Fear of Crime: A Racial Perspective

for
Professor Michael Dacey
Mathematical Methods in the Social Sciences, C98

by
Jill L. Fahlgren
June 05, 1989
Fear of crime can reflect the level of social disorder within a community rather than solely the risk of victimization. A study conducted in Houston by the Police Foundation was designed to reduce the fear of crime and improve attitudes toward the police by increasing police visibility and improving police/citizen relationships. The present study utilizes multiple regression analysis to examine the program effects by ethnic group. The result is a significant difference in impact between the white and black populations.
I. INTRODUCTION

Fear of crime reflects the atmosphere of a community. In neighborhoods with a lot of disorder, perceived risk of criminal victimization can outweigh actual risk, inflating the level of fear. According to Pate, Wycoff, et al. (1986),

The pervasive fear of crime is a threat to organized society - it makes citizens suspicious of one another, erodes the sense of community upon which a decent neighborhood life depends, and weakens the confidence of the people in their government. Though the level of fear is often way out of proportion to the actual risk of victimization, it should not for this reason be dismissed as groundless or hysterical.

The police play a key role in minimizing fear of crime. Merely assuring citizens that crime rates are low, minimizing the number of crimes reported to the public or focusing on solving as many crimes and making as many arrests as possible is not enough. Typically, citizens can pinpoint high-risk areas within their neighborhood. Problems arise with the exaggeration of the risks involved and the incorrect prediction of specific crime problems (Lewis and Maxfield, 1980). The Uniform Crime Rates encourage police to forfeit maintenance of order and crime prevention in lieu of solving serious crimes. "Victimless crimes", such as littering or loitering, often receive little attention. To the average citizen, graffiti and gangs are signs that there is no control on the streets: no one cares (Kelling, 1987). Such disorder widens physical and social distances between residents thereby discouraging community cohesion and increasing fear of crime (Brown and Wycoff, 1987).
Actual victimization is overshadowed by the perception of risk which is enhanced by the level of incivility within the neighborhood. Helplessness breeds fear. The mere threat of harm is equally as frightening as victimization itself. The approach of a harmless vagrant can be as traumatic as that of someone who actually is dangerous. Crime statistics are often unknown, disregarded or misinterpreted. Regardless whether crime rates are high or low, the state of the neighborhood is enough to invoke fear in the residents (Wilson and Kelling, 1982).

Attitudes toward the police can effect fear of crime. Greater police visibility creates the impression that there are more officers ready and willing to serve and protect the public. Keeping order within the community not only alleviates some of the fear, but instills a sense of pride for the neighborhood. An indifferent police force encourages an indifferent populace, but a well-respected force encounters a supportive, functional community.

II. THE HOUSTON STUDY

The Police Foundation, in association with the National Institute of Justice, implemented several programs in Houston, Texas and Newark, NJ designed to test "a variety of methods intended to reduce fear, improve the quality of neighborhood life, and increase popular satisfaction with police services" (Pate, Wycoff, et al., 1986). The present study is concerned with one of these programs, a storefront police office, introduced in Houston. This office was designed to improve citizen/police communication through increased availability and accessibility of the officers and several monthly
programs established through the office. The program was based on
the premise that increased police visibility and cooperation would
improve perceptions of the community and reduce fear of crime.

Two communities in the Houston area were chosen for this
program because of their growing, ethnically diverse populations.
Utilizing a quasi-experimental design, residents in one area,
Northline, were designated to serve as the treatment group and
residents of the other, Shady Acres, were chosen as a control group.
The two areas, approximately one square mile in size with
approximately 5,000 residents housed in 2,300 living units, were
matched on several criteria, including ethnicity, housing type and
neighborhood stability. This nonequivalent control group design was
of the form:

\[
\begin{array}{c}
\text{Control: } O_1 & O_2 \\
\text{Treatment: } O_1 & X & O_2 \\
\end{array}
\]

where \(O=\text{Observation}, X=\text{Treatment}\).

Households were randomly chosen from each neighborhood
by address with random (Kish) selection of an adult respondent to be
personally interviewed to determine actual level of victimization,
attitudes toward the community, police, etc. While the control area
remained unchanged, a storefront office was created in Northline.
Nine months after the program was initiated, residents in both
neighborhoods were administered the same survey with questions
added to ascertain recalled program exposure.
The program was conceived and carried out by the officers themselves with no additional funding, so they felt responsible for any success or failure. Personal involvement inspired dedication, so the results reflect actual police behavior. The officers were impressed by the positive reactions they received and by the change in their own attitudes (Pate, Wycoff, et al., 1986).

Table 1
Effects of Storefront Office Program

<table>
<thead>
<tr>
<th>GOALS</th>
<th>Cross-Sectional</th>
<th>Panel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce Perceived Area Social Disorder</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduce Fear of Personal Victimization</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Reduce Worry About Property Crime</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Reduce Perceived Area Personal Crime</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduce Perceived Area Property Crime</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Improve Evaluation of Police</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase Satisfaction With Area</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

X = desired goal achieved; significant at .05 level


The results of the Police Foundation's efforts are shown in Table 1. The program was successful in several areas including reduction in fear and perceived social disorder. Increased familiarity between residents and police is a step toward an awareness of police performance, what is expected/needed from the police, and a sense of
pride/concern for the community and the residents. Significant changes cannot be proven since attitudes of the police officers were not measured, but participation in the program appears to have had a positive effect. According to Pate, Wycoff, et al., the officers responded to the program with pride and excitement. Why was there no significant improvement in the residents' evaluations of the police? I will examine residents attitudes toward the police with regard to ethnicity* to determine the existence of significant effects on subgroups of the population which are not apparent when regarding the sample as a whole.

**III. HYPOTHESIS**

The Police Foundation's study, based on the premise that more police contact is desirable, was conducted in the south. Police discrimination, if it exists, could undermine efforts to improve attitudes toward police. Whether intentional or not, failure to establish contact with each ethnic group equally, could result in differential program effects. In their original analysis, Pate, Wycoff, et al. indicate that the black population benefitted least from the program. The purpose of this paper is to test the following:

- **H₀**: There is no (statistically significant) difference in the effects of the program among ethnic groups,

- **H₁**: The program yielded more positive results for the white population than for the blacks or hispanics.

*Ethnicity, here, refers to black, white, and hispanic. As noted in section IV., no other ethnic group was represented in the study by a large enough sample to demonstrate significant results.*
IV. METHOD

In accordance with Pate, Wycoff, et al. in Reducing Fear of Crime in Houston and Newark: A Summary Report (1986), "to provide an indication of the general levels and changes demonstrated by the various survey measures in both the program and comparison areas, simple comparisons between certain means, percentages, and distributions at Waves 1 and 2" are examined with the use of multiple regression analysis, t-tests and F-tests. Only results with a statistical significance level of .05 or less, those that could be expected to occur by chance no more than 5% of the time, are considered in this paper to be conclusive.

<table>
<thead>
<tr>
<th></th>
<th>Treatment Area</th>
<th>Control Area</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Complete Interview</td>
<td>Percent</td>
</tr>
<tr>
<td>Wave 1</td>
<td>406</td>
<td>77</td>
</tr>
<tr>
<td>Wave 2</td>
<td>460</td>
<td>81</td>
</tr>
</tbody>
</table>

Note: The response rate percentage subtracts vacancies and ineligible respondents.


Table 2 exhibits the interview response rates of the entire sample. All ethnic groups other than black, white and hispanic are omitted from the present study as none is represented by enough cases to allow conclusive analysis. Sample size utilized for the
present study is further reduced by the number of missing cases resulting from no response to relevant survey questions.

Regressions are run using the variables listed in Table 3. POL\textsubscript{1} and POL\textsubscript{2} are measurements of police evaluation at Wave 1 and Wave 2 respectively. Each is calculated as follows:

- the sum of the responses to questions Q50-52, Q57-59 (see Appendix, Table 1), each of which has a possible answer of 1 to 4 or 1 to 5 with 1=most negative response

- since failure to answer any one question results in a missing case and severely limits the number of valid cases, the initial sum is divided by the number of responses to create an average score - only those cases with less than three responses are dropped.

The similarity amongst the questions - all are regarding police performance and are measured on similar scales - facilitates the creation of a new variable.

Table 3
Variable List

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>POL\textsubscript{1}</td>
<td>Evaluation of police at Wave 1</td>
</tr>
<tr>
<td>POL\textsubscript{2}</td>
<td>Evaluation of police at Wave 2</td>
</tr>
<tr>
<td>T</td>
<td>Treatment effect</td>
</tr>
<tr>
<td>B</td>
<td>Effect of being black</td>
</tr>
<tr>
<td>W</td>
<td>Effect of being white</td>
</tr>
<tr>
<td>L</td>
<td>Effect of being hispanic</td>
</tr>
<tr>
<td>BT</td>
<td>Interaction effect of B*T</td>
</tr>
<tr>
<td>WT</td>
<td>Interaction effect of W*T</td>
</tr>
<tr>
<td>LT</td>
<td>Interaction effect of L*T</td>
</tr>
<tr>
<td>AGE</td>
<td>Age in years</td>
</tr>
<tr>
<td>SEX</td>
<td>Gender</td>
</tr>
<tr>
<td>RENT</td>
<td>Rent vs. own living space</td>
</tr>
<tr>
<td>EDUC</td>
<td>Highest year of school completed</td>
</tr>
</tbody>
</table>

The calculation of POL\textsubscript{2} as an average measure creates a response range of 1.00 to 5.00 (see Appendix, Table 2) which more
closely resembles an interval scale than does a single variable with possible scores of 1, 2, ..., 5. With skewness of -.571, POL2 is normally distributed and can be used as the independent variable in multiple regression analysis. Valid response rates to POL2 are presented in Table 4.

Table 4
Breakdown of POL2 by Ethnic Group

<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th>Control Area</th>
<th>Percent</th>
<th>Treat Area</th>
<th>Percent</th>
<th>Total</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>43</td>
<td>24.0</td>
<td>42</td>
<td>17.8</td>
<td>85</td>
<td>20.5</td>
</tr>
<tr>
<td>White</td>
<td>99</td>
<td>55.3</td>
<td>160</td>
<td>67.8</td>
<td>259</td>
<td>62.4</td>
</tr>
<tr>
<td>Hispanic</td>
<td>37</td>
<td>20.7</td>
<td>34</td>
<td>14.4</td>
<td>71</td>
<td>17.1</td>
</tr>
<tr>
<td>Total</td>
<td>179</td>
<td>100</td>
<td>236</td>
<td>100</td>
<td>415</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: Only six respondents of any other ethnic group provided valid POL2 scores

The variable T is a dummy variable representing the treatment effect: T=1 for the treatment group, and T=0 for the control group. Similarly, B, W, and L represent each of the three ethnic groups (e.g. B=1 for the black population, B=0 for everyone else). BT, LT, and WT are the interaction variables designed to identify the effect of being, in the case of BT, black and in the treatment group. Since both ethnicity and treatment are dummy variables, the only possible values are one or zero. For example, BT=1 for the black population in the treatment group, and BT=0 for everyone else.
The other four demographic variables are included to control for possible extraneous effects not related to ethnicity. Women, sometimes considered more prone to victimization, may be more likely to seek police aid or information than men. SEX (=1 for female, =0 for male) is included to detect resulting gender related attitudinal differences. Variances possibly due to the impermanence and/or lack of community integration from renting versus owning a home are considered with the inclusion of RENT (=1 for a renter, =0 for a home owner).

Aging can sometimes be accompanied by increased fear of victimization and perhaps a sense of helplessness. Corresponding attitudinal variance can be controlled for by the inclusion of AGE. Seeking higher levels of education could indicate a desire for knowledge and possibly greater willingness to utilize the storefront police office than those who forfeit school, hence the variable EDUC.

V. PRELIMINARY TEST

Table 5
Attitudinal Means at Wave 1 and Wave 2

<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th>Control Area</th>
<th>Treatment Area</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Wave 1</td>
<td>Wave 2</td>
</tr>
<tr>
<td>Black</td>
<td>3.4</td>
<td>3.5</td>
</tr>
<tr>
<td>White</td>
<td>3.3</td>
<td>3.4</td>
</tr>
<tr>
<td>Hispanic</td>
<td>3.0</td>
<td>3.2</td>
</tr>
<tr>
<td>Total</td>
<td>3.3</td>
<td>3.4</td>
</tr>
</tbody>
</table>
A comparison of mean attitudinal measures at Wave 1 and Wave 2 for both treatment and control groups is shown in Table 5. T-tests will show whether differential improvement between treatment and control respondents can be attributed to program effect.

Regression analysis reveals:

\[
\begin{align*}
P_{OL2} &= 2.26 + .345P_{OL1} + .101T \\
\text{SE} &= (.050) (.066) \\
\text{SIG t} &= (.0000) (.1265) \\
R^2 &= .120 \quad \text{SE} = .613.
\end{align*}
\]

As indicated in Table 1, the treatment has no significant impact on police evaluation. Controlling for ethnicity,

\[
\begin{align*}
P_{OL2} &= 2.29 + .335P_{OL1} + .174T + .009B - .413BT \\
\text{SE} &= (.049) (.073) (.120) (.160) \\
\text{SIG t} &= (.0000) (.0167) (.9406) (.0101) \\
R^2 &= .154 \quad \text{SE} = .603,
\end{align*}
\]

\[
\begin{align*}
P_{OL2} &= 2.23 + .343P_{OL1} - .121T + .070W + .319WT \\
\text{SE} &= (.048) (.103) (.101) (.132) \\
\text{SIG t} &= (.0000) (.2406) (.4891) (.0161) \\
R^2 &= .168 \quad \text{SE} = .598,
\end{align*}
\]

\[
\begin{align*}
P_{OL2} &= 2.30 + .341P_{OL1} + .098T - .135L - .045LT \\
\text{SE} &= (.050) (.072) (.130) (.177) \\
\text{SIG t} &= (.0000) (.1752) (.3014) (.8018) \\
R^2 &= .128 \quad \text{SE} = .612.
\end{align*}
\]

With the addition of B and BT in (2), T does become significant. This impact on blacks appears to be negative as BT has a significant
negative coefficient. Positive treatment effect is noted in equation (3), as the coefficient of WT is significant. None of the variables seems to be a good predictor for the hispanic population.

Significant program effects on subgroups of the population are seemingly counteractive and are masqueraded by the analysis of the entire sample.

**VI. PRIMARY TEST**

Further testing of $H_0$ and $H_1$ to determine the significance of ethnic variance in treatment response is broken down into 5 steps.

A. Test for significance of demographic variables,

B. Test for significant differences in effects between whites and one or both minority group,

C. If differences are apparent, test whether they occur between white and black, hispanic or both,

D. Test for significant differences in effects between minority groups,

E. Test for significant differences between average attitudes toward police between the three ethnic groups.

**STEP A**

The four demographic variables, AGE, SEX, RENT and EDUC, are tested for significance of effect on $POL_2$,

$H_{0a}$: None of the demographic variables is a significant predictor of $POL_2$,

$H_{1a}$: At least one of the four demographic variables is a significant predictor of $POL_2$. 
An F-value is then computed from:

\[
\text{POL}_2 = 1.80 + .308\text{POL}_1 + .250T - .003B - .004L - .446BT - .213LT + .007\text{AGE} - .008\text{SEX} + .006\text{RENT} + .057\text{EDUC}
\]

\[
\begin{align*}
\text{SE} & = (.051) (.084) (.124) (.141) (.164) (.181) \\
\text{SIG t} & = (.0000) (.0032) (.9789) (.9784) (.0068) (.2380)
\end{align*}
\]

\[
R^2 = .197 \quad \text{SE} = .593 \quad N = 365
\]

and a similar regression omitting the demographic variables.

\[
F = \frac{(.197 - .173) / (10 - 6)}{(1 - .197) / (365 - 10 - 1)}
\]

\[
= 2.645
\]

With \( F_{4, \infty}, .01 < p \text{ value} < .05 \), \( H_{0a} \) cannot be accepted and the demographic variables, as a group, appear to be significant.

**STEP B**

The following hypotheses are tested to determine if there are differential effects between whites and the minority groups:

\( H_{0b} \): There is no difference in response to \( T \) among any of the ethnic groups,

\( H_{1b} \): There is a difference in response to \( T \) between the white population and either black, hispanic or both.

Rewrite (5) as the general equation:

\[
\text{POL}_2 = \beta_0 + \beta_1B + \beta_2L + \beta_3T + \beta_4BT + \beta_5LT + \beta_6\text{POL}_1 + \beta_XX,
\]

where \( \beta_XX = \beta_7\text{AGE} + \beta_8\text{SEX} + \beta_9\text{RENT} + \beta_{10}\text{EDUC} \)
or,

$$\text{POL}_2 = \beta_0 + \beta_1 B + \beta_2 L + (\beta_3 + \beta_4 B + \beta_5 L)^\ast T + \beta_6 \text{POL}_1 + \beta_7 X. \quad (7)$$

Since $B=0$ and $L=0$ for the whites, any differential treatment effects will be evident in $\beta_4$ and $\beta_5$. Restate $H_{0b}$ as $\beta_4 = \beta_5 = 0$. Equation (5) and a regression excluding $BT$ and $LT$ yield

\[
F = \frac{(0.197 - 0.179) / (10 - 8)}{(1 - 0.197) / (365 - 10 - 1)} = 3.97.
\]

$F_{2,\infty}$ indicates $.01 < p \text{ value} < .05$. $H_{0b}$ cannot be accepted.

**STEP C**

To determine whether the difference in treatment effect detected in Step B occurs between blacks and whites, hispanics and whites, or both, the following hypotheses are tested:

- $H_{0c}$: There is no difference in program effects between blacks and whites,
- $H_{1c}$: There is a difference in program effects between blacks and whites,*
- $H_{0d}$: There is no difference in program effects between hispanics and whites,
- $H_{1d}$: There is a difference in program effects between hispanics and whites.*

* It may be noted that the program effects would be expected to be more positive for the white population.
Substituting in the values of $B$, $W$ and $L$ for each ethnic group, (7) can be rewritten as

$$\text{POL}_2 = (B_0 + B_1) + (B_3 + B_4)T + B_6 \text{POL}_1 + B_\times X$$  \hspace{1cm} (8)

for the black population,

$$\text{POL}_2 = (B_0 + B_2) + (B_3 + B_5)T + B_6 \text{POL}_1 + B_\times X$$  \hspace{1cm} (9)

for the hispanics, and

$$\text{POL}_2 = B_0 + B_3 T + B_6 \text{POL}_1 + B_\times X$$  \hspace{1cm} (10)

for the whites.

Significant variance in program effects attributable to ethnicity appear as a significant difference in the coefficients of $T$. $H_{0c}$ can therefore be rewritten as $\beta_4=0$, and $H_{0d}$ as $\beta_5=0$.

From equation (5),

$$\beta_4 = -.446 \hspace{1cm} t = -2.72 \hspace{1cm} \text{SIG} t = .0068$$

and

$$\beta_5 = -.213 \hspace{1cm} t = -1.18 \hspace{1cm} \text{SIG} t = .2380.$$

$H_{0c}$ is rejected. $H_{0d}$ cannot be rejected, indicating a significant difference in response to the storefront police office program between whites and blacks, but not between whites and hispanics.

**STEP D**

To ascertain whether differential results occur between the two minority groups, the following hypotheses are tested:

$H_{0e}$: There is no difference in program effects between hispanics and blacks,

$H_{1e}$: There is a difference in program effects between hispanics and blacks.
This test is similar to those in Step C with a regression, similar to (5), including $W$ and $WT$ instead of $B$ and $BT$. $H_{0e}$ is also rewritten as $B_5=0$. Multiple regression yields:

$$
\beta_5 = .223 \quad t = 1.04 \quad \text{SIG} \ t = .2972.
$$

$H_{0e}$ cannot be rejected. There seems to be no significant difference in response to the storefront office program between the black and hispanic populations.

**STEP E**

Attitudinal differences at the initiation of the program are not tested by

$H_{0f}$: There is no difference in average attitudes toward police among any of the ethnic groups,

$H_{1f}$: There is a difference in average attitudes toward police between whites and blacks, hispanics, or both.

Recalling equations (8), (9), and (10), significant differences in the constant terms denote attitudinal differences among ethnic groups not associated with treatment effects. $H_{0f}$ is restated as $\beta_1 = \beta_2 = 0$. From equation (5) and a variation which omits the $B$ and $L$ variables,

$$
F = \frac{(.197 - .197) / (10 - 8)}{(1 - .197) / (365 - 10 - 1)}
= 0.
$$

No significant difference in average attitudes toward police between the white and minority populations is apparent and $H_{0f}$ is not rejected.
A t-test to determine differential attitudes between the black and hispanic populations, similar to the test of $H_{0e}$, reveals

$$\beta_2 = -.007 \quad t = -.043 \quad \text{SIG } t = .9660.$$  

Again, the difference between the black and hispanic populations is not significant.

VII. RESULTS

Analysis of program effects by ethnic group reveals significantly more positive results for whites than blacks. Negative coefficients of BT and LT seem to reflect a negative impact on the blacks and hispanics. Table 4 reveals that minority groups exposed to the treatment improved less than their control area counterparts, nevertheless, the mean scores did not decrease. The minorities reaped fewer benefits from the program, but not adverse effects. Figure 1 exhibits the change in mean scores from Wave 1 to Wave 2.

![Bar chart showing change in average attitudes toward police from Wave 1 to Wave 2.](image)

**FIGURE 1**

The change in average attitudes toward police from Wave 1 to Wave 2.
No significant difference in attitudes toward the police were detected among the three subgroups. At Wave 1, attitudes among the entire sample population were not significantly different, but by Wave 2, attitudes of the white population had improved enough to be significantly different than those of the black population. Apparently, the program failed to reach the entire community equally.

According to Figure 2, which exhibits the change in mean scores of the entire sample, the treatment group improved more than the controls, but the black and hispanic populations each experienced greater improvement in the control areas. The masking of subgroup impact by the entire sample is apparent.

![Figure 2](image)

**Figure 2**
Mean attitude change from Wave 1 to Wave 2 of entire group
Note: T=Treatment group, C=Control group

**VIII. CONCLUSIONS**

There is not enough evidence to accept $H_0$. The storefront office program on the average improved the white population's
attitudes toward the police more than the black and hispanic populations.*

Why are there differential effects? While officers did respond to calls for help, organize monthly programs and patrol the neighborhood as part of their duties, the main focus of the storefront office was insuring police availability and accessibility. Officers were required to remain accessible and approachable during all working hours to provide help and information. Unlike footpatrol, for example, this program relied on citizen-initiated participation, which could only occur if citizens were aware of program.

Those who recalled program exposure, as a group, exhibited greater improvement in police evaluations (Pate, Wycoff, et al., 1986), as only those aware of the program could participate. Self-selected subgroups are typically not unbiased: it is not a random sample of residents who are willing to utilize the program of their own accord. Also, knowledge of the program could possibly encourage respondents to report more positive answers than they truly believe. Differences in the percentage of respondents from each group who were aware of the program could result in differential treatment effect.

Variation in program awareness could be the result of lack of cohesion within the community or failure of residents to communicate due to language or social barriers. Level of education attained could effect the likelihood of having read about the office,

* Testing indicated more positive results for the white population than for either minority group, although only the difference between whites and blacks was statistically significant.
and its location could facilitate knowledge of, and use of, the program for some. Considering renters to be a less permanent part of the community, their awareness of the program could be lower than owners because if they feel distanced from the neighborhood. Increased visibility of police could potentially increase fear and suspicion among this group, particularly with limited knowledge about the neighborhood itself. Even with knowledge of the program, renters could be less willing to participate if they plan to live there temporarily.

The control group may be an imperfect indicator of the status quo. Respondents in the control group may have been aware of the program through newspaper articles, word of mouth, etc. Comparison of attitudinal changes, in this case, would not accurately reflect treatment effects. Also, if the treatment and control groups are unevenly matched on significant factors the results could be biased.

From the regression analysis above, age seems to have a significant impact on predicting attitudes toward the police: as age increases, attitudes improve. An unequal distribution of respondents by age could result in attitudinal variation.

IX. SUGGESTIONS FOR FURTHER STUDY

The nature of the treatment area warrants further study. Specifically, the percentage of renters in each ethnic group should be examined. Perhaps this impermanent way of life hinders community communication, particularly for minorities. Desire to utilize the storefront program (which requires citizen initiation) may be
diminished by the perception of distance from or lack of cohesion with the community.

The location of the office could also be significant. Those living closest to the office could be predicted to be more aware of the program and more willing to utilize the office. Whether the community is ethnically mixed or whether certain areas are black, white, etc. could explain why some people remained unaware of the program if the boundaries are difficult to penetrate. Fewer minorities would probably learn of the office if it were located in the center of a predominantly white area of the neighborhood.

The ethnicity of the police officers could possibly provide another explanation for variable effects. An all white police force may be more approachable to a white citizen than to a black or hispanic citizen. Similarly, the ethnicity of the interviewers could possibly have had some effect on what respondents were willing to reveal. Perhaps if the interviewer had expectations of how a respondent of a certain ethnic group would respond, this notion could somehow affect the individual's answers.

Determining whether the treatment area was in the process of transition from, for example, white to black could further explain ethnic differences in response. As already noted, persons entering the neighborhood may be unfamiliar with it, and hence suspicious. While the new residents may cause fear and suspicion in the old, the visibility and cooperation of the police through the new program could possibly ease their minds and improve their attitudes. After all, the police appear to be responding to increased need.
These findings indicate that the storefront office program was in part successful in improving citizens' attitudes toward the police. Since initial attitudes do not appear to differ across the sample, the program should be reevaluated in an attempt to benefit the entire population.
APPENDIX

Table 1
Questions used as basis for POL$_1$, POL$_2$

Q50. Now, let's talk about the police in this area. How good a job do you think they are doing to prevent crime? Would you say they are doing a...

- very good job, ............... 5
- good job, ....................... 4
- fair job, .......................... 3
- poor job, or ..................... 2
- very poor job? .................. 1

Q52. How good a job do you think the police in this area are doing in helping people out after they have been victims of crime? Would you say they are doing a...

- very good job, ............... 5
- good job, ....................... 4
- fair job, .......................... 3
- poor job, or ..................... 2
- very poor job? .................. 1

Q53. How good a job are the police in this area doing in keeping order on the streets and sidewalks. Would you say they are doing a...

- very good job, ............... 5
- good job, ....................... 4
- fair job, .......................... 3
- poor job, or ..................... 2
- very poor job? .................. 1

Q57. In general, how polite are the police in this area when dealing with people? Are they...

- very polite, ..................... 4
- somewhat polite, ................ 3
- somewhat impolite, or ........... 2
- very impolite? .................. 1
Q58. In general, how helpful are the police in this area when dealing with people around here? Are they...

   very helpful, .........................4
   somewhat helpful, ....................3
   not very helpful, or ..................2
   not helpful at all? ....................1

Q59. In general, how fair are the police in this area in dealing with people around here? Are they...

   very fair, .............................4
   somewhat fair, .........................3
   somewhat unfair, or ..................2
   very unfair? ...........................1

Note: All unanswered questions and "don't know" responses have been coded as missing.

Table 2

Frequencies of Attitudinal Measures

<table>
<thead>
<tr>
<th>POL1</th>
<th>VALID</th>
<th>CUM</th>
<th>POL2</th>
<th>VALID</th>
<th>CUM</th>
</tr>
</thead>
<tbody>
<tr>
<td>VALUE</td>
<td>FREQUENCY</td>
<td>PERCENT</td>
<td>PERCENT</td>
<td>VALUE</td>
<td>FREQUENCY</td>
</tr>
<tr>
<td>1.00</td>
<td>4</td>
<td>4.00</td>
<td>4.00</td>
<td>1.50</td>
<td>2</td>
</tr>
<tr>
<td>1.17</td>
<td>1</td>
<td>0.8</td>
<td>0.8</td>
<td>1.67</td>
<td>4</td>
</tr>
<tr>
<td>1.33</td>
<td>1</td>
<td>0.8</td>
<td>0.8</td>
<td>1.60</td>
<td>2</td>
</tr>
<tr>
<td>1.50</td>
<td>2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.83</td>
<td>3</td>
</tr>
<tr>
<td>1.67</td>
<td>4</td>
<td>1.0</td>
<td>1.0</td>
<td>1.90</td>
<td>1</td>
</tr>
<tr>
<td>1.83</td>
<td>3</td>
<td>0.7</td>
<td>0.7</td>
<td>1.93</td>
<td>5</td>
</tr>
<tr>
<td>2.00</td>
<td>7</td>
<td>1.7</td>
<td>1.7</td>
<td>2.00</td>
<td>5</td>
</tr>
<tr>
<td>2.17</td>
<td>6</td>
<td>1.4</td>
<td>1.4</td>
<td>2.20</td>
<td>2</td>
</tr>
<tr>
<td>2.25</td>
<td>3</td>
<td>0.7</td>
<td>0.7</td>
<td>2.29</td>
<td>1</td>
</tr>
<tr>
<td>2.33</td>
<td>6</td>
<td>1.4</td>
<td>1.4</td>
<td>2.33</td>
<td>4</td>
</tr>
<tr>
<td>2.40</td>
<td>5</td>
<td>1.2</td>
<td>1.2</td>
<td>2.50</td>
<td>11</td>
</tr>
<tr>
<td>2.50</td>
<td>13</td>
<td>3.2</td>
<td>3.2</td>
<td>2.60</td>
<td>7</td>
</tr>
<tr>
<td>2.60</td>
<td>7</td>
<td>1.7</td>
<td>1.7</td>
<td>2.75</td>
<td>2</td>
</tr>
<tr>
<td>2.75</td>
<td>6</td>
<td>1.4</td>
<td>1.4</td>
<td>2.80</td>
<td>7</td>
</tr>
<tr>
<td>2.80</td>
<td>7</td>
<td>1.7</td>
<td>1.7</td>
<td>2.85</td>
<td>12</td>
</tr>
<tr>
<td>3.00</td>
<td>46</td>
<td>11.0</td>
<td>11.0</td>
<td>3.00</td>
<td>50</td>
</tr>
<tr>
<td>3.17</td>
<td>22</td>
<td>5.2</td>
<td>5.2</td>
<td>3.17</td>
<td>20</td>
</tr>
<tr>
<td>3.20</td>
<td>5</td>
<td>1.2</td>
<td>1.2</td>
<td>3.20</td>
<td>4</td>
</tr>
<tr>
<td>3.25</td>
<td>3</td>
<td>0.7</td>
<td>0.7</td>
<td>3.25</td>
<td>2</td>
</tr>
<tr>
<td>3.33</td>
<td>28</td>
<td>6.7</td>
<td>6.7</td>
<td>3.33</td>
<td>27</td>
</tr>
<tr>
<td>3.40</td>
<td>9</td>
<td>2.1</td>
<td>2.1</td>
<td>3.40</td>
<td>6</td>
</tr>
<tr>
<td>3.50</td>
<td>42</td>
<td>10.6</td>
<td>10.6</td>
<td>3.50</td>
<td>42</td>
</tr>
<tr>
<td>3.60</td>
<td>7</td>
<td>1.7</td>
<td>1.7</td>
<td>3.60</td>
<td>9</td>
</tr>
<tr>
<td>3.67</td>
<td>31</td>
<td>7.6</td>
<td>7.6</td>
<td>3.67</td>
<td>31</td>
</tr>
<tr>
<td>3.75</td>
<td>4</td>
<td>1.0</td>
<td>1.0</td>
<td>3.75</td>
<td>4</td>
</tr>
<tr>
<td>3.80</td>
<td>4</td>
<td>1.0</td>
<td>1.0</td>
<td>3.80</td>
<td>24</td>
</tr>
<tr>
<td>3.92</td>
<td>13</td>
<td>3.3</td>
<td>3.3</td>
<td>3.92</td>
<td>43</td>
</tr>
<tr>
<td>4.00</td>
<td>42</td>
<td>10.4</td>
<td>10.4</td>
<td>4.00</td>
<td>43</td>
</tr>
<tr>
<td>4.17</td>
<td>5</td>
<td>1.2</td>
<td>1.2</td>
<td>4.17</td>
<td>12</td>
</tr>
<tr>
<td>4.20</td>
<td>3</td>
<td>0.7</td>
<td>0.7</td>
<td>4.20</td>
<td>2</td>
</tr>
<tr>
<td>4.25</td>
<td>1</td>
<td>0.2</td>
<td>0.2</td>
<td>4.25</td>
<td>5</td>
</tr>
<tr>
<td>4.33</td>
<td>6</td>
<td>1.4</td>
<td>1.4</td>
<td>4.33</td>
<td>19</td>
</tr>
<tr>
<td>4.34</td>
<td>2</td>
<td>0.5</td>
<td>0.5</td>
<td>4.34</td>
<td>3</td>
</tr>
<tr>
<td>4.40</td>
<td>2</td>
<td>0.5</td>
<td>0.5</td>
<td>4.40</td>
<td>20</td>
</tr>
<tr>
<td>4.50</td>
<td>7</td>
<td>1.7</td>
<td>1.7</td>
<td>4.50</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>36</td>
<td>8.6</td>
<td>8.6</td>
<td></td>
<td>25</td>
</tr>
</tbody>
</table>

TOTAL 420 100.0 100.0

AN 3.245 STD ERR .033 MEDIAN 3.333 MEAN 3.443 STD ERR .033 MEDIAN 3.500
3E 3.000 STD DEV .649 VARIANCE .421 MODE .433 STD DEV .631 VARIANCE .424
3TOS .231 S E KURT 1.495 SKEWNESS -.535 KURTOSIS -.168 S E KURT 1.495 SKEWNESS -.571
3SKEW .125 RANGE .3500 MINIMUM 1.000 S E KSW 1257 RANGE .3500 MINIMUM 1.500
3INUM 4.500 SUM 1246.217 MAXIMUM 12.000 SUM 1354.603

3D CASES 384 MISSING CASES 36 VALID CASES 399 MISSING CASES 29
Bibliography


