URBAN COMMUNITY CHARACTERISTICS AND RATES OF VIOLENCE IN ISRAEL

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The purpose of this article is to examine the relation between violence rate and socio-economic and demographic variables in Israeli cities. All socio-economic and demographic variables except for population size are significantly correlated with violence rate. When a multivariate regression analysis was performed, these variables failed to attain statistical significance. The addition of the in-migration variable improved our prediction by 15 percent. In those communities where in-migration is low, and living conditions unsatisfactory, violence as an outlet for feelings of frustration is one possible alternative.

INTRODUCTION

The ecology of crime in general and of violent crime in particular has become a central issue in criminology in recent decades. Urban crime characteristics have been the subject of numerous theories and studies (Shaw and McKay, 1969; Park, 1952; Burgess, 1928; Newman, 1979:78; Gastil, 1971; Loftin and Hill, 1974; Messner, 1983a).

Two main trends are evident in studies which attempt to account for rates of violence in society. The first, a more traditional approach, invokes the socio-economic hypothesis. Classic studies (Shaw and McKay, 1969) have identified a relationship between the "urban crisis", in one form or another – crowded inner city slums, rundown industrial areas, shifting population in these areas, lack of recreational facilities – and many forms of crime and juvenile delinquency. In the suburbs the violence rate is considerably lower than in large cities. It appears that social areas within cities and the socio-economic groups they represent are associated with violent crime. Researchers in different countries (Clinard, 1964; Clinard and Abbott, 1973) seem to concur that violent crime is often an activity of the lower class (Dunn, 1976; Savalastoga, 1956; Verkko, 1951; McClintock, 1961).

The second line of explanation is essentially a cultural argument. The trend is reflected in two studies by Messner (1983a; 1983b). Here, when the effects of region and percentage of blacks were controlled, the explanatory power of the economic variables was drastically reduced or, in other words, the standard coefficient (Beta) of

the economic variables became very low or not significant. The region and the percentage of blacks are considered by Messner to be cultural variables and to have greater explanatory power. Studies conducted in Israel have also indicated that cultural variables are strongly related to crime rates (Shoham et al., 1966; Rahav, 1980). Among the cultural approaches, the theory of the subculture of violence (Wolfgang & Ferracuti, 1967) proposes that once an erosion of legitimate norms occurs, norms of violence become prevalent, mostly against a background of low SES and ethnicity. In those pockets of society in which the subculture of violence exists, there is a wide repertoire of violent responses which are normatively supported and socially accepted.

Our contention is that: (a) when communities are analyzed and group data are used, the explanation must remain on the same level. When we endeavor to account for crime rates, we cannot deal with the question of who commits the offense. All we can do is to identify the related collective characteristics. To state that poverty is associated with violence is not to say that poor people are the offenders (this question ought to be explored in a micro-analysis), nor can we say that an association between percentage of blacks and violent crime rates implies that blacks are more violent than whites. (b) Economic characteristics as well as the so-called cultural variables are in effect indicators of social homogeneity or heterogeneity. Messner's (1982) findings that economic variables have little significance after the percentage of blacks is added to the regression equation might be due to an intercorrelation between the independent variables, rather than to the independent effect of "culture". Convincing as Messner's (1984) "unexpected findings" may be, the relevance of economic variables cannot be ruled out.

We differ from Messner's interpretation of the variable percentage of blacks. Whereas he considers the ethnic variable to indicate culture, the size of ethnic groups can be seen as an indication of the societal ethnic composition. However, if one chooses a more conservative definition, it can be treated as a demographic variable. Thus, since we know that an intercorrelation exists between the independent variables, we would expect to find also correlations between violent crime rate and both socio-economic and demographic variables.

Israel constitutes a social milieu in which dimensions of pluralism are to be found not just on the socio-economic plane but also along ethnic and cultural lines. Israeli society is an ethnic mixture of several generations of immigrants from over 80 countries, which is traditionally divided into Ashkenazi and Sephardi Jews. The former are immigrants who were brought up in western cultures; the latter are mostly immigrants from Moslem countries in North Africa, and the Middle and Near East. The Sephardi community comprises a little more than 50 percent of the total Jewish population. If Israeli society is perceived as a plurality of social groups, the effect of the ethnic composition on the level of violence is a question of major importance.[1]

This study, the first of its kind in Israel, examines the impact of socio-economic variables on rates of violence in different communities, and enquires whether the introduction of another variable – ethnic composition – contributes further to an explanation of the phenomenon.

DESIGN AND METHODS

The study's sample consists of all Israeli towns and cities with over 5,000 inhabitants (N=61). The data fall into two general categories: (a) socio-economic and demographic variables and (b) official police reports of violent crimes for 1983. The data were drawn from two principal sources: the central data file of the Israeli police,[2] and a Social Profile of Cities and Towns in Israel (Berman, 1979).

VARIABLES

Violent crime rates. This variable combines the crimes of homicide, attempted homicide, manslaughter, rape, aggravated assault and kidnapping in a single rate per 100,000 for each community.

Percentage with low education. The percentage of people aged 14 and above with 0-8 years of formal education in each community.

Size of population. The population of each of the 61 communities was obtained from the Israel Bureau of Statistics, which supplies information on settlements with population of over 5,000. Our analysis was confined to those communities in order to avoid the possibility of missing data in the case of smaller towns.

Percentage of large families. The percentage of families with four children or more in each community.

Percentage of welfare recipients. The percentage of families on welfare in each community.

Ethnic composition. A scale ranging from +50 to –50 represents the ethnic composition. A community that scores +50 is completely Ashkenazi while a –50 score represents a community composed exclusively of Sephardis. The zero point represents a community that is half Ashkenazi and half Sephardi.

FINDINGS

The zero order correlations between the dependent variable – violent crime rate – and the independent variables are presented in Table 1. One should note the higher intercorrelations that exist between percentage of large families, percentage of welfare recipients, and percentage of lower education, all indicative of social status.

When a multivariate regression analysis was performed (see Table 2a) none of the independent variables used in the equation attained statistical significance, and the regression yielded an unexpectedly low coefficient (R^2=.26).

In accordance with the alternative hypothesis, the variable of ethnic composition was added to the equation. As Table 2b shows, no improvement occurred with that addition (R^2=.26). Clearly our independent variables are deficient in their predictive power and a further search is needed. Apparently, in Israel, adding ethnic composition does not improve the ability to predict violent crime rates.

TABLE 1

Means, Standard Deviations and Zero Order Correlations For Rate of Violent Crime and Socio-economic Variables for 61 Towns and Cities.

	1	2	3	4	5	6	7	8	$\bar{X}$	S.D.
Violent crime	1.00								305.1	167.9
Population size	−.16	1.00							56864	72367
Percentage of large families	**.48	−.13	1.00						25.8	13.1
Percentage of welfare recipients	**.35	−.24	.75	1.00					19.5	14.0
Percentage with low education	*.35	−.08	.61	.60	1.0				52.1	11.5
Ethnic composition	**−.37	.26	−.85	−.69	−.80	1.00			13.0	20.2
Out-migration	.18	−.13	.05	.15	.06	.05	1.00		37.9	14.1
In-migration	−.35	−.04	−.25	−.30	−.10	.08	−.37	1.00	35.4	17.8

** $p < .01$
* $p < .05$

As hypothesized, all the socio-economic and demographic variables except for population size are significantly correlated with the violence rate.

We hypothesized that "migration", a variable representing the movement of population into or away from a community, would indicate a community's attractiveness or lack of attraction (approach-avoidance conflict). This variable was measured by the actual number of people moving in and out in each community. A high positive correlation was expected between violent crime rate and out-migration, and a negative correlation with in-migration.[3] Surprisingly, no significant correlation with out-migration was found (see Table 1). However, we did find a significant negative correlation ($r=-.35$) with in-migration. The latter was introduced in a new regression analysis (Table 3).

The partial net effect of in-migration is strong (standardized coefficient β −.42) whereas all other independent variables failed to attain a significant effect on the violent crime rate. Percentage of variance explained improved from .26 to .41 percent.

Since our data do not permit any valid predictions as to violent crime rates, and since only in-migration (in a multiple regression and not as a single variable) has some statistical explanatory power, we were led to inquire whether communities with high or low rates of violence can be differentiated along the independent variables. In other words, does a community with a high violence rate have a different profile from a community with a low rate? It is plausible that a set of variables which account for a relatively small portion of the community violence rate in the regression analysis may nevertheless prove to differentiate well in a discriminant analysis between communities with high and low rates of violence. For instance, though ethnicity cannot be shown to

TABLE 2

Regression of the Rate of Violence for Socio-economic and Demographic Measures (N=61)

(a)

Independent variable	Standard error	Prob. > T	Standard coefficient
Percentage with low education	.007	.36	.15
Percentage of large families	.008	.07	.36
Percentage of welfare recipients	.008	.89	.03
Population size	.000	.44	−.10

R^2=.26

(b)

Percentage with low education	.010	.27	.25
Percentage of large families	.012	.09	.49
Percentage of welfare recipients	.008	.96	.01
Population size	.000	.33	−.14
Ethnic composition	.009	.51	.23

R^2=.26

TABLE 3

Regression of the Rate of Violence for Socio-economic and Demographic Measures (N=61)

Independent variable	Standard error	Prob. > T	Standard coefficient
Percentage with low education	.009	.35	.19
Percentage of large families	.010	.27	.29
Percentage of welfare recipients	.007	.53	−.12
Population size	.00	.26	−.14
Ethnic composition	.008	.90	−.04
In-migration	.004	.001	−.42*
Out-migration	.004	.843	,.02

*p > .001 R^2=.41

be a good predictor of the level of crime, it can discriminate clearly between criminals and noncriminals. It is one thing to argue that Sephardi origin does not predict (account for) criminality, but it may not be surprising to find that most criminals are of Sephardi origin.

For that purpose a discriminant function analysis was employed (Klecka, 1980). The dependent variable – rate of violence – was divided into two groups: (a) communities with a high rate of violence; and (b) those with a low rate of violence. The criterion for assigning a community to one of the two groups was whether it fell above or below the median point (283.8 incidents of violence per 100,000).

TABLE 4

Discriminant Analysis
(Class Variable – Violent Crime Rate)

Function	Eigenvalue	Canonical correlation	Wilks lambda	Sig.
1	.56	.60	.64	.000

Standardized canonical discriminant coefficients

Population size	–.35
Percentage of large families	.52
In-migration	–.59
Percentage of welfare recipients	.53
Percentage with low education	.33
Ethnic composition	.54

All six independent variables seem to be differentially related to high- and low-violence communities (canonical correlation .60). The discriminant function was found to be highly significant (δ=.64) which implies that all the independent variables do indeed constitute a certain milieu, in which crime exists. Thus, although our variables (see Table 4) cannot predict violence, we can say with relative confidence that violence is found in communities in which there is a high proportion of people with less than eight years of schooling, a high percentage of welfare dependence, and a high proportion of large families. This perhaps explains the lack of attractiveness of those communities, and hence the low in-migration.

DISCUSSION

Our findings can be summarized as follows:

(a) Socio-economic variables seem to have low explanatory power with regard to violent crime rates. Although most intercorrelations are significant (see Table 1), the partial correlations are very low and the total amount of variance explained by all of these variables does not exceed 26 percent.

(b) Contrary to our initial expectation, the addition of an ethnic composition index yielded no improvement at all.

(c) The in-migration variable was found to be most useful for predicting violence rates when used in a multiple regression. It improved our prediction by 15 percent. All of the variables taken together accounted for 41 percent of the variance.

Since these results were not in line with our hypothesis, they require some elaboration. The finding that in-migration is negatively associated with violent crime rates may suggest a different theoretical direction. It is plausible that we are dealing here with a very unattractive type of community which discourages the inward movement of population. At the same time these communities do not drive out their residents (the correlation between violence rate and out-migration is not significant). The reason for this may be inferred from the discriminant analysis. High violence is apparent in communities in despair: communities whose inhabitants have neither the ability nor perhaps the means to move out. This finding undoubtedly fits classical theories that deal with disorganized and distressed communities (Shaw and McKay, 1969).

The conclusion is that while ethnicity and poverty cannot predict the rate of violent crime in a community, the reverse can definitely be said, i.e. the violent community is one in which there is a low level of education, a high percentage of large families, a large number of people on welfare, and it is mostly inhabited by Jews of Sephardi origin. These findings suggest that there is a high association between "poverty" and being a Sephardi Jews, but do not permit the conclusion that ethnic origin is the cause of violence. Furthermore, there is a low inward movement of residents, which indicates the undesirability of the area.

The fact that the characteristics typify communities in a state of anomie (Lander, 1954) and disorganization (Sutherland and Cressey, 1960) leads one to wonder if Braithwaite's (1982) concepts of "perpetuating poverty" and "cycle of disadvantage" are at least partly applicable to the distressed communities in Israel, where a third generation of poverty is now evolving. Such a community is too weak ever to generate any viable alternatives for its members so that when in-migration is low and living conditions are unsatisfactory, one possible alternative for the community's inhabitants is to employ violence as outlet for their feelings of frustration (Marx, 1976) – especially when, in the background, Israeli society has changed rapidly and the overall standard of living has improved substantially.

Further studies should reduce the level of analysis from total communities to neighborhoods or other Standard Metropolitan Statistical Areas (SMSA) areas. The lack of in-migration is unlikely to be a city-wide phenomenon, but this may well be a relevant concept in more narrowly defined neighborhoods.

FOOTNOTES

[1] The Arab population has been excluded from our analysis because there is very little social mixing between Jews and Arabs even in the handful of settlements in which the two groups reside (often in distinctly exclusive neighborhoods).

[2] The data on violence were supplied upon request by the Data Processing Division at police headquarters.

[3] These variables, in- and out-migration, constitute the total number of people who migrated into or out of each community during 1983.

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