.069162    2.340 0.019390 *
com_dat$PctPolicwhite0.86  0.234056    0.119578    1.957 0.050452 .
com_dat$PctPolicwhite0.87  0.195722    0.073335    2.669 0.007675 **
com_dat$PctPolicwhite0.88  0.168500    0.069162    2.436 0.014928 *
com_dat$PctPolicwhite0.89  0.190722    0.069162    2.758 0.005877 ***
com_dat$PctPolicwhite0.9  0.058722    0.092680    0.634 0.526415
com_dat$PctPolicwhite0.91  0.199294    0.078376    2.543 0.011075 *
com_dat$PctPolicwhite0.92  0.120722    0.062596    1.929 0.053930 .
com_dat$PctPolicwhite0.93  0.104472    0.073335    1.425 0.154440
com_dat$PctPolicwhite0.94  0.110722    0.078376    1.413 0.157902
com_dat$PctPolicwhite0.95 -0.034278    0.146409   -0.234 0.814915
com_dat$PctPolicwhite0.96  0.079056    0.084630    0.934 0.350353
com_dat$PctPolicwhite0.97 -0.024732    0.062596   -0.395 0.692809
com_dat$PctPolicwhite0.98 -0.060706    0.078376   -0.775 0.438698
com_dat$PctPolicwhite0.99 -0.041778    0.073335   -0.570 0.568963
com_dat$PctPolicwhite1    -0.086778    0.103589   -0.838 0.402296
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```

```
com_dat$PctPolicwhite0.51 0.134056 0.119578 1.121 0.262398
com_dat$PctPolicwhite0.52 0.588722 0.092680 6.352 2.64e-10 ***
com_dat$PctPolicwhite0.53 0.257389 0.119578 2.152 0.031484 *
com_dat$PctPolicwhite0.54 0.500722 0.146409 3.420 0.000639 ***
com_dat$PctPolicwhite0.55 0.555722 0.146409 3.796 0.000152 ***
com_dat$PctPolicwhite0.56 0.440722 0.119578 3.686 0.000234 ***
com_dat$PctPolicwhite0.57 0.365722 0.146409 2.498 0.012575 *
com_dat$PctPolicwhite0.58 0.265722 0.146409 1.815 0.069691 .
com_dat$PctPolicwhite0.59 0.555722 0.103589 5.365 9.09e-08 ***
com_dat$PctPolicwhite0.6 0.220722 0.146409 1.508 0.131829
com_dat$PctPolicwhite0.61 0.228222 0.103589 2.203 0.027702 *
com_dat$PctPolicwhite0.62 0.406722 0.092680 4.388 1.20e-05 ***
com_dat$PctPolicwhite0.63 -0.064278 0.146409 -0.439 0.660691
com_dat$PctPolicwhite0.64 0.400722 0.146409 2.737 0.006257 **
com_dat$PctPolicwhite0.65 0.453222 0.103589 4.375 1.28e-05 ***
com_dat$PctPolicwhite0.66 0.200722 0.103589 1.938 0.052808 .
com_dat$PctPolicwhite0.67 0.300722 0.119578 2.515 0.011989 *
com_dat$PctPolicwhite0.68 0.339056 0.084630 4.006 6.40e-05 ***
com_dat$PctPolicwhite0.69 0.284056 0.069162 4.107 4.17e-05 ***
com_dat$PctPolicwhite0.7 0.419056 0.084630 4.952 8.00e-07 ***
com_dat$PctPolicwhite0.71 0.435722 0.103589 4.206 2.72e-05 ***
com_dat$PctPolicwhite0.72 0.357995 0.062596 5.719 1.24e-08 ***
com_dat$PctPolicwhite0.73 0.382722 0.092680 4.129 3.79e-05 ***
com_dat$PctPolicwhite0.74 0.307389 0.119578 2.571 0.010227 *
com_dat$PctPolicwhite0.75 0.284056 0.084630 3.356 0.000805 ***
com_dat$PctPolicwhite0.76 0.029294 0.078376 0.374 0.708623
com_dat$PctPolicwhite0.77 0.210722 0.103589 2.034 0.042066 *
com_dat$PctPolicwhite0.78 0.412151 0.078376 5.259 1.61e-07 ***
com_dat$PctPolicwhite0.79 0.223722 0.065632 3.409 0.000666 ***
com_dat$PctPolicwhite0.8 0.112722 0.092680 1.216 0.224038
com_dat$PctPolicwhite0.81 0.140722 0.103589 1.358 0.174473
com_dat$PctPolicwhite0.82 0.246972 0.073335 3.368 0.000773 ***
com_dat$PctPolicwhite0.83 0.132389 0.084630 1.564 0.117906
com_dat$PctPolicwhite0.84 0.271972 0.073335 3.709 0.000214 ***
com_dat$PctPolicwhite0.85 0.161833 0.069162 2.340 0.019390 *
com_dat$PctPolicwhite0.86 0.234056 0.119578 1.957 0.050452 .
com_dat$PctPolicwhite0.87 0.195722 0.073335 2.669 0.007675 **
com_dat$PctPolicwhite0.88 0.168500 0.069162 2.436 0.014928 *
com_dat$PctPolicwhite0.89 0.190722 0.069162 2.758 0.005877 ***
com_dat$PctPolicwhite0.9 0.058722 0.092680 0.634 0.526415
com_dat$PctPolicwhite0.91 0.199294 0.078376 2.543 0.011075 *
com_dat$PctPolicwhite0.92 0.120722 0.062596 1.929 0.053930 .
com_dat$PctPolicwhite0.93 0.104472 0.073335 1.425 0.154440
com_dat$PctPolicwhite0.94 0.110722 0.078376 1.413 0.157902
com_dat$PctPolicwhite0.95 -0.034278 0.146409 -0.234 0.814915
com_dat$PctPolicwhite0.96 0.079056 0.084630 0.934 0.350353
com_dat$PctPolicwhite0.97 -0.024732 0.062596 -0.395 0.692809
com_dat$PctPolicwhite0.98 -0.060706 0.078376 -0.775 0.438698
com_dat$PctPolicwhite0.99 -0.041778 0.073335 -0.570 0.568963
com_dat$PctPolicwhite1 -0.086778 0.103589 -0.838 0.402296
---
```

```
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
Residual standard error: 0.2069 on 1919 degrees of freedom
Multiple R-squared: 0.2404, Adjusted R-squared: 0.2112
F-statistic: 8.209 on 74 and 1919 Df, p-value: < 2.2e-16
```

White Police vs Crime

Analysis of Variance Table

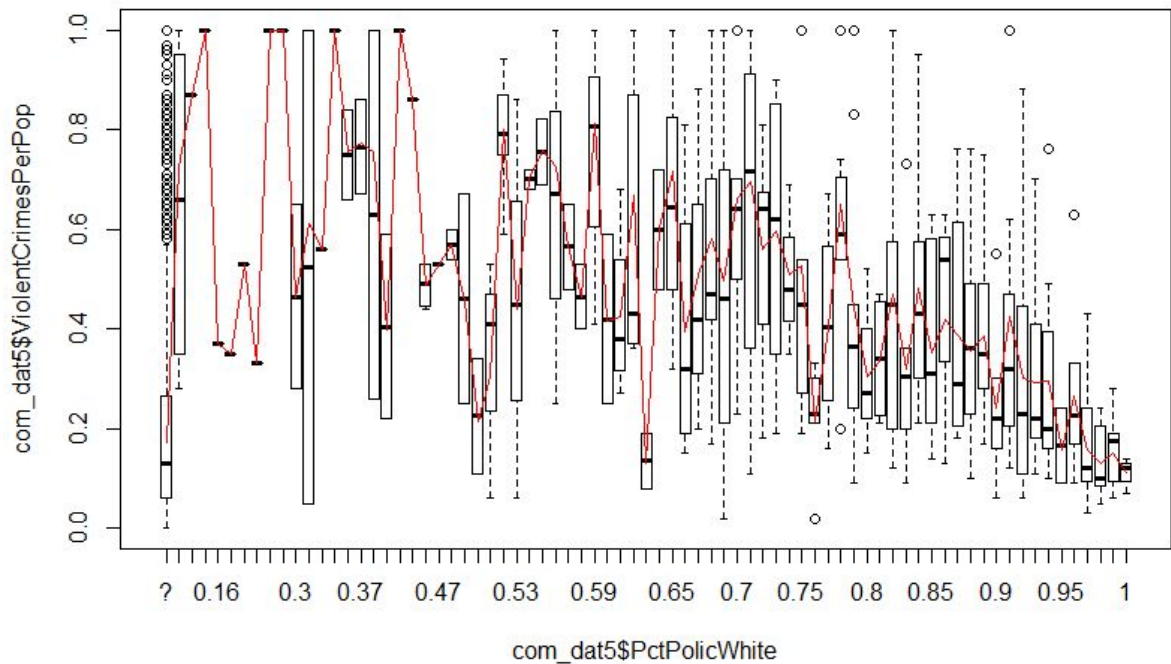
Response: com_dat\$ViolentCrimesPerPop

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
com_dat\$PctPolicwhite	74	26.012	0.35151	8.2091	< 2.2e-16 ***
Residuals	1919	82.172	0.04282		

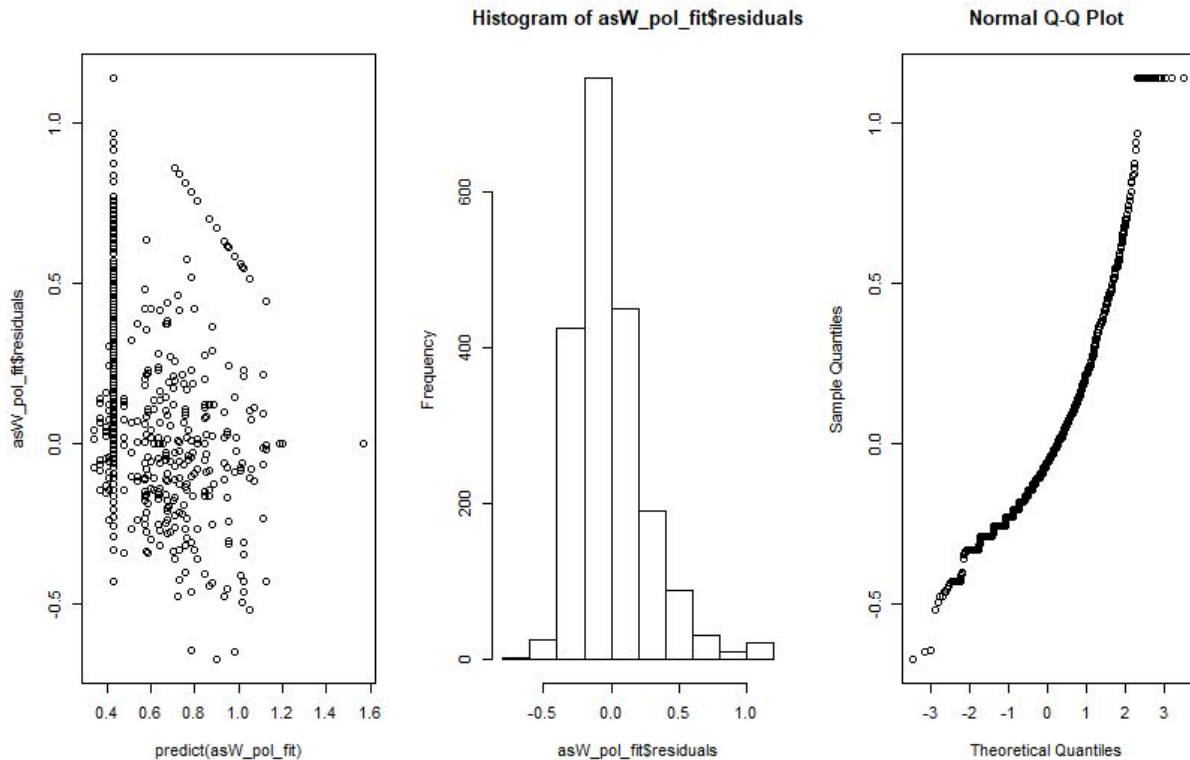
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

White police vs asin(Crime)

White police vs asin(crime)



White police vs asin(crime)



White police vs asin(crime)

```
call:
lm(formula = asCrime ~ com_dat5$PctPolicwhite)
```

Residuals:

Min	1Q	Median	3Q	Max
-0.6726	-0.1812	-0.0598	0.1143	1.1421

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	0.428667	0.006529	65.657	< 2e-16 ***
com_dat5\$PctPolicwhite0	0.591473	0.094696	6.246	5.17e-10 ***
com_dat5\$PctPolicwhite0.06	0.773266	0.267284	2.893	0.003858 **
com_dat5\$PctPolicwhite0.1	1.142129	0.267284	4.273	2.02e-05 ***
com_dat5\$PctPolicwhite0.16	0.225220	0.267284	0.843	0.399545
com_dat5\$PctPolicwhite0.21	0.204384	0.267284	0.765	0.444562
com_dat5\$PctPolicwhite0.23	0.386749	0.267284	1.447	0.148073
com_dat5\$PctPolicwhite0.27	0.183272	0.267284	0.686	0.492996
com_dat5\$PctPolicwhite0.28	1.142129	0.267284	4.273	2.02e-05 ***
com_dat5\$PctPolicwhite0.29	1.142129	0.189055	6.041	1.83e-09 ***
com_dat5\$PctPolicwhite0.3	0.319004	0.189055	1.687	0.091696 *
com_dat5\$PctPolicwhite0.32	0.469487	0.189055	2.483	0.013101 *
com_dat5\$PctPolicwhite0.33	0.416876	0.267284	1.560	0.119003
com_dat5\$PctPolicwhite0.35	1.142129	0.267284	4.273	2.02e-05 ***
com_dat5\$PctPolicwhite0.36	0.625104	0.189055	3.306	0.000962 ***
com_dat5\$PctPolicwhite0.37	0.644411	0.189055	3.409	0.000666 ***
com_dat5\$PctPolicwhite0.4	0.624266	0.189055	3.302	0.000977 ***
com_dat5\$PctPolicwhite0.41	0.253381	0.189055	1.340	0.180323
com_dat5\$PctPolicwhite0.43	1.142129	0.267284	4.273	2.02e-05 ***
com_dat5\$PctPolicwhite0.44	0.758632	0.267284	2.838	0.004583 **
com_dat5\$PctPolicwhite0.46	0.344183	0.133762	2.573	0.010154 *
com_dat5\$PctPolicwhite0.47	0.386749	0.267284	1.447	0.148073
com_dat5\$PctPolicwhite0.48	0.427092	0.189055	2.259	0.023990 *
com_dat5\$PctPolicwhite0.49	0.312560	0.189055	1.653	0.098438 *
com_dat5\$PctPolicwhite0.5	0.051632	0.189055	0.273	0.784802
com_dat5\$PctPolicwhite0.51	0.157262	0.154409	1.018	0.308579
com_dat5\$PctPolicwhite0.52	0.679955	0.119676	5.682	1.54e-08 ***
com_dat5\$PctPolicwhite0.53	0.294693	0.154409	1.909	0.056473 *
com_dat5\$PctPolicwhite0.54	0.562697	0.189055	2.976	0.002953 **
com_dat5\$PctPolicwhite0.55	0.627804	0.189055	3.321	0.000915 ***
com_dat5\$PctPolicwhite0.56	0.589083	0.154409	3.815	0.000140 ***
com_dat5\$PctPolicwhite0.57	0.422901	0.189055	2.237	0.025406 *
com_dat5\$PctPolicwhite0.58	0.321400	0.189055	1.700	0.089286 *
com_dat5\$PctPolicwhite0.59	0.694487	0.133762	5.192	2.30e-07 ***

com_dat5\$PctPolicwhite0.64	0.460628	0.189055	2.436	0.014922 *
com_dat5\$PctPolicwhite0.65	0.580608	0.133762	4.341	1.49e-05 ***
com_dat5\$PctPolicwhite0.66	0.249471	0.133762	1.865	0.062328 .
com_dat5\$PctPolicwhite0.67	0.366584	0.154409	2.374	0.017689 **
com_dat5\$PctPolicwhite0.68	0.438440	0.109281	4.012	6.25e-05 ***
com_dat5\$PctPolicwhite0.69	0.354908	0.089307	3.974	7.33e-05 ***
com_dat5\$PctPolicwhite0.7	0.521952	0.109281	4.776	1.92e-06 ***
com_dat5\$PctPolicwhite0.71	0.555786	0.133762	4.155	3.40e-05 ***
com_dat5\$PctPolicwhite0.72	0.415840	0.080829	5.145	2.95e-07 ***
com_dat5\$PctPolicwhite0.73	0.453893	0.119676	3.793	0.000154 ***
com_dat5\$PctPolicwhite0.74	0.364246	0.154409	2.359	0.018425 *
com_dat5\$PctPolicwhite0.75	0.382048	0.109281	3.496	0.000483 ***
com_dat5\$PctPolicwhite0.76	0.052039	0.101205	0.514	0.607172
com_dat5\$PctPolicwhite0.77	0.258528	0.133762	1.933	0.053414 .
com_dat5\$PctPolicwhite0.78	0.507875	0.101205	5.018	5.69e-07 ***
com_dat5\$PctPolicwhite0.79	0.298295	0.084749	3.520	0.000442 ***
com_dat5\$PctPolicwhite0.8	0.155818	0.119676	1.302	0.193072
com_dat5\$PctPolicwhite0.81	0.188493	0.133762	1.409	0.158948
com_dat5\$PctPolicwhite0.82	0.326375	0.094696	3.447	0.000580 ***
com_dat5\$PctPolicwhite0.83	0.172194	0.109281	1.576	0.115259
com_dat5\$PctPolicwhite0.84	0.337703	0.094696	3.566	0.000371 ***
com_dat5\$PctPolicwhite0.85	0.206256	0.089307	2.310	0.021021 *
com_dat5\$PctPolicwhite0.86	0.275070	0.154409	1.781	0.074998 .
com_dat5\$PctPolicwhite0.87	0.244643	0.094696	2.583	0.009855 **
com_dat5\$PctPolicwhite0.88	0.211178	0.089307	2.365	0.018147 *
com_dat5\$PctPolicwhite0.89	0.241517	0.089307	2.704	0.006905 **
com_dat5\$PctPolicwhite0.9	0.083795	0.119676	0.700	0.483899
com_dat5\$PctPolicwhite0.91	0.281744	0.101205	2.784	0.005424 **
com_dat5\$PctPolicwhite0.92	0.151081	0.080829	1.869	0.061755 .
com_dat5\$PctPolicwhite0.93	0.142387	0.094696	1.504	0.132844
com_dat5\$PctPolicwhite0.94	0.145896	0.101205	1.442	0.149579
com_dat5\$PctPolicwhite0.95	-0.020335	0.189055	-0.108	0.914356
com_dat5\$PctPolicwhite0.96	0.111846	0.109281	1.023	0.306214
com_dat5\$PctPolicwhite0.97	-0.019124	0.080829	-0.237	0.812993
com_dat5\$PctPolicwhite0.98	-0.058808	0.101205	-0.581	0.561254
com_dat5\$PctPolicwhite0.99	-0.029697	0.094696	-0.314	0.753856
com_dat5\$PctPolicwhite1	-0.088982	0.133762	-0.665	0.505987

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.2672 on 1919 degrees of freedom
Multiple R-squared: 0.2327, Adjusted R-squared: 0.2031
F-statistic: 7.862 on 74 and 1919 DF, p-value: < 2.2e-16

White police vs asin(crime)

Analysis of Variance Table

Response: asCrime

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
com_dat5\$PctPolicwhite	74	41.541	0.56137	7.8625	< 2.2e-16 ***
Residuals	1919	137.013	0.07140		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Conclusion

May be conclude that stick with linear model for simplicity since the other models are not improving anything