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ABSTRACT

This analysis is an application of social disorganization theory for understanding variations in county crime rates in the state of Minnesota. Social disorganization is seen as the breakdown of community institutions of social control, where indicators of breakdown included such things as family disruption and over-crowding. With few exceptions, measures of social disorganization were found to be correlated with county crime rates, with three variables as showing up as especially important; these are percent of children not living with both parents, per capita alcohol tax collected in the county, and net-migration. Three variables--percent of persons with incomes less than $5000, median income, and percent of adults with a high school education--were correlated with crime in directions opposite than what was predicted. Limitations and suggestions for further research are also provided.

RESEARCH QUESTION

Crime is one of the most pervasive problems confronting American society today. The overall crime rate in the United States is generally higher when compared to previous decades.

And, as a society, we lack any sufficient explanation for why rates of crime are higher in some communities and lower in the others. Could it have something to do with population size or density? Some researchers have contemplated this relationship? Could it be due to the breakdown in the family? Maybe poverty? Some nonacademics have even blamed minority groups for high crime rates. The point of these questions is to point out that there are a number of different explanations for why crime rates vary from one place to another. In an attempt to clarify the reasons for this variation, this research entertains the following general but straight-forward question: What characteristics of communities best explain their rates of crime?

The main concern of this research is to examine and explain crime by accepting the perspective that criminality is the result of people reacting to social forces. Based on this perspective, the theory of social disorganization emerged as a leading explanation of variations in crime rates. Today's social disorganization theory of crime is grounded in the works of Shaw and McKay (1942), who focused on the ecological effects of neighborhoods on juvenile crime. In its recreated form, the social disorganization theory of crime contends that community structure, or lack thereof, leads to higher overall crime rates by creating a climate where formal and informal mechanisms of social control are loosened, thereby facilitating an increase in crime among juveniles as well as adults (Chamlin, 1989; Warner and Pierce, 1993; Rountree et. al., 1994; Miethe, et. al., 1991; and, Sampson and Groves, 1989). It is the lack of these social controls that lead to values favorable to crime and, ultimately, to higher crime rates. The main goal of this research, then, is to provide a greater understanding of social disorganization by testing its theoretical framework against a larger unit of analysis (county rather than

neighborhood or city) and by incorporating additional variables into the analysis of the social disorganization paradigm.[1]

This study accounts for all Part I index crimes when looking at the impact of social disorganization. Past studies have looked only at a limited number of crimes. Specifically, past researchers have limited their analysis to crimes of *robbery* (Chamlin, 1989; Warner and Pierce, 1993), *homicide* (Kposowa and Breault, 1993; Chamlin, 1989; Warner and Pierce, 1993), *burglary* (Warner and Pierce, 1993; Rountree, et.al., 1994), and *assault* (Warner and Pierce, 1993). This analysis will attempt to incorporate all Part I index crimes identified in the Uniform Crime Reports; these include homicide (murder), burglary, robbery, and aggravated assault, as well as forcible rape, larceny, motor vehicle theft, and arson. As indicated above, both metropolitan and non-metropolitan counties are included in the analysis. Thus, social disorganization theory may be utilized to explain not only urban crime but, more importantly, rural county crime rates as well.

As will be explained later, this project will also incorporate new variables, such as alcohol consumption and police officer to citizen ratio of the county. These variables are indicators of the lack or probable breakdown in social control mechanisms and should be included.

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Numerous studies, dating back to the original Shaw and McKay study, have focused on the neighborhood (Kposowa and Breault, 1993; Sampson and Groves, 1989; Miethe et. al., 1991; Chamlin, 1989; Rountree et. al., 1994; and, Bursik and Grasmick, 1993) or the city or specific neighborhoods within a certain city (Warner and Pierce, 1993), but very few studies used the county as the unit of analysis.

ANSWERING THE RESEARCH QUESTION

EMPIRICAL GENERALIZATIONS

In an attempt to ascertain the causal elements of county crime rates, several empirical generalizations were derived from the literature. First, it was found that crime is inversely related to a community's income level (Sampson and Groves, 1989; Warner and Pierce, 1993; Kposowa and Breault, 1993). Second, crime rates vary positively with: (1) racial and ethnic heterogeneity (Chamlin, 1989; Sampson and Groves, 1989; Warner and Pierce, 1993; Kposowa and Breault, 1993); (2) population density (Warner and Pierce, 1993; Rountree et al., 1994; Kposowa and Breault, 1993); (3) the number of nontraditional families in a community (Sampson and Groves, 1989; Warner and Pierce, 1993; Kposowa and Breault, 1993); (4) percent of the population that is young and males (Vold and Bernard, 1986); and (5) alcohol usage (Vold and Bernard, 1986). Third, the greater the in-migration and out-migration, the higher the crime rates (Sampson and Groves, 1989; Warner and Pierce, 1993; Kposowa and Breault, 1993). These generalizations describe several relationships between socio-ecological forces and crime.

THEORETICAL PERSPECTIVE

The theoretical framework of social disorganization focuses on the socio-ecological components that most influence crime. Specifically, this perspective focuses on the formal and informal controls of community structure and their effect on crime. Many elements of the social disorganization paradigm are included such as--income and poverty levels; percent of minorities; breakdown in family structures and processes; population density; population change; proportion of young males, and so forth.

According to the theory, each element produces, or are produced by, weakened social controls and, subsequently, to an inability of the community to regulate and check human behavior, particularly criminal behavior.

In their original theory, Shaw and McKay (1942) focused on the detrimental effects that economic conditions, rapid population change, and heterogeneity had on the ability of a neighborhood to regulate itself. Those areas characterized by economic deprivation also tended to have high rates of population change and high rates of racial and ethnic heterogeneity (Bursik and Grasmick, 1993). Contemporary researchers have drawn similar conclusions. Focusing on rapid population change, economic conditions and heterogeneity, many researches have found that these variables act together to produce high crime rates (Crutchfield, et. al., 1982; Kposowa, Breault, and Harrison, 1995; Blau and Blau, 1982; Shihadeh and Steffensmeier, 1994; Patterson, 1991; Warner and Pierce, 1993; Gerson and Preston, 1979; Simpson, 1985).

Siegel (1998: 169), in reviewing the literature on social disorganization theory, argues that social disorganization can be characterized in two ways, first, by a "breakdown of social institutions and organizations such as school and the family" and, second, by a "lack of informal social control." Social disorganization, he goes on to write, is common in areas with a transient population, where residential and commercial property are in close proximity, and in transitional neighborhoods (high population change). Social disorganization is also a common feature of poverty-ridden communities, which are characterized by isolated slums, abandoned buildings, lack of social and economic opportunities, and racial and ethnic discrimination. Siegel (1998) further argues that social disorganization leads to the breakdown

of social control. Communities with weak social controls are characterized by weak social institutions; indeed, these traditional agents of social control may very well have been replaced by gangs and other peer groups.

Whether we are discussing racial heterogeneity, family disruption, or any of the other disorganization-related variables, these factors produce at the county level a condition where conventional norms and values are not passed on to all individuals within the county. Indeed, the community could very well be characterized by conflicting social values. Under either of these conditions, people in a county will not be able to control the behavior of some of their members. In a Durkheimian sense, members who commit crimes are not constrained by conventional agents of social control--places of employment, schools, churches, police, and volunteer organizations (Siegal, 1998: 174).

Given the above discussion on the socio-ecological causes of crime, we have identified a number of characteristics of counties that should account for variations in crime rates. These include economic variables, in that income should vary negatively with crime while poverty should vary positively with crime. Several indicators of family disruption, racial/ethnic heterogeneity, formal social control, population density, and population change should also vary with crime rates. Although social disorganization theory does not explicitly identify a population with a larger than normal share of young males in the population as a correlate with crime rates, it makes empirical and theoretical sense to do so. People commit fewer crimes as they age. Also, it can be argued that males are supervised less closely than females. It appears reasonable to assume that places with larger numbers of young males will have higher crime rates. When under the influence of alcohol, some people do things, even criminal things, that they wouldn't do when

sober. Regardless of why they drink, it is logical to assume that communities with higher per capita alcohol sales will have more people under the influence of alcohol, and more often, than communities with lower per capita sales.[2] Finally, we expect that social disorganization theory will be able to account for variations in crime for rural areas as well as the urban areas studied by Shaw and McKay and other social structural theorists. Social disorganization looked at in a new light is not merely the result of a changing urban environment but can also afflict poor rural areas experiencing social, cultural, and economic flux.

RESEARCH DESIGN: THE TEST OF THE ANSWER

This research employs a correlational research design to test specific hypotheses, primarily by using secondary data from FBI, Census Bureau, and state documents. Therefore, it is hypothesized that county crime rates vary positively with the following characteristics of counties (1) per capita alcohol tax collected, (2) ethnic/racial heterogeneity , (3) net-migration, (4) population density, and (5) family disruption. Furthermore, it is hypothesized that county crime rates vary negatively with the following characteristics of counties: (6) income levels, (7) formal social controls, and (8) percent of young males.

Sampling

The unit of analysis for this project is counties in the United States. The primary concern in the analysis of these counties is their organization. The population of this project is the 87

We expect that this relationship will be especially strong when measured in conjunction with other social disorganization-related variables.

counties in the state of Minnesota. This state has an estimated, year 1990 population of 4,375,099 people (Bureau of the Census, 1990). Since this population is relatively small, all elements will be utilized in this research.

Operationalizations

This section describes how each variable is measured. In general terms, crime data comes from the Uniform Crime Reports compiled by the FBI. The number of police officers used in calculating the police/citizen ratio comes from data provided by the Minnesota Bureau of Criminal Apprehension. Liquor consumption data was provided by the Minnesota Department of Revenue, Annual 1990 [report of] Liquor Sales and Liquor Tax by County. All other data was drawn from United States Census Bureau publications.

Crime rates. Part1 Index crimes drawn from the Uniform Crime Reports make up the independent variable. This index consists of murder, forcible rape, robbery, aggravated assault, burglary, larceny, motor vehicle theft, and arson. An average for a five-year period (1989 to 1993) is utilized.

Income Level. Three measures are used (1) the percentage of the population with an annual income of less than five thousand dollars, which is symbolized as **INCOME5000**; (2) the percentage of the population living below the poverty level (**BELOWPOV**); and (3) median household income (**MEDINCOME**).

Racial and Ethnic Heterogeneity. Racial heterogeneity is measured with an index; this index is comprised of the percentage

of the population that identifies themselves as Black, American Indian, and Hispanic. This variable is coded as **HETERO**.

Migration. Migration is the act of individuals moving from one place to another. For purposes here, migration refers to the net effect of people in and out of counties. This variable is coded as **NETMIG**.

Population Density. Three measures of density are being used: (1) the number of persons per square mile **(PPMILE)**; (2) the number of persons per room in the county **(PPROOM)**; and (3) the number of persons per household (**PPHHOLD**).

Family Disruption. Family disruption is concerned with the ability of the family to convey informal social control over children in the family. Several measures of family disruption will be utilized. Family disruption will be measured by the percentage of single parent households (husband absent) in the county. This variable shows up as **FHEADED**. Another indicator of family disruption is the percentage of the population not living with two parents. This variable is symbolized as **NOT2PAR**.

Young males. The main focus of this variable is on the percentage of males aged 15 to 24. This variable is coded as **PYMALES**.

Alcohol Usage. At the county level, we are concerned with the total amount of alcohol consumed; in our case, it is operationalized as the rate of alcohol tax paid in each county. This variable is symbolized as **ALCTAX**.

Formal Social Control. The ability of the community to utilize formal controls to gain compliance with the norms and

values of the majority is referred to as formal social control. This is operationalized as the police/citizen ratio in each county. This variable is coded as **COPRATIO**. This variable is also operationalized as the percentage of the population in the county with at least a high school diploma. It is logical to assume that one of the fundamental functions of the educational system in America is to not only teach norms and values but to also enforce those norms and values. The percent of adults age twenty-four and older with a high school diploma acts as an indicator of this aspect of formal social control; it is coded as **DIPLOMA**.

Validity and Reliability

Several concerns of validity and reliability present themselves in this project. The most pressing concern is the validity and reliability of the data. As stated, this project utilizes a variety of data sources, many of which are secondary data sources. The two main data sources are the Uniform Crime Reports (Part I Index Crimes) and Census Bureau Data (Population Statistics). Each data source has its own unique concerns that need to be addressed at this time.

The major concern with the Uniform Crime Reports (UCR) data is that UCR tends to underestimate crime. The major flaw of UCR data is that it is based on crime being reported to the police and then reported by the police to the FBI. The concern is that not all crime is reported to the police. And, some law enforcement agencies do not report crime committed in their jurisdiction to the FBI. In spite of this limitation, policy regarding crime reduction, law enforcement, courts, and corrections is still based on the FBI's crime estimates. In addition, prior studies of crime and social disorganization have relied on UCR statistics in their analyses.

Validity and reliability represents a concern also for the census data. Census data are prone to errors in coverage and errors in content (Frankfort-Nachmias and Nachmias, 1992). The main concern for the census data is errors in coverage. Errors in coverage amount to either counting a person twice or not counting a person at all (Frankfort-Nachmias and Nachmias, 1992). "Duplicate counts [however] are less serious than undercounts" (Frankfort-Nachmias and Nachmias, 1992: 298). An estimated four percent of the population was not counted. This represents a very small percentage of the total population. Most of those people, however, were lower class, homeless, and/or from a minority group. Nonetheless, many federal and state policy decisions, such as Congressional districting, are based on Census Bureau Data. Also, many researchers have utilized census data in their analyses of sociological variables, including social disorganization.

Face validity may also be a concern, although not a great one. One might question whether these measures are really indicators of social disorganization. The fact that other researchers have used these measures of social disorganization, however, should relieve face validity concerns.

Statistics

A correlational research design will be employed to establish and describe the relationships between the variables of social disorganization and crime rates. Multiple correlation and multiple regression analyses are used to develop a model for describing and predicting variation in county crime rates. A t-

test, with an alpha level set at .05, will be used to test whether the strength of the correlation are statistically significant.[3]

ANALYSIS OF DATA: A TEST OF THE ANSWER

Univariate analysis of the data reveals an average of 274.97 index crimes per county, with a standard deviation of 128.69 index crimes. The means and standard deviations of the rest of the variables are shown in Table 1.

TABLE 1. MEANS AND STANDARD DEVIATIONS OF THE VARIABLES OF SOCIAL DISORGANIZATION (N = 87).

VARIABLE	Mean	Std. Dev.
ALCTAX	199.69	89.81
BELOWPOV	12.65	4.40
COPRATIO	1032.65	325.94
CRIME	274.97	128.69
DIPLOMA	84.29	3.99
FHEADED	17.61	17.43
HETERO	2.54	3.47
INCOME5000	2.29	.85
MEDINCOME	25052.22	5758.93
NETMIG	-6.19	10.12
NOT2PAR	15.77	4.23
PPHHOLD	2.60	.14
PPMILE	107.19	389.18
PPROOM	392.25	1168.32
PYMALES	6.51	1.68

3 Using inferential statistics with a 100% sample may appear to be redundant; nevertheless, we are including t-tests because some reviewers requested them.

Tests of Hypotheses

The purpose of the tests of hypothesis is to provide both theoretical and statistical understanding of the relationship between characteristics of a county and that county's crime rates.

Pearson's product moment correlation coefficient was employed to test the hypotheses. The Pearson's correlation coefficient provided both intensity and direction of the relationships. A t-test, with an alpha level of .05, is used to test for statistical significance.

Hypothesis testing found support for hypotheses 1-3 and 8, partial support for hypotheses 4, 5, and 7, and no support for hypothesis 6 (see Table 2). Hypothesis 1 predicted a positive relationship between per capita alcohol tax collected in the county and crime rates. A correlation of .5816 (p = .001) reveals a strong, statistically significantly relationship between these variables. Moderate, statistically significant relationships were found between crime rates and ethnic/racial heterogeneity (H_2: r = .4565), net-migration (H_3: r = .4809), and percent young males in the population (H_8: r = .3173). With regards to hypothesis 6, the relationship between the percent of persons living in poverty and crime rates was not statistically significant. Although statistically significant, the relationships between crime rates and percent of persons with less than $5000 income (r = -.2707) and median income (r = .2833) were in the direction opposite than was predicted. Two of the indicators in hypothesis 4 showed a moderate statistically significant relationships with crime: persons per mile (r = .4533) and persons per room (r = .4995). The persons per household, however, was not significantly related with county crime rates. As an indicator of family disruption (hypothesis 5), the percent of children not living with both parents

was found to be statistically related with crime (r = .7392), while percent of female-headed households was not found to be significantly related with crime. With regards to hypothesis 7, police/citizen ratio was significantly related with county crime rates (H_7: r = .-4099) as was the percent of the adult population with high school diploma (H_7: r = .4999); however, the relationship between DIPLOMA and county crime rate was in the direction opposite than was predicted.

Table 2. PEARSON CORRELATION COEFFICIENTS BETWEEN COUNTY CRIME RATES AND MEASURES OF SOCIAL DISORGANIZATION (N = 87)

VARIABLE	r	p-value
ALCTAX^{H1}	.5816	.001***
HETERO^{H2}	.4565	.001***
NETMIG^{H3}	.4809	.001***
PPHHOLD^{H4}	.1184	.275
PPMILE^{H4}	.4533	.001***
PPROOM^{H4}	.4995	.001***
FHEADED^{H5}	-.0812	.455
NOT2PAR^{H5}	.7392	.001***
BELOWPOV^{H6}	.0394	.717
INCOME5000^{H6}	-.2707	.011*
MEDINCOME^{H6}	.2833	.008**
COPRATIO^{H7}	-.4099	.001***
DIPLOMA^{H7}	.4999	.001***
PYMALES^{H8}	.3173	.003**

* **significant at the .05 level**
** **significant at the .01 level**
*** **significant at the .001 level**

Multiple Regression Analysis

A regression analysis was utilized to describe the strength of the relationship between most of the disorganization variables and county crime rates.[4] Multiple regression analysis also determines what combination of independent variables best predict variation in the dependant variable. By conducting this type of analysis, a more accurate description of the predicted causes of county crime rates can be given. The multiple regression model explained 77% (R^2 = .77086) of the variation in county crime rates, which is quite substantial (see Table 3). Variables in the equation which statistically account for this variation are percent of alcohol tax paid per capita (beta = .333667), percent of children not living with both parents (beta = .332168), and net-migration (beta = .232242). In terms of predicting variations in county crime rates, the focus should be on these three variables.

TABLE 3. REGRESSION MODEL FOR COUNTY CRIME RATES IN MINNESOTA (N = 87)

Multiple R	.87799
R Square	.77086
Adjusted R Square	.74071
Standard Error	65.52742

Analysis of Variance

ecause of intercolinearity concerns, INCOME5000, MEDINCOME, PPHHOLD, and PPROOM ere excluded from the regression analysis. Several of the variables also had skewness scores outside f acceptable levels. In order to bring them back within acceptable limits, ALCTAX, HETERO, PMILE, and PYMALES were transformed with the LOG_{10} function. COPRATIO and NOT2PAR ere transformed with the square root function.

	DF	Sum of Squares	Mean Square
Regression	10	1097852.71566	109785.27157
Residual	76	326332.02938	4293.84249

F = 25.56807 Signif F = .0001

---------- Variables in the Equation ----------

Variable	B	SE B	Beta	T	Sig T
ALCTAX	1595.339899	380.762355	.333667	4.190	.0001***
BELOWPOV	4.658749	2.749988	.159407	1.694	.0943
COPRATIO	-1.720027	1.973648	-.065098	-.871	.3862
DIPLOMA	3.784803	3.844617	.117400	.984	.3280
FHEADED	.169990	.434913	.023029	.391	.6970
HETERO	41.590585	25.205936	.128952	1.650	.1031
NETMIG	2.954238	1.088339	.232242	2.714	.0082**
NOT2PAR	83.285311	23.982754	.332168	3.473	.0009***
PPMILE	139.621941	72.316877	.168757	1.931	.0573
PYMALES	-207.832127	193.873034	-.081468	-1.072	.2871
Constant	-977.272804	374.181502		-2.612	.0108*

* significant at the .05 level
** significant at the .01 level
*** significant at the .001 level

EVALUATION OF THE ANSWER IN LIGHT OF THE TESTS

The main concern of this research was to analyze and explain crime through the sociological perspective. In this way, crime and deviance were explained at a socio-ecological level. One of the theories that emerged to explain crime in this way was the theory of social disorganization. Social disorganization theory, applied to county level crime rates, contends that crime is the

result of the lack of structures of social control in the county. Specifically, application of this theory holds that inadequate social structures in the county produced a climate where formal and informal mechanisms of social control are loosened, facilitating an increase in crime rates in the county.

Discussion of the Findings

Based on a modern day theory of social disorganization, several hypotheses were developed and tested. With some exceptions, the results of hypotheses testing supported the predicted bivariate relationships. For instance, hypothesis testing revealed a very strong and significant relationship between crime rate and the percent of children not living with both parents (r = .7392). A strong significant relationship was found between per capita alcohol tax paid in the county and the county crime rate (r = .5816). Variables moderately related with county crime rate were the percent of households with less than $5000 of income, median income, racial/ethnic heterogeneity, net-migration, persons per square mile, persons per room, percent of adults with a high school diploma, the police/citizen ratio, and the percent of the population made up of males ages 15-24. Of these, the relationships between county crime rate and the percent of households with less than $5000 of income (r = -.2707), median income (.2833), and percent of adults with a high school diploma (.4999) were in the direction opposite of what was predicted. Hindsight allows us to interpret these anomalies from a somewhat different perspective. Crime, especially property crime, occurs where expensive items--for instance automobiles in high demand--are to be found. It appears that low income counties provide fewer targets for property crime than high income counties. From this perspective, it appears that high percentages of adults with a high school diploma is measuring some aspect of affluence in the county. Even with these

qualifications, it appears that county crime rates can be explained by the social disorganization theory developed in this paper.

The final test of the social disorganization paradigm was conducted using the multiple regression analysis. Multiple regression analysis was conducted to test which variables of social disorganization best predicted crime rates in Minnesota Counties. Based on the regression analysis, 77% of the variation of Minnesota county crime rates was explained by three variables: (1) the percentage of the children in the county living with less than two parents; (2) net-migration; and (3) alcohol consumption, as measured by the per capita alcohol tax collected in the county. The regression analysis does not indicate that other variables are unimportant, but that when we control for intercorrelations, these three variables become the best predictors of county crime rates.

The bivariate and multivariate analyses in this study support the contention of social disorganization theorists that social disorganization, its causes, characteristics, and consequences, are related in substantial ways to crime rates. At a county level, this means that social disorganization may very well make it difficult for community institutions to control of behaviors of its residents.

Speculations At The Individual And Group Level

Although our analysis of crime was at the county level, we all know that individuals or groups of individuals, not counties, commit crime. It makes sense to us, then, to speculate on how these county level relationships might work at a lower level of analysis. For brevity sake, we are focusing only on the three disorganization variables found to be most important during the regression analysis--percent of children not living with both

parents, the per capita alcohol tax collected in the county, and net-migration.

This research found that alcohol consumption was related to county crime rates. It is assumed that drinking causes released inhibitions in the consumer that allows him/her to loose control over his/her actions. So, it is easy to understand how alcohol consumption leads to crime. However, this understanding may be secondary to an understanding of why people consume alcohol. It is possible that people drink as a result of inadequate social norms and social regulation. People may drink because it has become the socially acceptable means of dealing with one's problems. It may be the acceptable means of dealing with such problems as family disruption and low economic status. Each of these problems is directly related to social disorganization. Therefore, it is possible that social disorganization promotes drinking, the consequence of which is increased crime or increased social disorganization. There appears to be a cyclical relationship where social disorganization influences alcohol consumption which causes crime and creates higher rates of social disorganization.

The variable number of those living without two parents furthers the notion of the importance of informal social control. When children do not live with both parents, the parent in the home may be unable to provide adequate guardianship and supervision. In these households, the vitally important mechanisms of social control is lost. In many instances, the remaining parent is unable to provide a strong familial base because time spent in the home and time spent providing support and surveillance is greatly diminished. As a result, in communities that experience high rates of family disruption, not only are parents unable to provide guardianship and control over children, but community members are also unable to provide guardianship and support.

Net-migration is the next most important variable in regression analysis of Minnesota county crime rates. Communities that are transient have high rates of crime. Net-migration is important because moving in and out of a community produces a climate where social controls are weakened. Social controls are weakened because high rates of migration hinders interpersonal relationships from developing. When interpersonal relationships fail to develop, cohesion and solidarity also fail to develop. In this way, social norms and values are not transmitted from one person to the next. When cohesion and solidarity are nonexistent, people fail to have a stake in the community. Therefore, people without a stake in the community are less constrained by the social controls of the community.

In summary, the most important dimensions of social disorganization to consider when explaining high crime rates are: (1) the percentage of families with fewer than two parents in the home; (2) net-migration; and (3) alcohol consumption. Nevertheless, based on the test of bivariate relationships, several variables of the social disorganization theory were found to be applicable to county crime analysis. Many of these variables were also able to predict variation in county crime rates. An important contribution here is the application of the social disorganization theory to the analysis of county level crime rates.

Limitations

No research is without its limitations. In this study, caution was taken at every step in the process, and the process was conducted to the best of the ability of the researchers, however, the researchers would not be true to the role of researcher if they did not look critically at the project and realized its limitations. As a result, several limitations have presented themselves.

The first limitation of this research deals with the theory itself. The main limitation of the theory is that it is a mid-range theory, and has limited in scope and generality. Because it is limited in scope, does not mean that its applicability is diminished. On the contrary, the theory explains 77% of the variation in Minnesota county crime rates.

The second limitation of this research is generalizability. The population of this research was limited to one Midwestern state, Minnesota. This state is extremely homogeneous, with very distinct geographical and natural characteristics. It also has some highly urban and some highly rural areas. Finally, it has a somewhat low overall crime rate. The real limitation here is that only one state was included in the analysis. Thus, the same results might not occur if using a sample of counties from eastern states, which have much higher levels of population density, or southern states that have much higher levels of racial heterogeneity, or with other Midwestern states that are much more rural, or with western states that have higher levels of ethnic heterogeneity.

The third limitation of this research is the data itself. This research relied on both census data and uniform crime report data. The limitation of these sets of data has already been discussed. It is important to note, however, that these sources of data remain extremely important in terms of research, policy, and resource allocation.

The fourth limitation of this research is unexplained variance. In the regression analyses, the amount of variations explained by the model was low. In Minnesota counties 77% of the variation was explained. The fact is, however, that 23% of the variation in crime rates remained unexplained. This unexplained variance means that there are other variables, not mentioned in this analysis, that have an effect on county crime rates.

Suggestions for Future Research

As stated above, limitations proceed any research study. The limitations of one study may be accounted for in another study. Therefore, additional insight into the relationship between levels of social disorganization and county crime rates may result from further research.

The first recommendation is to develop additional variables that might clarify the relationship between the dependent and independent variables. In this process, two variables, drug usage and unemployment present themselves for consideration. Also, further analysis of the variable gender needs to be further explored.

The second recommendation is replication. Replication is essential in social sciences. Errors and limitations are involved with any study. These errors and limitations may be addressed in further research. In addition, replications of this study will be able to incorporate the variables mentioned above, and it will be able to address the limitations of the data itself.

SUMMARY

This research project was an attempt to understand crime rates from the social disorganization perspective. With few exceptions, this research was successful in applying the theory of social disorganization to an analysis of county crime rates. In this analysis many of the elements of social disorganization were highly correlated with county crime rates. Further analysis also illustrated that several elements of the theory can predict crime rates in the sample counties. Overall, the variables of social disorganization that seem to be the most important to an understanding of county crime rates are: not living with both parents, alcohol consumption, and net-migration, all of which can be understood in terms of the level of social control levied in the county.

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