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CRIME AND DEVELOPMENT: A COMPARATIVE ANALYSIS

by

Dick Taver'shima Andzenge

A Dissertation
Submitted to the
Faculty of The Graduate College
in partial fulfillment of the
requirements for the
Degree of Doctor of Philosophy
Department of Sociology

Western Michigan University
Kalamazoo, Michigan
April 1991
The study examines the extent to which social and economic development might be related to crime. Modernization theory of crime posits that the process of social and economic development involves changes in the society which are criminogenic. These changes include: urbanization, industrialization, longevity or increased life expectancy, increased manufacturing and gross domestic products. According to this theory these characteristics alter social tendencies to stability and conformity, and therefore result in increased deviance and crime.

This study tests the theory by using longitudinal data collected over a 25-year period from 54 countries. A sample of these data representing 34 countries from 6 regions of the world is analyzed to test the various hypotheses that the above changes are causally related to crime in general and to the specific crimes of theft, homicide and fraud.

The study found that though there appears to be a strong correlation between development and crime, this relationship is not consistent throughout the regions and countries studied. The rate of increase in crime does not seem to be consistent with the rate of development. In areas like Asia, development may have actually contributed to the decrease in crime.

The conclusions from the study are that though there appears
to be a correlation between development and crime this relationship seems to differ from one region to another. This suggests that some cultural and regional factors may contribute to the relationship. The fact that there is actually a negative relationship between the two in other regions also means that development can actually help in reducing the incidence and rates of crime.
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Crime and development: A comparative analysis

Andzenge, Dick Taver'shima, Ph.D.

Western Michigan University, 1991
ACKNOWLEDGEMENTS

I wish to express my special gratitude to Professor Paul C. Friday, my major doctoral advisor and chair of the dissertation review committee, under whose guidance this dissertation was written, for his advice, his patience and his encouragement. Thanks also go to the other members of the committee: Professors Lewis Walker, Susan Caringella-MacDonald and Sesay Asefa who offered valuable suggestions in the design, analysis and interpretation of these data.

This study would not have been possible without the data which were supplied by Professor Richard Bennett of American University. I, therefore, express a very sincere gratitude to him for this.

I also wish to thank Karen Rice, who typed and handled the entire technical format of the dissertation. I am also thankful to Nina Miller and Becky Miller of the Center for Statistical Services at Western Michigan University for their assistance in producing analytical tables and graphs.

A most sincere gratitude also goes to my wife, Julie Beth Andzenge, for her invaluable aide and encouragement on all phases of this project. Without her, and the many sacrifices she has made, this dissertation may never have been written.

Dick Taver’shima Andzenge
DEDICATION

This Dissertation is Dedicated:

To: My parents, Mr. Peter Lorhemba and Mrs. Hana Mbapeven Andzenge, who not only named me Taver'shima (Perseverance), but also taught me that talent is worthless unless you persevere in developing it. It is they, also, who taught me never to seek success at the expense of another human being, the central idea behind my interest in the idea of progress without crime.

To: My wife, Julie, and her parents, Mr. and Mrs. Harold Blun, who stood by me, encouraged me and often had faith in me even when I wasn't very sure myself.

To: Our children, Senenge, Kaase, Kadoon and Nese for their faith in me and patience when their interests had to take second place so that this work could be done.

Dick Taver'shima Andzenge
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CHAPTER I

INTRODUCTION

Development and Crime: A Comparative Analysis

All human societies tend to encourage progressive change. This change, also known as development or modernization, is society's continuous effort to improve the quality of life of its people. One of the major tasks of development is to encourage creativity and productivity which are aimed at reducing the pain and suffering of everyday life and therefore enabling people to fulfill their potentials. While development has made our lives better and easier, it has not eradicated social problems. While some of these problems are natural to humanity and therefore not easily changed by social processes of modernization and change, others are actually the products of modernization itself. To understand the society in which we live, and others in which we do not live, but with which we must relate and interact, we must be able to understand universal social phenomena and processes. These phenomena and processes become the bases upon which we compare societies.

Development influences not only the quality of life, but also the total way of life of the people. It provides solutions to difficult social problems. Successful cure and even eradication of diseases such as small pox and yaws are good examples of how change in lifestyle and advances in medicine, both of which are characteristics
of development, have benefited humans. Technological developments have also increased our ability to fulfill our potentials. Modern transportation and other communication systems such as the telephone have drastically reduced social contact limitations due to physical distances. Humans are now able to go into space, talk over the phone to people thousands of miles away and watch on the television events taking place in several places all over the world. Even biological limitations are controlled by scientific interventions which regulate growth, gestation and other biological processes.

Although these developments are clearly visible and beneficial, human suffering has not been eliminated. In some ways it has increased. Many social problems are directly linked to social and economic development. Increases in social problems associated with modernization have been of major concern to sociologists since the early development of the discipline.

The emergence of cities has brought large populations together enabling the establishment of public utilities and amenities such as electricity, schools, water supply, hospitals and industries which benefit people. Today's cities have enabled governments to reach large populations effectively. Public services such as government offices, schools, markets and hospitals are located in cities where vast populations live, bringing governments and these services closer to the people. Cities also serve as market centers making it easier for people to buy needed goods without having to travel long distances or wait several hours for market days. Cities serve as basic infrastructural units which contain much needed public goods and services.
Modern cities are enriching cultural, ethnic and industrial centers. The cultural and ethnic diffusion of various groups of people who need each other and who together need things they must share greatly enriches the society and individual lives.

Despite their great advantages, cities are also a source of major problems. Cultural diffusion requires a break from tradition and original cultures, and the development of new ones. The move to cities bring people close to each other, who may have nothing in common and therefore choose to live as strangers to each other, often including those living very close to them. This anonymity can create insensitivity and a sense of detachment making random criminal behavior much more likely.

The pull to cities results in exposure to many goods and services which are often available at a financial cost. Money which is necessary for the purchase of these attractive things is not easily available. Although cities attract many people and seem to promise them jobs and income they are usually not able to hire and pay everyone who responds by moving to the city. As a result, "a population emerges of people who need things which are available, but which they cannot afford" (Fisher, 1987, p. 25).

Though people in cities live closer to each other, and may often be crowded, they are not emotionally close to one another. Most of them lack a support system and traditional informal controls which are necessary for social and moral conformity. Anonymity, inadequate social and moral control, increased social and physical mobility, improved mass and public communication all increase opportunities

The desire to develop is universal, so also is the concern with crime. Evidence of increased crime associated with increase in development leads one to wonder whether development causes or simply increases the evidence of crime. To understand the relationship between the process of development and crime there is a need for global and comparative study of both. A look at some benefits of comparative studies of both development and crime is appropriate.

Some Benefits of Comparative Criminology

The benefits of comparative criminology cannot be overstated. Criminality is one of the classes of social deviance that expresses the qualities of a particular population, the workings of its social institutions and social systems, its levels of economic and social development, and the rate of its industrial and urban growth (Johnson & Barak-Glantz, 1983). Criminal law, on the other hand, reflects the fundamental values and concerns of a people as it is one of the most faithful mirrors of a given population (Edgerton, 1976; Johnson & Barak-Glantz, 1983). This means that criminality and criminal law reveal the most important characteristics of any society. To understand criminality in any society is to understand the society itself. Since a comprehensive understanding of human society requires a comparative study of different human societies, such a study must include a comparative study of criminality.

Comparative studies of crime provide empirical foundation for
tests of theories about crime, law, demography, and social change and therefore, strengthen criminological theory (Archer & Gartner, 1984; Johnson & Barak-Glantz, 1983). For criminological theories to be valid they must have sufficient generality to be applicable in different societies. Comparative criminological studies enable the development of theories which meet these requirements and are broad enough to assist in the universal understanding of criminality.

Cross-cultural studies reveal the relative importance of specific social, political and economic conditions which, though not directly related to crime, may be helpful by providing a general understanding of the environment in which crime occurs. Such environmental factors may influence not just the amount of crime but also the forms in which it manifests itself. In this way comparative studies of crime can add to our knowledge of the social origins of crime (Archer & Gartner, 1984; Johnson & Barak-Glantz, 1983), which is necessary in understanding and preventing crime.

Comparative criminological studies are helpful to scholars and policy makers. They provide insight into the problem of crime. Those who make policies are able to apply preventive, corrective and rehabilitative measures which have worked in other societies, under conditions which may be similar. They are also able to avoid investing into ineffective policies which have failed elsewhere. Proper utilization of comparative studies enables policy makers to foresee potential impact of social factors (such as rapid urbanization and industrialization) on crime and regulate them to minimize possible negative consequences. Data that show much lower rates
of crime in some societies and higher rates in others may suggest the relevance of specific cultural differences to crime. Policy makers and criminal justice practitioners can learn from different societies and therefore increase their effectiveness in their own efforts to deal with crime.

Cultural characteristics of some societies are particularly relevant to the incidence and rates of crime. In Islamic cultures or among orthodox Jewish communities social goodness is claimed to be sustained and social evil resisted through a nomos based on divine law and a spiritual commitment to social decency. In Saudi Arabia, (and other Islamic nations) "Shariah law is used both as a moralizing instrument, as well as a preventive agent" (Souryal, 1988, p. 5). The system encourages compliance by encouraging citizens to assist each other. The significance of social, political and cultural (including religious) philosophy makes the need for comparative criminology very compelling. Even if comparative criminology does not increase the understanding of crime itself, understanding cultures with low crime rates may assist in adopting cultural aspects which have negative effects on crime.

Modernization and Development

Modernization has been defined as "the process of moving towards the idealized sets of relationships or characteristics posited as modern. Development on the other hand, as the process of achieving parity with the worlds most economically developed states in the production of goods and services" (Palmer, 1980, p. 24). These
views of development and modernization are shared by many scholars (Bendavid & Bendavid, 1974; Chirot, 1977; Gant, 1982; Webster, 1984). The problem with this definition is that it assumes that there is a terminal developed stage, which has been achieved by some nations but not other nations who must struggle to achieve parity. Countries which are said to have reached this stage have become standards used to evaluate the status of other countries. No country can claim to have reached a terminal stage of development. Since every society is capable of moving at a different rate and in a different direction based on its resources and priorities which are not the same, the notion of a universal parity is not appropriate. No two countries are at the same stage in the process. Scholars who accept this definition are not able to identify the exact boundaries which differentiate these countries from each other and from the rest of the world.

The definition is ethnocentric, as it assumes or implies that some characteristics of certain societies are ideal and therefore "superior" to those of other societies. In fact, advocates of this view of development claim that "for a society to develop, significant numbers of its members (its population) must come to despise their own current cultural state and to believe that progress (in a Western sense) is both possible and desirable" (Ray, 1970, p. 307). They must believe further that the superior state of development is achieved by adapting to specific new cultural values, attitudes and behaviors. There is sufficient evidence however, that not every "developed" or "developing" country is going in the same direction or is developing at the expense of its traditions (Archer & Gartner,
Japan comes to mind as an example of a country that is modern and developed but also traditional. Development may not require despising one's culture and adopting a new one.

The position that modernization or modernity applies to a movement towards specific idealized conditions or characteristics also needs some further examination. To be modern means to be current or up-to-date. The question is what one is current or up-to-date about. The above definition implies the existence of idealized characteristics. Every society has idealized social, economic and political characteristics which are unique to it and not universalistic. The position of the writer is that this view of modernization is right if "idealized characteristics" are assumed to be unique for each society and not universal. Every society has or should be allowed to have things it considers to be ideal and evolve ways of achieving those. These should depend on the total characteristics unique to the society and resources available to it.

Development is a process, not towards parity with other "developed" societies, but rather towards the achievement of a country's own goals. Such goals are determined by the specific needs of each country and reflected in its national policies. Each country's definition, determinants and goals depend on situations within the country and not by the status of other nations. If development is the process towards achievement of a particular society's goals, modernization is the extent to which the means used are appropriate, effective and current. Modernization and development are closely
interrelated. In fact, one implies the other. It is not possible to develop without being modern or to modernize without developing. For this reason the two are used synonymously throughout this study.

Crime

The concept of crime has prominence in all the social sciences. People who make social policies, those who enforce them and all who live in every society are concerned about the presence, the possibility, the experience and the extent of crime. Social scientists are interested in crime as a social phenomenon which exists in every society and as a major problem which needs to be understood and controlled. Every society attempts to control crime. Beccaria believed that crime was any behavior which was harmful to society. Since committing crimes offended and was harmful to society, it was most important to prevent criminal behavior (Vold & Bernard, 1986, p. 22). Durkheim (1966) on the other hand, argued that crime was normal. Criminal behaviors represent differences in attitudes, values, beliefs and behaviors which are necessary for social progress (Durkheim, 1966; Vold & Bernard, 1986). In fact, Durkheim (1966) suggested that a society without crime is not possible. The designation of criminality according to Durkheim is the way a society defines the nature of its moral principles. If in any society at any time all members decide not to engage in any acts determined to be criminal at the time, the same society would designate new behaviors as criminal which were not considered criminal previously. Crime is a necessary measure of a society's values and moral tolerance. According to Durkheim, crime
is a social fact which contributes to the social dynamics of the society. The difference between the two is that while one sees criminality in the effect particular behaviors have on the society, the other (Durkheim) sees criminality in the nature of a society's social or public morality which may or may not have anything to do with the effects of the behavior on the society.

The reactive perspective defines crime as "acts which are reacted to distinctively by legal officials" and that an "individual is only a criminal if he or she is reacted to distinctively by legal authorities" (Gibbs, 1985, p. 824). According to this perspective, the behaviors themselves and their effects on the society are not important in determining criminality. The reaction of those in authority is the only important factor in determining criminality. This view of crime defies the social science emphasis on objectivity. A fair measure and study of criminality are only possible if an objective definition of crime is used. The above definition is not. The most acceptable view of crime usable in social science research is one that sees crime as the violation of previously stated law (Lopez-Rey, 1986). This definition assumes that a fair, logical, rational, and unemotional consideration go into the predetermination of acceptable and unacceptable behaviors. Unintended behaviors may have as harmful effects as intended ones but may not be considered criminal. A rational and logical predetermination enables a valuable social consideration of all relevant factors such as intent, amount of damage and cost to society. This is the definition used in this study.
Statement of Problem

The primary problem for this study is to explore the effects of development or modernization on rates of crime. The advent of industrial revolution had great hope for all societies. It was hoped that with industrial revolution and subsequent development most social problems would be solved. It was hoped, for example, that increase in productivity would make available all goods and services needed for comfortable living. This would result in improved quality of life enabling people to be their best. The industrial revolution and development which has followed it have not reduced crime and other social ills. Rather, the advent of industrial revolution has resulted in increased social problems. Durkheim (1966) observed "that the earlier years of industrial revolution in France were accompanied by more than 300% increase in crime in general and even greater increases in the rate of suicide" (p. 66). Though he saw and described a general breakdown of traditional collective values (anomie), Durkheim predicted that the new society will evolve a new collective conscience based upon individual values of people who, for their own personal interests, would seek to do good, leading to improved social morality. The increases in crime suggested that industrial revolution did not make the society morally better as Durkheim's idea of conscience collective implied.

The process of development has been shown to occur with rapid increase in all kinds of crime in many societies. Robbery, a major property and personal crime, like many other crimes, has greatly increased in industrialized countries of Europe and the United States.
(see Table 1). The rate of increase in robbery is not the same in all countries, but each of these nations shows significant increases. The rate of robbery increased by 25% in Switzerland and 425% in Sweden between 1960 and 1978. Other countries such as Australia, England, and the United States have also shown much increase in rates of robbery. During these periods these countries enjoyed a sustained high level of industrial development and modernization. The general quality of life in these societies also remained high or even continued to improve so that they maintained among the highest quality of life in the world.

Table 1

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>1960</th>
<th>1978</th>
<th>CHANGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>5.3</td>
<td>22.1</td>
<td>+317</td>
</tr>
<tr>
<td>England/Wales</td>
<td>5.6</td>
<td>27.0</td>
<td>+382</td>
</tr>
<tr>
<td>United States</td>
<td>50.1</td>
<td>191.0</td>
<td>+281</td>
</tr>
<tr>
<td>Sweden</td>
<td>8.0</td>
<td>42.0</td>
<td>+425</td>
</tr>
<tr>
<td>Switzerland</td>
<td>1.2</td>
<td>1.5</td>
<td>+25</td>
</tr>
</tbody>
</table>


The United States has continued to experience a persistent increase in both violent and property crimes. Increased affluence,
sophistication of investigative techniques and a continuously improved criminal justice system have not succeeded in reducing the rates of crime. All forms of crime and vice have continued to increase in the United States despite the above developments and much progress in behavioral sciences. Some scholars have suggested that industrial development may improve the quality of life of a society but that it is also conducive to crime, especially property crime (Clinard & Abbott, 1973; Messner, 1982; Sesay, 1977; Stack, 1982; Winslow, 1977).

In the United States the rates of all property crimes have continued to increase (see Table 2) despite sustained development and continuous progress in criminal justice processes and research, general emphasis on civil rights, public assistance for the poor and abundant social and economic opportunities. The rates of all forms of crime are increasing faster than the rate of population growth. Table 2 shows that robbery, burglary, larceny and motor vehicle thefts have continued to increase at a rate much higher than the rate of population growth.

Table 2

Number of Property Offenses Known to Police in 1970 and 1987 in the USA

<table>
<thead>
<tr>
<th>CRIME</th>
<th>1970</th>
<th>1987</th>
<th>%CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>203,235,298</td>
<td>243,400,000</td>
<td>+20</td>
</tr>
<tr>
<td>Robbery</td>
<td>349,860</td>
<td>517,700</td>
<td>+48</td>
</tr>
<tr>
<td>Burglary</td>
<td>2,205,000</td>
<td>3,236,200</td>
<td>+47</td>
</tr>
</tbody>
</table>

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Table 2--Continued

<table>
<thead>
<tr>
<th>CRIME</th>
<th>1970</th>
<th>1987</th>
<th>%CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Larceny</td>
<td>4,225,800</td>
<td>7,499,900</td>
<td>+78</td>
</tr>
<tr>
<td>Motor Vehicle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Theft</td>
<td>928,400</td>
<td>1,288,700</td>
<td>+39</td>
</tr>
</tbody>
</table>


It is not only the rates of property crimes that have continued to increase. Violent personal crimes have continued to increase even more rapidly (see Table 3). The same reasons that cause increases in property crime may also contribute to increases in personal crime. This is contrary to argument by some scholars that modernization contributes to a rise in property crime rates but "have no such effects on violent personal crimes" (Messner, 1986, p. 38).

Table 3

Total Number of Arrests of Offenders for Violent Personal Crimes in USA

<table>
<thead>
<tr>
<th>CRIME</th>
<th>1970</th>
<th>1987</th>
<th>%CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>203,235,298</td>
<td>243,400,000</td>
<td>+20</td>
</tr>
<tr>
<td>Murder</td>
<td>16,000</td>
<td>20,100</td>
<td>+26</td>
</tr>
<tr>
<td>Forcible Rape</td>
<td>37,990</td>
<td>91,110</td>
<td>+140</td>
</tr>
</tbody>
</table>

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Table 3--Continued

<table>
<thead>
<tr>
<th>CRIME</th>
<th>1970</th>
<th>1987</th>
<th>%CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggravated Assault</td>
<td>334,970</td>
<td>855,090</td>
<td>+155</td>
</tr>
<tr>
<td>Total Violent Crime</td>
<td>738,820</td>
<td>1,484,000</td>
<td>+101</td>
</tr>
</tbody>
</table>


During this period when both property and personal crimes have rapidly increased in the United States, the population has increased only from 203,235,298 to 243,400,000, (or by 20%). The disproportional increase in rates of all forms of crime compared to increases in population rates suggests that increases in crime may not simply be due to population increases or that the changes simply reflect population dynamics. These continuous increases have been a pattern in the United States through its history as a modern industrial country. Between 1960 and 1963 "the national rate of criminal homicide increased by 35%, the rate of forcible rape by 65%, aggravated assault by 67% and robbery by 119%" (Winslow, 1977, p. 178).

Social, economic and industrial changes associated with development have not succeeded in reducing crime and other social problems in most of the developed and developing countries either. Data from both the industrialized and developing countries suggest that the process of development has been frustrated by increases in all forms of crime.
International crime statistics reveal that criminality has increased steadily in the United States, Europe, and the British Commonwealth in the period since World War II (Shelley, 1981, p. 68). These crime patterns in the industrialized countries are seen by many scholars as a natural outgrowth of the process of social and economic development. Some criminologists claim that industrialization leads to increased productivity in the society which in turn results in the greatly increased availability of goods that become targets for criminal activity, (Cohen & Felson, 1979; Devine, Shelley, & Smith, 1988; Fisher, 1987; Henry, 1982; Stack, 1982).

Increases in crime are also evident in most developing countries today. This leads some scholars to conclude that the increases show a repetition of patterns experienced by today's developed countries during their own periods of development. According to these scholars, the developing countries of today are merely repeating what those countries which are now developed had experienced when they were going through their own process of development (Clinard & Abbott, 1973).

In their study of crime in developing countries Clinard and Abbott (1973) found that the increases and changes in rates and patterns of criminal activity in today's developing countries are very similar to the patterns which existed when today's developed countries were experiencing their own process of development. This position is shared by many scholars; for example, Hemley and McPheters (1975) have concluded that crime is an "externality of economic growth." They suggest that increased levels of criminal activity
are direct indicators of modernization or development.

The pressure and general desire to develop or modernize, and the desperate attempts used by societies to achieve this makes the exploration of the phenomenon an imperative task. Another fact that makes development such an important subject of study is the fact that it may have specific and different impact on specific societies which may in turn influence other societies. The process of modernization in the United States has influenced the society differently than the process of development in Japan. Because of these differences, the influence these countries have on other nations is very different. Modernization in America has made it a military super power. The non-military orientation of Japanese development has made it an economic superpower whose global economic influence differs from the military influence of other countries such as the United States of America on other countries.

The desirability of development as a process which improves the society's ability to meet its own needs would suggest that development results in a positive change in quality of life and of human behavior. This change has been associated with increase in crime and other problems in some societies, as discussed earlier, but with much less increase in other societies. Shelley (1981) suggests that some societies, while they experience changes usually associated with development, they retain some of their traditions which are not criminogenic.

Studies have shown that some societies while experiencing rapid social and economic development have succeeded in maintaining low
rates of crime (Adler, 1983; Chang, 1988; Clinard, 1978; Rogers, 1986). Clinard (1978) argues that social and political characteristics such as maintaining community responsibility, youth integration, political decentralization and emphasis on conformity in Switzerland, have made the rate of crime in that country much lower than in other equally developed countries. Other countries, such as Ireland, Japan, Peru, Algeria, and Costa Rica, have also succeeded in maintaining low levels of crime while they experience social and economic development.

Though many criminologists and available data have suggested a link between rapid industrialization and crime, there are exceptions. "No country has developed faster than Japan since the Second World War, yet most recent statistics indicate that its crime and delinquency rates are remarkably lower than those of other countries" (Chang, 1988, p. 140).

What, then, is responsible for increases in crime in some societies but not in others? Odekunle (1978) suggests that it is the capitalist system of economic development which is criminogenic. According to Odekunle, the capitalist economy creates the "economic man," who accumulates wealth and property at the expense of others, and fosters unemployment, marginal and meaningless employment resulting in obvious and relative unacceptable poverty (p. 88). In their experience with development, socialist countries have much lower increases in the rates of crime compared to their counterparts in capitalist countries. The fact that Saudi Arabia, Japan, and Switzerland are capitalist countries with low crime rates despite
increasing capitalist socio-economic development suggests that the capitalist mode of development may not necessarily be the culprit. In some countries (especially the Third World), the increases in crime seem to be faster and greater than increases in development. In some of these societies political and economic development appear to be permanently sabotaged by corruption and crime. In some countries, such as Nigeria, things are so bad that the public lives in permanent fear due to the unpredictable corrupt governments and the overwhelming presence of street crime.

The major questions then are what exactly is the nature of the relationship between crime and development, and why is it that some societies experience much development with little crime, some much development with much crime and others have little development with much increase in crime? These questions can only be adequately addressed by comparative analyses.

The Purpose of the Study

The purpose of this study is to examine the popular assumption of a causal relationship between social and economic development and crime. The tendency of the two to occur together has led many scholars to conclude that one may cause the other. By claiming that crime patterns that exist in the developed countries are the natural outgrowth of the process of social and economic development, proponents of modernization theory of crime suggest that increases in crime are inevitable consequences of socio-economic development (Clinard & Abbott, 1973; Fisher, 1987; Messner, 1986; Sesay, 1977; Shelley, 1981;
There seem to be adequate data which show increases in criminal activity in societies experiencing development. Proponents of modernization theory of crime share the general orientation of modernization theory. This is the perspective which (among other things) argues that "there is one universal, unilinear pattern of development which all nations go through. Consequently, there is a single pattern of crime associated with modernization as exemplified by the history of advanced western nations" (Horton & Platt, 1986, p. 118). These scholars often ignore the fact that some societies which have comparable levels of development do not have the same pattern of criminal activity. Some societies with lower rates of development may actually have higher rates of crime.

The purpose of this research is to explore the extent to which social and economic development occur together with increases in crime. This is done by examining the process of development and crime rates in various countries over a period of 25 years. Development is indicated by the presence of social, economic, political, and structural elements indicative of a society's ability to use its resources or produce goods and services needed for the welfare of its people. It is also indicated by general actual changes in the society which can be seen in results of the social changes such as increase in life expectancy. These indicators are considered to indicate the process of development though it is not assumed that they are the only indicators of development, neither is it assumed that they are the most effective in indicating development. They are used because
they seem to be the most measurable and the most universal upon which data are available.

The rate of criminal activity in the same countries, during the same period, is examined to show how changes in the rates of criminal behavior in these societies compare to the process of development. The study assumes that behaviors defined and reported under specific criminal designations meet the universal broad definitions of those crimes such as homicide, theft and fraud. No attempts are made to question the definition of individual crimes by specific societies. This is because studies have shown that the use of controlled definitions and data collecting techniques have not produced data that are much different from data collected and reported by individual countries (Bennett & Lynch, 1989). Even when there is a consensus on the definition of criminal behavior in a particular society, the judicial process in the same society, through the adjudication process, does not always arrive at either the same verdicts or sentences.

It is correct and convenient to accept the records of criminal activity in each society as defined and documented by that society. It is what each society defines as criminal behavior that it passes laws against, prosecutes, convicts and punishes. The classification of total crime includes behavior which may not be criminal in some societies at all but which may be in others.

The study assumes that there may be a significant relationship between specific socio-historical and geo-political factors in every society which either affect the rates of crime in general or which influence the effect of development on crime. No attempt is made to
identify those and test them in this study. That may be done in a subsequent study. Such an endeavor is a major task which is beyond the scope of this study. If the study confirms co-relationship between development and crime in these diverse societies, the attempt to find relevant socio-cultural and geo-political factors will be irrelevant. The need for such a search will be indicated if the relationships are either non-existent or are inconsistent.

Another purpose of the study is to explore the basis for a better explanation of the dynamics of both development and crime. Such an explanation, it is hoped, will help criminologists to evolve comprehensive theories which are better able to explain the two phenomena. The findings of the study could also be helpful to people who have responsibility of planning for social and economic development in various societies. If crime is found to be a result of other factors rather than the dynamics of development, one would suggest that crime control mechanisms be focused on such factors if they are known. If they are not known both research and planning would emphasize efforts in seeking to identify them. On the other hand, if the study finds that development is indeed criminogenic it would be suggested that both researchers and policy makers invest more of their energies in finding ways of accommodating crime rather than attempting to control it.

The study also purports to underscore the significance of vigorous comparative research on both crime and development. Though criminologists have long recognized the importance of comparative studies, insufficient efforts have been put into studies which result
in adequate understanding of the nature of criminality. In doing comparative studies it is not enough to simply examine the different rates and typology of crime in different societies. We must assess the similarities and differences between and among nations. We must try to establish the relevance of those similarities and differences as contexts of specific social processes, such as development, and of major social phenomena such as crime.

Efforts must be made to determine what specific social characteristics make societies truly similar or different. Characteristics of the physical environment may define both economic and political potentials of a society, and, therefore, determine their rate and direction of economic development. A country's physical location determines its neighbors and strategic importance in the world community which in turn shapes its potential and actual alliances. The location of many Middle East countries and their role in world events demonstrates this point.

The history and culture of all societies affect their political and economic developments, but most of all they shape a society's political ideology upon which laws and social norms are based. Japan and other Asian countries are good examples of this. One needs to know whether historical and cultural similarities influence the experience of societies with processes of change and development.

Religious beliefs also affect and influence social and political ideologies: A recognition that shared ideologies and religious belief systems can make societies different, which in many other ways are similar, may be a very important one. Current comparative studies have tended to emphasize trends in western European countries and
America as cross-cultural and international studies. These societies may be more similar than different, so that similar patterns in criminal trends may be due to their inherent similarities rather than the nature of crime itself.

This study acknowledges common concerns about the definition of the concepts of crime and modernity, and the accuracies of official data and recognizes that crimes may be influenced by political interests (Bennett & Lynch, 1989). However it is the feeling of the author that the concerns are exaggerated since studies have shown that objective data collected by criminologists have not been found to be any more accurate. The question of definition is not relevant either, since it is logical to see that social meanings of common crime tend to be universal. The concern with crime does not need to be a moral exercise by criminologists, who tend to disregard what ruling governments consider as crime and impose their own definitions, in a desperate search for objectivity. Societies define crimes. Our concern as criminologists should be with those behaviors that representatives (governments) of such societies consider as criminal and not what we ourselves do. It was Durkheim (1966) who said, "What confers the character of criminality on any behavior is not the intrinsic quality of the act but that definition which the collective conscience lends them" (p. 70). Durkheim went on to argue that if all people in a given society decide not to commit any acts currently considered criminal, those with the power to legislate public morality will define new acts as criminal capable of producing equally high moral outrage. Even objective definitions lend themselves to subjective
interpretations by those doing surveys, those responding to surveys, and those analyzing the data.

Summary

The fact that every society desires progress in the form of development and modernization is evident in the national policies of all nations. The extent to which this progress is achieved differs from one country to another. The hope that progress would improve the quality of life and make social life better has not been realized in most societies. The process of development itself has succeeded more in some societies than others, putting some societies ahead of others if one assumes that all are going the same direction. The history, geography, politics, and culture of societies makes them very different from one another.

The differences among societies makes the use of comparative studies to understand human society highly desirable. The shared desire for progress, the varied degrees of both success and failure in this pursuit in different countries, social and economic problems they each encounter and the inevitable dependency of countries on one another all make comparative studies not only desirable but imperative.

Attempts to compare societies must consider the foci of the comparisons being made. One must assume the existence of the phenomena and their characteristics. In this study development or modernization and crime are the phenomena of concern. The assumption is that all societies desire and pursue the process of development or modernization. The success rate of these societies in the process
of development is not the same. Problems encountered in the pursuit of progress differ from one country to another. The resources available for development also are not the same. Consequently, even for countries presumably going the same direction in the pursuit of development, some succeed more than others. All societies at all stages of development experience some levels of criminal activity. However, as they modernize or develop even more, attempting to improve the quality of life and other social processes, the societies may be confronted with even more crime. To some of these societies the levels of crime are high enough to become a major concern for those who make policies and those who live in such societies.

The failure of modernization to curtail crime and the tendency of crime to actually increase despite rapid social and economic development has led to a rather popular belief that the relationship is not coincidental, but that the process of development itself is criminogenic. The attempt made in this study is to explore the relationship between socio-economic development and crime. If there is a direct relationship between the two the correlation will be sustained in a similar pattern in all societies. If the pattern varies with a different in cultures and for geographical regions, it must be assumed that the causes for increases in crime must be sought in cultural, regional or other social facts unique to each society, or that the relationship is spurious suggesting a need for further exploration of possible intervening factors.
CHAPTER II

REVIEW OF PERTINENT LITERATURE

Introduction

The impact of development or modernization is a major concern for scholars of various disciplines. Hence, there is an abundance of literature on the history, the causes, the process, the benefits and the problems of development. There are scholars who are concerned with the process of development in general and some who are concerned with the kinds of development. Some scholars are satisfied with the view of development as inevitable social processes while some see development as a social phenomenon needing carefully articulated theories to explain. Some see development as a state of being exemplified by societies which are models for the rest of the world which must also seek to achieve. Others see it as a continuing process, never completely achieved by any one. As a process which affects the society by its emphasis on change, development is expected and is often beneficial and usually desirable. However, it does not eliminate social problems; in fact, it may contribute to them.

With the abundance of literature on development and on crime, which is itself a phenomenon of major concern to sociologists, an exhaustive review of literature on both phenomena is not possible in this study. Since the study is only concerned with relationship between the two, the literature reviewed includes only those that...
deal with each phenomenon as it relates to the other. The theories discussed are ones that either apply in the attempts to directly correlate the two or which provide explanations subsequently relevant in the explanation of the correlations between crime and development providing a basis for further explorations. The literature reviewed also includes scholarly works which provide specific and broad discussions of the phenomenon of development and crime. Such discussions contribute to a comprehensive understanding of the relationship between crime and development. When they do not establish a link, the literature used here provides meaningful insight into the nature of both crime and development independently. This is important because in order to adequately understand the relationship between crime and development it is important to understand the nature of these phenomena independent of each other. This is particularly helpful in attempts to explain the trends in either when there is no clear indication of a link between the concepts of development and crime.

Theories of Development

Development as a Natural Process

Development is the process by which a society makes use of resources available to it to achieve its goals. In other words, development is the process by which a society tries to maximize the potential of its social and natural resources to achieve individual and public goals (Wilber, 1973, p. 6). Usually these goals include enhancement of the human potentials of its citizens, solving problems which threaten them, and fulfilling fantasies and dreams of both its
leaders and its citizens. Durkheim (1966) saw development as an inevitable normal evolutionary process. He saw development as a process in which the major mechanisms which hold the society (or its social institutions) together undergo changes to better perform their roles (Durkheim, 1966). According to Durkheim, the evolutionary process involved in development is one in which traditional mechanical social systems give way to modern organic systems.

Theoretical considerations of development proposed by Durkheim (1966), acknowledged possible problems associated with the evolutionary process. As they become more aware of their creativity, their loyalty to traditional values and norms may breakdown, resulting in a state of normlessness he called anomie. However, the new society would be more efficient and productive, the new social institutions productive and effective, and the new society will develop a new collective conscience which will control individual tendency towards deviation.

This view of development as a natural evolutionary process is demonstrated by Rostow (1962) in the book *The Process of Economic Growth*. Rostow argues that societies evolve through five stages of economic growth. The first of this he calls the traditional stage with characteristics of traditional or primitive societies. During this stage growth is a discontinuous and dialectical process. Since it is not sustained, life is very unpredictable. People adapt by depending on chance. Gradually people start questioning this dependency and exploring their potentials and resources. This dissatisfaction leads to the second stage Rostow referred to as preconditions.
for economic take off. At this stage traditional barriers to change or progress are denounced in favor of new and alternative ideas. Essential characteristics of self-sustained growth evolve. Indigenous industries emerge for production of needed goods. This leads to the third stage, the take off stage (the period of self-sustained growth). During this stage the foundations laid in the second stage begin to bear fruits. Economic products and resources are reinvested into the economy making the society increasingly self-sufficient. With surplus dividends, the society is able to push to the fourth stage, the drive to economic maturity.

With resources to meet its immediate needs, and the ability to cope with unexpected social and economic problems, the society begins to assume a responsible, mature position in world affairs. Economic and political alliances are formed for the marketing of surplus goods and to assert political, social and economic interests. The mature society gradually grows into the final stage of mass consumption. With wealth and prosperity, sustained economic resources and industrial and technological productivity, the society can afford high consumption of raw materials (to feed industries) and natural resources to meet human demands.

Rostow (1962) sees each stage as requiring social changes and social adaptation. The more willing a society is to realize the need for progression, the more rapidly it would develop. He also sees many problems associated with this progression. It often involves deviation from acceptable norms, which is frustrating due to difficulties in predictability, and which is essential for planning and policy.
However, for a society to develop, these problems must be overcome, not avoided.

With few variations the Rostowian approach to development as a natural process is expressed by various scholars. Palmer (1980) sees development as a progressive move towards an idealized set of characteristics. Some of these may be seen in other societies and others evolved through social cultural change. Bendavid and Bendavid (1974, p. 10) see development as progression due to education and appropriate attitudes with no need for major infrastructural change. The position that development is a natural progression from a more primitive, less than modern way of living to more modern way of living is a rather common position among many social scientists.

**Development as Strategy**

Another perspective on development is the view that development is an economic strategy. According to this perspective, Meadows (1975) states:

Development consists of activities which bring shifts in the total national income, or shifts in the composition of the total output, or shifts in the per capita income or in the Gross National Product, or shifts in capital accumulation, or in some other directly relevant economic category. (p. 19)

Since development is a strategy oriented toward accumulation and distribution of resources, it is a planned social, political, and economic process. Prospects and problems are seen within the context of their economic impact.

The Rostowian model suggests that since development is patterned it can be encouraged or stimulated by removing obstacles to the take
off stage. The view of development as economic strategy, emphasizes economic planning at the expense of social and other non-economic forces. Meier (1985) observed that though developmental ideas and technology can be imported the process itself can only occur if it is carefully planned and implemented using indigenous forces and resources. This strategic planning, according to Meier, results in the emergence of a modern personality among citizens with paraphernalia of industrial nature, social and institutional practices conducive to change and a new intellectual perspective of culture.

The view of development as a strategy has had great appeal to nation builders, many of them in the Third World. In many of those countries powerful civilian and military dictators have engaged in Draconian policies to develop the people and societies based on national development plans. They make promises to their countries of infrastructural and economic development. They pass laws or decrees to force conformity or change.

The strategic view of development often assumes specific results to specific actions. The tendency to force people to comply with decreed change has a tendency to cause resistance and rebellion, hence, constant military takeovers in these countries. The promises made in strategic planning often are made to sound good, but are often not as easy to fulfill, resulting in mass dissatisfaction, social discord and many social problems.

Development as an Inevitable Result of Social Inequalities

The radical approach takes issues with the tendency to view...

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development from the western perspective. According to Bendavid and Bendavid (1974), the basic conception of development as:

A process through which a society moves from a particular (underdeveloped) socio-economic condition to another, a more desirable (developed) socio-economic condition as a consequence of education in appropriate attitudes and skills, technical assistance and basic infrastructure. (p. 10)

is not right. To the radical theorist, this tendency to see development from a Western perspective is misleading. True development is based on each society determining what its unique needs are, and defining the means of meeting those needs which are based on the society's own unique resources, political, social and economic circumstances.

Developed countries see underdevelopment in social and economic inequality, unemployment, lack of human dignity and poverty (Seers in Wilber, 1973, pp. 6-7). These problems, according to Bendavid and Bendavid (1974, p. 12), may be as much or even more of a problem in the developed as in the underdeveloped countries. The traditional view of development imposes on poor societies a Western view of development. Given a real choice, people in poor countries may not be interested in emulating the characteristics of rich and industrialized societies (Bendavid & Bendavid, 1974, p. 12). This view of development, also referred to as the critical or Marxist approach, sees the relationship between the developed and less developed countries as a new form of colonization called imperialism. Proponents of this position disagree with the tendency to see societies as independent of each other in their pursuit for development. The concept of Third World is questioned. The general perception of Third World countries as poor emerging countries riddled with poverty and
political instability is questioned. The most developed countries have large quantities of poverty and unstable conditions. The designation itself is seen as masking the true nature of imperialism.

Chilcote (1984) defines these as "countries that are exploited and oppressed, have less technology and development, whose underdevelopment is brought about by colonialism and imperialism, and dependency upon the dominant capitalist system and outside influences" (pp. 1-2).

The Marxist approach challenges the notion that the flow of capital and technology from advanced capitalist nations to the backward nations destroys feudalism and inequalities leading to capitalist development. "Many Third World countries are shaped largely by the needs of the industrialized capitalist countries" (Chilcote, 1983, p. 7). Imperialism is seen as a particularly "rapacious stage in the history of capitalism which intensified the exploitation of the imperialized formations while augmenting the process of accumulation by the more advanced bourgeoisie of the imperialist countries" (Ahmad, 1983, p. 33).

In summary, the Marxist approach sees development and underdevelopment as consequences of social and international inequalities. Developed countries have achieved their position at the expense of the less developed countries which remain poor as a result of exploitation by the rich and developed nations. The process of development is seen as the result of the dynamics of imperialism.

Summary

The Marxist or Imperialist views of development are seen as one
since both approaches emphasize dependency and exploitation of both individuals and governments of underdeveloped countries. They both argue that the process of development is brought about by the growth of working class political and economic consciousness and independent organizations which benefit both the working class and the bourgeoisie (Howe, 1982). The Marxists see this as ultimately not benefiting the lower class or the underdeveloped countries as they continue to be perpetually exploited. To them development would only occur with the development of a national consciousness, revolutionary in character to change the equation (Edelstein, 1982; Henfrey, 1982; Howe, 1982; Johnson, 1982). Non-Marxist imperialists see the exploitation as benefiting the rich and poor in the developing countries, as being responsible for social and economic dynamics in both developed and developing countries and between or among them. Since every one benefits, development could occur through negotiations which will increasingly improve the benefits of these countries leading to capitalist development which the benefit to the poor and helps developing the countries without a need for nationalistic revolutions which often tend to be misguided and corrupt (Ahmad, 1983; Howe, 1982; Johnson, 1982).

Dependency Theory

The end of colonization and the emergence of the new world order have resulted in various theoretical attempts to explain political, social and economic processes in, between and among various nations. One of these is dependency theory which sees the end of political
colonization as the dawn of economic and social dependency by former colonies on former colonial master nations. Dependency theory emphasizes the extent to which this relationship affects the former colonies.

The many years of colonization subjected the colonized nations to laws, economic, social and political systems reflecting those of the nations which colonized and ruled them. Some of these former colonial masters are also economic, military and industrial giants who control the world's financial, military and industrial markets. Poor countries depend on the richer and industrialized countries for access to the world market systems. Dependency theorists also claim that the wealthier nations also control the raw materials which are abundant in the Third World, as they control world markets. Development in these countries is molded after the industrialized nations out of choice or necessity (Johnson, 1983; Petras, 1982; Weeks, 1982).

Dependency theory originated in the 1960s through the work of a number of academics and development economists who were particularly concerned over the continuing economic failure of Latin American countries (Webster, 1984, p. 84). It has become a prominent theory especially among academicians from the Third World. Proponents of this theory argue that the massive and persistent poverty in the Third World countries is caused by exposure to the economic and political influences of the advanced countries. They reject the diffusion thesis of modernization theory which sees the impact of advanced societies as progressive. They also reject the imperialism thesis of Marxist theorists (Chilcote, 1984; Edelstein, 1982;
Henfrey, 1982).

A major spokesperson for dependency theory is Andre Frank (1974) who claims that the persistent poverty of the Third World is a reflection of its dependency. Frank argues that the periods of merchant capitalism and colonialism forced a specialization of production on Third World countries that was primarily export oriented, of limited range and geared to the raw material needs of imperial powers. The Third World elites were incorporated into the system and could do little to establish a more diverse, independent form of economic activity. They became the mere intermediaries between the rich purchasers and the poor producers. Frank describes their (the elites) lifestyles and wealth as more and more tied to and so heavily dependent on the activities of the economic elite in the developed countries (Angotti, 1982; Chinchilla & Deitz, 1982). While the Third World elites enjoy a high standard of living from this relationship, the masses experience chronic deprivation as their surplus production is taken from them in the local rural region and transferred to the rich farmers and merchants in their own country and then on abroad. Frank argues that there is a chain of dependency running down from the highly advanced centers of the world down to the rural merchant in the poorest countries. While countries of the advanced center can develop through self-growth, others since they are dependent, can only possibly expand if the dominant interpel expands.

Dependency theory is actually a very broad, eclectic school of thought whose only common ground is the assumption that
underdevelopment has causes external to the underdeveloped nations. Thomas Angotti (1982, p. 124) presents four major perspectives under the theme of dependency:

1. The critique of dualism, whose major position lies in the criticism of the traditional view that all social history is explained as gradual transition from a traditional underdeveloped society to a modern developed one.

2. Core/peripheral position which presents the notion that the world is divided up into core and periphery. The core is made up of affluent advanced countries and the periphery of poor underdeveloped countries.

3. The unequal exchange advocates who argue that underdevelopment is related to the disadvantage of peripheral nations on the world market.

4. Dependent bourgeoisie theorists regard bourgeoisie in the periphery as entirely dependent on external forces and therefore unable to play a progressive role in their countries (Edelstein, 1982; Howe, 1982; Johnson, 1982).

The major implications of dependency theory are that: The process of development in the Third World is not only modeled after the first world, but is actually controlled by the developed countries. The problems of underdevelopment are also to be blamed on direct or indirect actions of the developed countries. Social and economic problems in these countries can be better explained by understanding the dynamics in the developed countries which influence social and economic policies in the poorer or less developed countries.
Summary

Dependency is a popular perspective because it tries to locate the origins of current patterns of relationships among nations and the dynamics of such relationships. The problem of underdevelopment is seen as a result of unequal exchanges between the developed countries and the developing or less developed ones. The developing or less developed countries, most of which were colonies of now industrialized countries, are said to continue to depend on those industrialized countries. The experience of colonization left these countries with a value of dependency, which include a need to model their development after the development in developed countries. Some of these include constitutions and political ideologies with no basis in the countries' traditions or cultures. Economic, political and social elites in some developing countries are seen as attempting to emulate the values and lifestyles and may actually act as agents of the elite in industrialized nations, often at the expense of their societies' resources.

Dependency theorists see underdevelopment as both direct and indirect result of the relationship between these countries and the developed ones. The industrialized countries benefit from this dependency. Underdeveloped countries act as emptying grounds for the surplus production of industrialized countries and a source of raw materials for them. Since the elite in the Third World countries who make politics try to emulate the elite of industrialized countries, the policies they make both for development and governing of
their countries tend to be inappropriate for those societies (Adeyemi, 1980; Angotti, 1982; Henfrey, 1982; Johnson, 1982; Webster, 1984; Weeks, 1982). Hence, many problems associated with both under-development and development are seen as the product of the influence of the developed countries (Chilcote, 1984, pp. 1-2).

**World Systems Perspective**

In recent years the world systems perspective has become a major theoretical attempt to explain the nature of economic development and underdevelopment. The perspective has also been used to explain the nature of international relations and to classify the world community. Developed by sociologists, economists and political scientists, mostly from the Third World the approach can also be seen as a Third World perspective of the world. As a descriptive model it attempts to show the dynamics of development in the industrialized countries and of underdevelopment in those not developed. It also shows the process of development or progression from the underdeveloped (or peripheral) stage through developing (or semi-peripheral) to the developed (or core) stage. The world systems approach unlike dependency theories suggest that the peripheral nations need not be dependent on the core nations. In fact, they may perceive of their dependency as independence and consider it alignment which benefits them as much as or even more than the core countries.

The world system perspective was introduced by Immanuel Wallerstein (1980) who describes the world system as a "network of unequal economic and political relationships among the developed and
less developed countries" (p. 53). According to Wallerstein, the modern world comprises a single capitalist world economy which has emerged historically since the 16th Century and which still exists today. National states are not societies that have parallel histories, but parts of a whole reflecting that whole. This theory sees the world as comprised of three parts: The core societies, the peripheral societies and the semi-peripheral societies (Chirot, 1977, p. 13). The core societies include the rich and powerful societies that are relatively independent of external controls. The peripheral societies which include the relatively poor and underdeveloped societies which are manipulated and controlled by the core powers. The semi-peripheral which are countries midway between the core and the peripheral which are trying with modest success in diversifying and developing their economies (Frank, 1984; Wallerstein, 1974).

Proponents of world system perspective argue that "the hallmark of capitalism is the fact that it has displayed 'growth' as a system over its history. That there are five areas in which this growth shows itself" (Hopkins & Wallerstein, 1982, p. 106). The five areas, according to Hopkins and Wallerstein, are mechanization, contractualization (free social and economic association through which people or parties make contracts protecting their interests and guiding their relationships), commodification (transfer of land and labor into commodities), interdependence (division of labor and interdependence of productive forces), and polarization (increasing awareness of unevenness of development in different zones of the
world. Development is seen as the process of change in these areas. The whole world community is structured as an interrelated system of units at different stages of development or change in the five areas.

According to world system theorists, the present well being of advanced states is due to the advantageous relations they have with less developed states (Frank, 1984, p. 183; Hopkins, 1982, p. 10). The natural resources of the poorer (peripheral) nations exported to the more advanced (core) nations. The advantaged position of profit, interest and capital accumulation oriented core countries' results in their manipulation of social, economic, social and political processes in the peripheral nations resulting in stagnation in these areas.

The ability of core nations to manipulate the peripheral nation's results in their ability to control the process of development in these areas. They can only develop in the directions under conditions favorable to the core nations. Since the inequality benefits the core nations, they only pay lip service to the desire for development in peripheral countries. The offer of economic aid often includes loans with conditions which undermine the conditions necessary for repayment such as devaluation of currencies, flooding the markets of peripheral nations with goods made in core countries which guarantee the outflow of capital and infiltration of political institutions causing instability and often expensive investment in military activities. The peripheral countries are kept in the situation of permanent dependency export dependency, the debt trap and the corruption and exploitation by multinational corporations (Veltmeyer,
Proponents of world system perspective argue that true development in the core nations can only be achieved through the liberation of their economics, social and political institutions.

True autonomy is seen as their only hope. This can be achieved by renegotiation of relationships and assertion of control over their resources (Wallerstein, 1974).

World system theorists see some social problems in peripheral countries as the product of the dynamics of the relationship with the core nations. They also see some problems as resulting from practical difficulties in coping with social, economic and political realities in their societies, also caused or influenced by the core nations.

Summary

World system perspective is a theoretical attempt to explain the phenomenon of development by looking at the nature of societies in the abstract (Hopkins & Wallerstein, 1982, p. 41). The modern world is seen as comprising a single capitalist world economy which has emerged since the 16th Century and which still exists today. This abstract world is seen as consisting of states which do not have parallel histories, but rather as parts of whole interconnected systems. The system consists of three groups of nations; the core (the developed), the peripheral (the underdeveloped), and the semi-peripheral (those seen as evolving visible signs of development) which interact and benefit from each other, though
the core countries have an unfair advantage over the peripheral. The development in the peripheral is controlled by the core countries. Social (including criminal), economic and political problems in the peripheral nations are seen as a result of the influence of the core countries. Development and the control of social, economic, and political problems will be achieved only when the imbalance is corrected giving the peripheral countries more control over their destinies. Major criticism of the world system's approach are that it fails to recognize or trivializes the significance of indigenous forces in the peripheral nations and fails to explain the causes of social, economic, and political problems in the core nations.

Modernization Theory of Development

Modernization theory has its roots in the work of early social thinkers such as Emile Durkheim, August Comte, Max Weber and Karl Marx. These and other classical sociologists were concerned with the progress which led to industrial revolution but also a major product of it. Modern modernization theory became prominent in the 1950s and 1960s and attempted to draw from the works of Durkheim and Weber to explain rapid social development.

Modernization theories assume that societies progress from traditional to modern types by changing ways of thinking and behaving. These modern ways of thinking and behavior are considered better, more desirable and beneficial to the society. The change includes alteration in the structure of societies involving a transition from traditional mechanical type societies to modern organic type.

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This results in new patterns of morality and system of norms which are much less rigid than those of traditional mechanical societies. This means that modern individuals have much more freedom to be creative and to act. The new society also leads to other structural changes such as urbanization, division of labor, industrialization and formalization of education and other institutions (Webster, 1984). Formalization of life, of social and economic activity adds purpose to life. People invest and engage in more productive activities.

What results is a more productive and efficient society.

Modernization has problems (or potential problems) as the emphasis on change may be destabilizing making life less predictable. Scholars have linked many social problems (including crime) to the process and dynamics of modernization.

Modernization theory is traced to the work of early sociologists, especially Emile Durkheim and Max Weber. In his work, The Division of Labor in Society, published in 1893, Durkheim proposed that there are two types of societies, the traditional and the modern, which have different social characteristics. The traditional society is the more backward type held together by mechanical solidarity. This type of society, according to Durkheim, is stable and predictable because of control mechanisms. However, it is less progressive and generally less productive. The other type of society, the modern one, is held together by organic solidarity emphasizing and in fact exploiting the diversity of its members, hence, encouraging individuality in the form of division of labor to maximize creativity and productivity. Durkheim saw the unsatisfactory nature of the traditional societies
as establishing the basis for change to modern types.

Max Weber, in his now famous text, The Protestant Ethic and the Spirit of Capitalism, argued that the distinctive care, calculation and hard work of Western business was encouraged by what he referred to as the Protestant work ethic, a value system which came to pre-eminence in the 16th Century, promoted most forcefully by the doctrines of Calvinism. According to Max Weber, the religious commitment to hard work and deferred gratification helped to create highly productive and investment oriented societies, characteristics which are necessary for development. The major contribution of Max Weber in this regard was his pronouncement of the significance of particular values, lifestyles and behaviors in social, economic, and political development which transformed certain societies.

As a theory, modernization evolved following the decline of the old colonial empires. Talcott Parsons and other Western sociologists started proposing a developmental process for the Third World, molded after Western democratic and capitalist systems rather than the socialist one (Webster, 1984).

In recent years scholars, especially from the developed and industrialized but also some for the Third World, most of whom have been educated in the West, see modernization theory as best able to explain lack of development in the Third World. They also see the theory as providing the best hope for the process of development. Some of the major tenets of modernization theory include the following: Lack of development is a condition prior to rapid and high levels of industrial development. Gross National Product
(GNP) is used to indicate economic development. Other indicators of development include perceived quality of life, basic needs and rates of consumption (Webster, 1984).

Lack of development is the result of the socio-economic conditions in these societies that create obstacles to modernization. As a result of this perception, modernization theorists argue to that development would occur only if "significant numbers of the population must come to despise their current situation and must come to the belief that progress is both desirable and possible" (Ray, 1970, p. 307). This means that in order to develop some cultural characteristics of these societies must change or be abandoned in favor of modern and progressive ones.

Development is a relatively straightforward process of efficient social adaptations to periods of strain (Webster, 1984). During these periods, when there is pressure to change traditional behaviors, attitudes give way to new values and behaviors. This process may be strenuous to the society as major traditional characteristics which act as stabilizing factors are forced to give way to these new values and behaviors.

Modernization theorists claim that development must proceed in the Third World along similar lines as it has in western societies (Webster, 1984, p. 55). They see the history of the social, economic and political development in Western Europe and North America as a blueprint of development throughout the world. They contend that Western and American economics will continue to grow and develop so that they enjoy the prosperity of high mass consumption. This development can
spread by diffusion, encouraging the evolution of features such as urbanization, literacy, mass media, a heightened political awareness (or democracy), capitalism and the replacement of irrational tradition with rational culture. Proponents of this theory also assume that the evolution of capitalist development along the linear path toward modernization associated with the practices democracy, constitutionalism, electoral participation, and competitive politics are the only way to real development (Chilcote, 1983, pp. 9-10).

Modernization theorists claim further that for development to occur, the culture must experience three major transitions. First, there must be changes in the values or desires for traditional things to values and desires for new things and ways of acting. This means that there must be a change in social attitudes which involves increased curiosity and actual exploration for new and foreign ideas. Second, the kinship system must change or be replaced by an achievement oriented system. This means that there must be the introduction and enforcement of a merit system in all major aspects of social, economic and political life for the society. Thirdly, that the view of the world must change from the emotional, superstitious, fatalistic and a naive sense of individual and public content to one that encourages looking forward to an open world to be conquered and sees problems as obstacles to be explored and resolved. Development is therefore a psychological process requiring the mental capabilities to be curious and the creativity to solve problems. Both individuals and the public have to evolve a new progressive mind set.

Proponents of modernization theory recognize the potential
upheaval of the kind of change they consider necessary for development to occur. Durkheim (1933) had earlier recognized the impact of this when he introduced the concept of anomie. Many social problems are seen as potentially or actually associated with this process of change and development.

Critics of modernization theory have suggested that the primary concepts of traditionalism and modernity are too vague, as all societies contain elements which can be construed as being both. Societies may also be considered, by some critics, as to not stop being traditional because they are developed. Japan is a good example of a society which is developed as much as or more than many, yet the Japanese society can be considered a traditional society by almost any definition of the word. Kinship ties, which are generally considered as a primary primitive characteristic, persist in many modern and developed societies.

Summary

Modernization theory is a descriptive theory of modern social, economic and political development with its roots in classical sociology, especially in the works of Emile Durkheim (1858-1917) and Max Weber (1864-1920). Both saw development as the evolution of primitive societies to modern type societies. The process, they both argued, involved the breakdown or major changes in both structural and cultural aspects of societies and adoption of values and attitudes considered progressive.

Proponents of this perspective see industrialized, capitalist
and democratic countries of Western Europe and North America as models of this development. They see underdevelopment as the result of cultural and social characteristics in those societies which prevent them from adopting values, attitudes, and behavior necessary for change. Change has to be a highly desired and pursued phenomenon. Those who propose modernization theory recognize it as potentially being very problematic as it challenges all major social characteristics which hold the society together and as responsible for stability. However, they contend that for development to occur those problems must be overcome, not avoided.

Theories of Crime

Introduction

The field of criminology is replete with theories which attempt to explain the phenomenon of criminality. The theories can be classified into different categories based on their main focus as they try to explain criminality. There are theories which focus on the characteristics of offenders. These theories emphasize what personality characteristics might contribute to tendencies and actual criminal behavior. Some of these theories have emphasized physical and biological abnormality as the distinguishing mark of the criminal (Vold & Bernard, 1986, p. 47). These theories contend that biological inferiority may produce in criminals certain physical characteristics. Personality theories also consider mental deficiency as possible cause of criminal behavior.

Other theories see crime as learned behavior, similar to other
forms of behavior. They are, therefore, interested in the processes by which these behaviors are learned. Gabriel Tarde (1843-1904) claimed that people imitate one another if they have close contact with one another (Vold & Bernard, 1986, p. 208). Edwin Sutherland (1883-1950 in Vold & Bernard, 1986) extended Tarde's ideas, arguing that criminal behavior is learned if one interacted closely, over an extended period, with people they look up to who consider those behaviors as acceptable. The above theoretical orientations are helpful in explaining specific criminal behaviors and for doing mis sociological analysis. They are, however, not effective or adequately applicable for macro-sociological analysis or for cross-national comparisons.

Other criminological theories are more suitable for macro-sociological analyses and for cross-national comparisons. Some of these (ecological theory, conflict and Marxist perspectives, structural strain, control and modernization theory of crime) are discussed as they provide theoretical basis for generality necessary in comparative and macro-level analysis. Particular attention is paid to the modernization theory as it is the theory upon which this study is based.

**Ecological Theories of Crime**

Many criminologists have tried to look to the environment of criminal activity to explain the phenomenon of crime. The attempt to link crime to specific ecological factors is credited to the works of Clifford Shaw and Henry McKay (1979) who, in *Social Factors in*
Juvenile Delinquency and Juvenile Delinquency in Urban Areas

constructed a series of spot maps of Chicago, pinpointing the residences of juveniles involved in various criminal activities (Vold & Bernard, 1986, p. 165). Shaw and McKay used these maps to conclude that there are specific areas, often located within industrial zones, with high crime rates. The highest rates of delinquency were found in the areas with lowest economic status. Areas of high delinquency were areas occupied by lower socio-economic class, foreign born, recent immigrants and Black families. Their argument was that the socio-economic status and specific areas in urban centers were related to criminality. Since these studies, many other studies have been done to explore the inner city phenomenon and its relationship to crime and delinquency, especially since change in ethnic and individual or cohort compositions of these areas does not change significantly the rate and character of crime in them.

Urban and poor neighborhoods consist of some characteristics seen as conductive to criminal behavior. These include high density, (ensuring anonymity) poverty (often in the presence of much wealth since most of these areas are adjacent to industrial and business zones), transience (or lack of stable family and social relationships), dilapidation (deteriorating buildings and infrastructures). All of these lead to moral cynicism, diminished social control, decreased motivation to conform to values of the dominant society and generally increased opportunities for crime and deviance (Bursik, 1988; Sampson, 1989; Stark, 1987). The economic and social conditions in specific neighborhoods are seen as being conductive to
criminal behaviors or nonconforming tendencies.

In recent years, Peter M. Blau has done many studies on the relationship between urban structures and criminal behavior. According to Blau (1977) heterogeneity increases the probability of fortuitous contacts between members of different groups promoting high rates of inter-group association and less crime. In typical American cities, however, there are social inequalities due to race, economic and social status which depress the rates of intergroup association leading to hostilities of personal and economic crime.

The emergence of geographical zones tied to ethnic and socio-economic groups lead to social disintegration and the development of subcultures, many of them unadaptive to standard social norms. Structural conditions which hinder the development of integrated role patterns may lead to increased delinquency and crime (Friday & Hage, 1976). This may be responsible for high rates of delinquency in various social groups such as juveniles who need role models and minority and immigrant groups who also need to be integrated into the society.

A dominant theme in ecological theory is the concept of social disorganization. This refers to the inability of local communities to realize common values of their members or to solve their problems enabling them to integrate into the mainstream (Bursik, 1988, p. 519). Social disorganization results from lack of investment in members which is characteristic of people living in poverty and very difficult social and economic conditions.

Environmental factors have been linked to criminal behavior by many criminologists of modern times. In proposing the routine activity
approach, Cohen and Felson (1979) argued that criminal behavior results from structural changes in routine activity patterns in a society which effect the convergence of in time and space suitable targets, motivated offenders and the absence of capable guardians. Scholars who have linked urbanization to crime all emphasize structural and social conduciveness determined by anonymity, availability of goods that can be stolen, easy access and departure from crime scenes and absence of or insufficient law enforcement and informal social controls (Fisher, 1987; Sampson & Groves, 1989; Shelley, 1981; Stark, 1987). Criminal acts are seen as likely to occur if environments are conducive to their occurrence. The major argument of the ecological approach is that most human beings are capable of committing crimes. If exposed to environments which provides the opportunity for crime with perceived likelihood of avoiding detection, most people would commit crimes.

Summary

Ecological theorists of crime emphasize the importance of environment in criminal activity. The theory is linked to the work of Henry McKay, Clifford Shaw and other criminologists who observed in Chicago and other American cities that some districts continue to remain high crime areas over decades despite the fact that demographic characteristics change. Racial groupings may change, delinquency cohorts may outgrow delinquent acts and leave, social and economic mobility may move residents to new areas, who may (and often do) change their lifestyles. The new residents, who may have
no social, ethnic or cultural links to the previous ones, may be as delinquent as the former residents. These observations have led to the contention of ecological theorists that it is environments and their socio-economic characteristics and structural factors which are responsible for criminal behavior and high or low rates of crime.

Ecological theory is appropriate for comparative analyses both within and between or among nations. If it is structural factors rather than specific cultural, ethnic or demographic factors which cause crime, one would expect that all societies with similar environmental characteristics will have similar patterns of crime. The approach enables comparison and generalization.

Ecological theory is also important because of its implication for social policy. If it is environment rather than general social processes or individuals that are responsible for crime, then criminal justice policies would be directed towards environmental factors. This would be particularly relevant in comparative studies and benefit those who would understand and make policies in different societies.

The major shortcoming of ecological theory is that it ignores the processes by which delinquency or criminal areas are created (Vold & Bernard, 1986, p. 183). Ecological approach has continued to be a potent theory in criminology. It is very helpful in understanding the impact of specific social structures and other factors on social behavior enabling us a reasonable level of generality.


**Structural Strain Theory**

Structural strain theories propose that certain pressures or forces which are socially generated drive people to commit crimes (Vold & Bernard, 1986, p. 185). The approach is structural because it also proposes that these pressures or forces are not evenly distributed in the society. They tend to be highest among social groups with higher crime rates.

Strain theories also have been linked to the work of Durkheim who, in introducing anomie, suggested that the breakdown of traditional norms (in mechanical societies) during the transition to organic societies results in forms of social strain (Messner, 1982; Vold & Bernard, 1986).

Robert Merton (1967) extended the notion of anomie. He proposed the first strain theory by arguing that societies induce some social appetites culturally while their social structures limited the ability of certain groups to satisfy those appetites. As an American in multi-cultural and multi-racial society, Merton argued that in societies that are so diverse it is easy for certain groups to be disadvantaged in their ability to have access to certain desired goals. These difficulties, according to Merton, result in different coping mechanisms or modeled of adaptation (see Table 4).
Table 4

Merton's Typology of Modes of Individual Adaptation

<table>
<thead>
<tr>
<th>Modes of Adaptation</th>
<th>Cultural Goals</th>
<th>Institutional Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>I - Conformity</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>II - Innovation</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>III - Ritualism</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>IV - Retreatism</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>V - Rebellion</td>
<td>±</td>
<td>±</td>
</tr>
</tbody>
</table>

*Key + signifies "acceptance", - signifies "rejection", and ± signifies "rejection of prevailing values and substitution of new values."

According to Merton (1967) every society has specific cultural goals and institutionalized means of achieving them. If a society is stable and structurally equal and fail, most persons will choose to conform to both goals and means since both are shaped by the dominant values of the society. However, according to him, structural imbalance and social unfairness leads to the other forms or modes of adaptation which are considered deviant or even criminal. Conformity, according to Merton is the adaptation to standard goals and institutionalized means. Innovation is adaptation to standard goals, but failure to adapt to institutionalized means of achieving those goals. This Merton assumed was due to structural conditions and might result in differential socialization which does not include a mental commitment and appreciation of acceptable institutionalized means, but a general appeal to attractive social goals. Structural differentiation
can also lead to discrimination which reduces availability of acceptable means to achieving social and cultural goals. Innovation also results because the institutionalized means are not the only means of the achieving the goals even if they are the only ones acceptable. In fact, other unacceptable means can be as or even more affective, efficient and attractive. Insufficient commitment to or lack of access to institutionalized means can lead to the tendency to resort to other innovative means.

Ritualism, according to Merton (1967), was another deviant form of adaptation by people who want to play it safe. This involves the rejecting possibility of ever achieving cultural goals, but retaining institutionalized means as a form of allegiance to norms. Feeling inadequate and structurally trapped, these people do not want to rock the boat. They accept their inferior position as safe. They may not commit any crimes as they are committed to values of conformity such as hard work and honesty. Merton also identified a fourth mode of adaptation, retreatism, which he defined as failing to adapt to both cultural goals and institutional means. Some of these people simply surrender to their structural inferiorities and engage in behaviors that perpetually exclude them from the mainstream and what is considered normal life. Psychotics, outcasts, transients, addicts, vagrants, vagabonds and tramps are examples of people in this category (Vold & Bernard, 1986). According to Merton this lack of adaptation is necessarily due to a lack of commitment to the goals or means, but rather the fact that structural conditions in the society makes the possibility of achieving success unreal to them. They,
too, have dreams and the desire to succeed. These people tend to engage in self-destructive behaviors.

The fifth mode of adaptation, according to Merton (1967), is rebellion. Here the persons respond to their frustration by replacing the values of the society to new ones. These new goals and means may be political for example, the goal might be the achievement of a socialist state and the means a violent revolution. To these people the dominant values of their society may become acceptable as they consider them bad or generally unfair. Since values shape norms, cultural goals and institutional means rejecting these values also means rejecting the goals and means. These people might engage in acts which challenge existing order and rules and consider their criminal acts as necessary actions to correct a bad existing order.

Though strain theories have been used to explain delinquent characteristics in America and have focused on characteristics of offenders, their major emphasis is not on offenders. The major assumption of strain theories is that structural conditions cause strain which result in nonconforming behavior. Albert Cohen (1955) saw delinquency as occurring mostly among gangs, rather than individual kids, who saw the acts as providing them with status among their delinquent peers. Structural conditions enable the development of subcultural groups with a differential system of values, some of them delinquent. According to Cohen, school and other forms of behaviors are generally middle class values. Social structures and processes which exclude segments of the population from them force the differential values and behaviors.
Richard A. Cloward and Lloyd E. Ohlin (1960) also linked social structure to delinquency and crime by suggesting that social structures determine opportunities. The structure in the society according to them, resulted in a feeling of general hostility towards those who have made it. When pressures towards delinquency arose among young boys, they centered on reactions against the middle class values in which they may also believe, but consider themselves unable to conform to due to social structural pressures.

Structural strain theories have continued to be very popular in the attempt to explain criminal behavior. Data that continuously show higher crime rates among ethnic minorities and lower socio-economic classes continue to call attention to the significance of social and economic inequalities in crime. A look at structural variations in society shows the existence of subcultural groups who differ by age, race, ethnicity, socio-economic class and other factors. The subcultural identity implies that there are value judgments or a social value system which is a part from and part of the larger value systems of the dominant society. "The values of the subculture set it apart and prevent a total integration and therefore result in discrimination and often hostilities. Such groups often engage intentionally or unintentionally in behaviors considered criminal by the dominant society" (Wolfgang & Ferracuti, 1969, p. 75). Many studies have shown that economic and social inequalities which result from subcultural differentiation and discrimination results in increase in criminal activity (Clinard & Abbott, 1973; Devine, et al. 1988; Liebow, 1967).
Conclusion

Structural strain theorists assume that people generally may want to do good and conform to publicly accepted goals of the society and to the means of achieving those goals. Structural differentiation results in the development of subcultural differentiation and differential opportunity of access and adaptation resulting in social and economic inequalities. While the structure provides pressures to conform in the majority of the population, the minority have the pressures to not conform. Non-conformity results in engagement in deviant and often criminal acts.

Social strain theories are very helpful in the attempt to explain crime in multi-ethnic and multi-cultural societies, especially when crime rates differ so much. They emphasize a strong need for social integration to control crime and to enhance social and economic development. It assists in policies to improve the status of disadvantaged groups in such societies.

Structural strain theories are very helpful in cross-national studies. Structural characteristics show similarities and differences among societies. The extent to which specific structural characteristics affect criminal and other social trends can help in understanding the effects of similar characteristics in other societies. Some scholars have insisted that comparatively lower levels of crime in Scandinavian and other countries are a result of ethnic and cultural homogeneity and higher levels of social and economic equalities (Adler, 1983; Clinard, 1978; Norstrom, 1988; Stack, 1982). Other multi-ethnic and multi-cultural societies which have succeeded in controlling crime
and delinquency can contribute to enable societies similarly structured who have major problems with suggestions on how to solve these problems.

Control Theories

Control theories assume that the motivation to commit crime is natural to all humans and that everyone would commit crimes if left alone or given the opportunity. Since the inclination to commit crime is universally inherent in all people, the responsibility of the society is to restrain or control people. Criminal acts occur when restraining or controlling mechanisms fail.

Like most sociologists and criminologists, control theorists also trace their reasoning to the work of Durkheim. Durkheim (1966) suggested that anomie, the breakdown of traditional informal control mechanism inherent in traditional mechanical societies which occurs during the transition to modern organic societies was conducive to deviance.

Jackson Toby (1957) suggested that the strong tendency towards deviance and crime are only controlled if individuals perceived themselves as having a stake in conformity. People were better controlled, according to Toby, if they were made to see what they would gain by conforming to specific social expectations. If not convinced that they would benefit from conformity and compliance, they were more likely to commit crimes.

Walter C. Reckless (1961) proposed the theory of containment. He argued, as did Toby, that there were always strong tendencies
towards deviance (and criminality). These tendencies, which he referred to as social pulls, draw individuals away from accepted norms of living and of behavior. These social pulls include bad friends, a criminal subculture, deviant groups, mass media and other evil or bad social forces. Besides these social pulls are biological or psychological pushes from within the individual that drive him or her towards crime. These psychological pushes include restlessness, discontent, anger, hostility, aggressiveness, and need for immediate gratification. These social pulls and psychological pushes makes the tendency to commit crimes very intense. Aligned against these forces are internal and external control forces Reckless (1961) referred to as containment forces, both internal and external. External containment includes factors such as family life, support group, discipline, institutional reinforcement and other social pressures to conform. Inner containment includes factors within the individual which enables them to resist the urge to commit criminal acts. These include self-control, conscience, ego, strength, superego, tolerance, and patience.

Modern control theories are linked to the work of David Matza (1964) and Travis Hirschi (1969). Matza (1964) maintains that "delinquency neutralizes conventional moral values, makes them unable to control people, so that they can commit crimes and excuse themselves" (cited in Vold & Bernard, 1986, p. 240). The most outspoken proponent of control theory is Travis Hirschi. According to Hirschi (1969) humans have the motivation to commit criminal acts and will do so under suitable circumstances. Since this tendency is so strong and
natural, it can only be controlled through strong and effective institutional controls (Hirschi, 1969; Vold & Bernard, 1986). Hirschi proposes that four elements are important in controlling the behavior of individuals in order to prevent them from giving in to the urge of deviance. The elements of bond are attachment, commitment, involvement and beliefs. Individuals who are strongly attached to the society's significant social institutions and to other conforming members of the society are less likely to be involved in criminal behavior. Commitment to conventional lines of action, involvement or engrossment in conventional activities and the belief in the society's values or conventions result in conforming behavior and therefore reduces chances of engaging in criminal activity.

Hirschi (1969) argues that these elements function as informal forms of control. Individuals who are not committed to social groups such as families, groups, peers, school or other social institutions, or attached to others in order of experience, affection, a sense of closeness or positively involved in conventional activities and who does not share the society's beliefs about values and attitudes is more likely to violate them. Control theories attribute criminal behavior to our innately aggressive, selfish and violent criminal heritage (Vold & Bernard, 1986, p. 247).

Conclusion

The major assumptions of control theory is that human being have strong tendencies to engage in criminal behavior. This creates a need for control. This control is achieved by different mechanisms
which ensure conformity. According to Hirschi (1969) there are four elements of conformity or bonding. He identifies these as attachment to others, commitment to conventional lines of actions, involvement in regular and approved social processes, and sincere belief in the society, its values and norms. Social institutions are seen as existing to enhance these four elements. Criminal activity is the result of an individual’s failure in any of these areas. High crime rates in any society are a result of social institutions whose responsibility is to enhance them among members of the society. Control theorists are interested in the process of socialization through individuals development in these areas.

Since control theories emphasize social integration as the essence of conformity and obedience to laws, it is also useful in comparative analyses. Factors which contribute to the success or failure of social integration among societies can be assumed to be responsible for different rates of crime among them. Clinard (1978) observed that societies with low crime rates are highly integrated societies. From Adler (1983) in her study of nations not obsessed with crime, found that countries with little crime have the following characteristics: Ethnic homogeneity (cultural conformity), cultural commitment to traditional institutions such as family and religion, a strong evidence of religiosity or encompassing belief system, emphasis or moral and intellectual education and strong social commitment and involvement in ensuring conformity. Samuel Souryal (1988) also found that there is low crime rate among Muslim and Orthodox Jewish communities which are established on the basis of divine law and general social commitment.
to neighborliness and social decency. A look at factors which influence commitment in some societies to law abiding but not in others may be very helpful in comparative analysis.

Conflict and Marxist Theories of Crime

Conflict Theory of Crime

The conflict perspective is traced to Karl Marx (1818-1883) who argued that "the organized state in capitalist societies represents the economic interests of the people who own the means of production" (Vold & Bernard, 1986, p. 269). Marx' view that the history of all societies is the history of the struggle between two social classes; the bourgeoisie and the proletariat is not shared by all scholars who subscribe to the view that conflict is an essential characteristic of societies. These people see sources of conflict in other factors such as different and often conflicted social and cultural values and interests.

Thorsten Sellin (in Vold & Bernard, 1986) presented a theory of crime based on the conflicts between different cultural groups in society. He argued that "different cultures have different conduct norms, that is, rules that require certain types of people to act in specific ways in certain circumstances" (p. 270). According to Sellin these social and cultural expectations or norms are enacted into laws in simple homogeneous societies. As these societies develop and become more complex, the expectations among different groups, that are also different, overlap when such people interact. This results in "primary cultural conflicts" (Vold & Bernard, 1986, p. 270).
Selling saw this kind of conflict as occurring where there are high rates of immigration and large populations of people move into another area or society whose prevailing values are considerably different. These conflicts can also occur at border areas between two or more divergent cultures; or, in the case of colonization, when the laws of one culture are extended into the territories of another. Acts which were not criminal in such instances among large segments of the population suddenly become crimes.

Conflicts can also develop in societies that do not have sudden population change as described above. Sellin refers to this as "secondary cultural conflict" (Vold & Bernard, 1986, p. 270). This results when subcultures evolve in the society, each having its own conduct norms. Laws used in these societies may reflect a value system which is alien to the people who live in it.

Vold and Bernard (1986) presented a conflict theory based on "conflict of interests" (p. 270). According to Vold, groups are formed out of situations in which members have common interests and common needs that can best be served through collective action. New groups continue to be formed as new interests arise and existing groups weaken and may even disappear when they no longer have a purpose to serve (p. 271).

Since groups exist for particular purposes when they fail to serve any purpose, they disappear. Groups that endure are effective units through the direction and coordination of the activities of its members. Participation becomes so important that self-identification with and loyalty to groups become psychological realities. Groups
come into conflict when their interests and purposes overlap, encroaching on one another and becoming competitive. This results in conflict which intensifies loyalty. To sustain this loyalty laws are passed against behaviors which threaten the integrity of the group. According to Vold, "The whole process of lawmaking, lawbreaking and law enforcement directly reflects deep seated and fundamental conflicts between group interests and the more general struggles among groups for control of the police power of the state" (Vold & Bernard, 1986, p. 274).

Vold argued that a great deal of criminal behavior is carried out by groups rather than individuals and represents a collective resistance by those at odds with those in power. Other forms of criminal behaviors result from conflict among those groups struggling over control of power in the political organization of the state. The ultimate form of political struggle is rebellion and revolution. If perpetrators lose they are considered guilty of treason, if they succeed they make criminals out of government officials previously in power.

Many other criminologists consider themselves conflict theorists by their emphasis on intergroups, value, subcultural and social differences which contribute to the labeling of particularly behaviors as criminal or for engaging in non-conforming behavior (which is considered criminal) to protest a prevailing social system. Richard Quinney (1970) argues that "The reality of crime is constructed by those in power to carry out actions which best promote their interests" (Vold & Bernard, 1986, p. 180). Austin Turk (1969) argued that social order is based on a consensus-coercion balance maintained by
the authorities. The process of criminalization enables authority figures to coerce dissenting members in order to maintain social stability.

Conclusion

Conflict theories argue that behaviors of relatively powerless people are more likely to be considered criminal. Powerlessness is also seen as a possible key structural characteristic associated with the development of patterns of behavior that are likely to be considered criminal. Conflict theories also suggest that powerlessness and crime seem to be positively related. This means that behaviors associated with those in power tend to be legitimated and those of the less powerful to be made or declared illegal.

Though most conflict theories have their roots in the assertion that social, inequalities result in criminalization of certain behaviors many modern conflict theorists do not share Marxists' views that the source of this inequality is in economics. Conflict theories do well in describing social dynamics causing actual criminal and labeling of behaviors as crime. This makes them generally broad and abstract enough for comparative and cross-national studies.

The vast difference among conflict theorists on the concept of crime, some suggest that criminal acts are actually acts that purposefully contradict those in power and some as the designation of criminality as actions of those in power in order to exercise control, makes the conflict perspective itself subject to criticism.
Marxist Criminology

There is much disagreement among criminologists and sociologists as to whether there is or should be a Marxist criminology. This is because Marx did not research or develop a specific theory of crime. Proponents of Marxist criminology argue that it is a specific form of conflict theory. They claim that "crime is an ideological and political category of behavior generated by state practices" (O'Malley, 1988, p. 70).

The theory is based on general Marxist theory which emphasizes the significance of the conflict between material forces of production and the social relations of production. Marx saw a polarization of capitalist societies into two social classes. The bourgeoisie who controlled the means of production and therefore economic resources and processes. They used these to establish further control over the proletariat, who through alienation, have no control over even what they produced. The bourgeoisie also control political and other social processes and social institutions. The polarization results in conflicting groups, the exploiters and the exploited. Marxist criminologists focus on the distribution of power, economic processes and the capitalist processes to explain crime. Capitalism is seen as being criminogenic because "the capitalist economic system encourages people to be greedy and selfish and to pursue their own benefits without regard for the welfare of their fellows" (Vold & Bernard, 1986, p. 303). A similar view is expressed by many scholars who see capitalist development as encouraging behaviors and attitudes conducive to criminal behavior (Odekunle, 1978; O'Malley, 1988). The
class conflict involves unequal distribution of power in which the legal authorities criminalize the greed of the lower classes while encouraging that of the rich and powerful resulting in the concentration of crime in the lower classes.

Marxist criminologists also focus on the structure and behavior of criminal law, especially in capitalist societies. The state is seen as the tool of the ruling class which is used to control the behavior of the lower classes, therefore protecting the power and economic interests of the ruling class. The state passes laws which protect what is considered right and desirable. Usually what is considered right and desirable depends on the interests and values of the elite. Laws, which are instruments of the state for regulating behavior, are actually passed to regulate those behaviors which threaten the lifestyles, values and interests (political, social or economic) of the elite (the ruling class). Marx had argued that true state would uphold the rights of all citizens but the laws, as he saw them, defended only the rights of land owners (Vold & Bernard, 1986, p. 312).

Pat O'Malley (1988) recognized the fact that Marxist theory has generated various theoretical positions. Even among Marxist criminologists there is a wide variety based on different points of interest. There are existential Marxists, economic Marxists, neo-positualist Marxists, structuralist Marxists, phenomenological Marxists and many other orientations that use the Marxist designation to attempt to explain criminal behavior. According to O'Malley there are central concepts in what is considered as Marxist
criminology.

First, there are theories which focus on the concepts of class, the cellular relations of capitalist exploitation, the labor theory of value, the state and political ideology. These concepts are applied in the attempt to explain the operations and functioning of the state, political, economic and other social institutions and of various social phenomena (such as crime), and how the public reacts to them.

Another central theme in Marxist criminology is the development of a dialectical analysis in order to explain contradictions which are seen as inherent in the political economy and how these are linked to the incidence and distribution of criminality (O'Malley, 1988, p. 73). The implication of this theme is that Marxist criminology is not simply a focus on the social structures and their interrelational dynamics to explain crime. It is also an intellectual and philosophical theory which utilizes a specific form of methodology (the dialectical approach) to explain the phenomena of crime (as well as other social phenomena).

The purpose of a dialectical approach is to thoroughly explore opposing views of a phenomenon by analyzing concepts and how the opposing views of the concepts are applied in order to evolve a thesis which is encompassing. The concept of crime, for example, means a different thing to different people. The definition of crime generated by bourgeois legal intellectuals is not universally acceptable to some intellectuals without the bourgeois orientation. To effectively apply the concept an intellectual synthesis is necessary. The concept of
crime itself is seen as an "open-ended construct with ambiguous boundaries" (O'Malley, 1988, p. 75). A conceptual of criminality associated the nation of social disconformity is not the same with one that sees crime as acts forbidden by authorities which may in fact be normal and engaged in by the majority of the citizens such as driving above the speed limit. While the first is concerned with the function or operations of specific concepts in society, the second focuses on the philosophical and theoretical validity and applicability of those concepts.

Marxist criminology can be seen as a theoretical perspective which provides a fruitful theoretical insight (as it focuses on applicability and operations of specific concepts) and research directives (as it is also concerned with the synthesis of the concepts used) by theorizing in its own terms "these processes (both parentheses are mine)" (O'Malley, 1988, p. 82).

Marxist criminologists in focusing on social processes emphasize two views of crime. One is that crime is real and reflects the rebellion of those exploited. The second is that crime may not be real, but rather a product of bourgeois laws which are used to intimidate and control the oppressed. The first (the view of crime as rebellion against conditions of exploitation and oppression) is now widely rejected by Marxists (Vold & Bernard, 1986, p. 305) due to the fact that changing societies and controlling exploitation and oppression through Marxism has not eradicated crime. They now look for more complex explanations of crime within the Marxist theory of history and social change. Greenberg (1981) sees crime as a result of social
and economic conditions under capitalism. Class is defined in terms of the relationship to the means of production. A similar position is taken by other Marxist criminologists. Quinney (1970) for example, describes street crime as crimes of accommodation to capitalist-social relations. He sees street crime as actions of people who have been brutalized by the conditions under capitalism.

Conclusions

A review of Marxist criminology suggests a theoretical orientation whose proponents differ on as many themes as they agree upon. It is, therefore, very difficult to state conclusively what Marxist criminology is. Vigh (1985) identified five most important characteristics of Marxist criminology as:

1. That universal regularities of causality and determinism are present in criminal human behavior.

2. That crime is a social phenomenon. Social conditions prevailing in the country, and the different forms of social injustice within them, that play the most important role in the existence and changes in crime.

3. That prevention of crime on a social scale, the reduction or possible elimination of the reasons for crime and the conditions of crime are the most effective means of combatting crime.

4. That it is necessary to consistently enforce the determinist concept in the administration of penal justice, and

5. That Marxist criminology must be guided by the endeavor to enforce its views in both criminal and social policies.

Crime is seen as a product of total social processes and result
from social failings of the system. Marxist criminologists argue, therefore, that crime cannot be adequately controlled simply by addressing crimes and criminals through laws and punishment. Since crime results from social injustices and economic inequalities, crime can only be controlled by correcting these injustices and inequalities. This must be done nationally by policies teaching and enforcing fair and equal standards of social life.

Variations in themes of Marxist criminologists and similarities between their points of interest (especially those dealing with social conditions) makes some scholars question the singular label of Marxist criminology. In socialist countries where Marxist criminology is practiced there seems to be a contradiction in the theory of crime causation and of the reaction to crime. Friday (1988) takes issues with the fact that though socialist countries practice Marxist criminology, which explains crime as socially determined, the reactions to crimes are focused on the individual rather than on the society. This is particularly important to Marxist criminology which has consistently argued that since the capitalist system causes crime, crime can only be controlled by changing or reforming the capitalist system. The fact that socialist societies, which are not capitalistic, also have crime, suggests that the assumption that crime is the product of capitalist social and economic characteristics may not be correct. This does not mean that Marxist criminology is completely useless; its emphasis on social and economic determinism provides a useful basis for understanding behavior. Friday sees the major benefit of Marxist criminology in its emphasis on thinking comprehensively.
and contextually. This means "placing crime and criminality within the wider historical and societal context, for it is this historical and societal context which gives the concepts cause, effect and determinism special meaning" (Friday, 1988, p. 138). This is particularly helpful in comparative analysis which deals with total societies.

Modernization Theory of Crime

Modernization theory of crime is also traced to the writings of Emile Durkheim. Durkheim (1966) suggested that man social maladies such as crime resulted from a breakdown in social norms and rules associated with industrial revolution. He referred to the breakdown as anomie. Durkheim saw development as a process of transition from one form of society (mechanical society) to another, a modern one (organic society). Traditional societies had unique characteristics. Members of each society were tied together by what he referred to as mechanical solidarity, which emphasized conformity to traditional norms and values. This collectivity included both a general cultural and value identity he referred to as conscience collective. This collective conscience (or conscience collective) was conforming and functioned to solidify the community. Crimes occurred in these societies because every society has the tendency to express its collective morality by designating particular behaviors as criminal. The designation reflects moral standards and not social concern. He saw crime as normal in these societies. As societies evolved to modern organic type there is seen to be a breakdown of the conscience collective. The society becomes individualistic with increased tolerance or even encouragement
of change. Crime no longer reflects a moral expression of society, but assumes pathological characteristics (Durkheim, 1966). It represents a rebellion against society and a manifestation of pathological traits in individuals in the society and communities or groups.

The basic assumption of modernization theory of crime is "that there is one unusual unilinear pattern of development which all nations go through, consequently there is a single pattern of crime associated with modernization as exemplified by the history of advanced western nations" (Horton & Platt, 1986, p. 118). With its roots in Durkheimian view of social evolution from mechanical (or traditional) to organic (or modern) societies modernization theories see this process as being desirable, beneficial, and in fact inevitable. It is achieved at a price. The price includes social and structural change in societies requiring adjustment to such changes and social problems associated with the changes. Modernization theorists see the process and experience of development as related to crime because of structural and behavior (and attitude and believes) changes associated with it.

Structural Influences of Modernization

One of the major influences of modernization on society is seen in the structural changes it creates or in the influence it has on them. In linking modernization to crime, Shelley (1981) emphasizes two major areas in which the modernizing influence on the society is felt most: The industry and population aggregation or urbanization.
The role of industry on rates and trends in criminal activity is unquestionable, especially in the attempt to link the two. One of the major effects on industries on the society is to change routine activity structure. The productivity of surplus goods, the high mobility, intensified desire (generally socially approved) to accumulate or acquire wealth or properties generally easily accessible, the emphasis on creativity, liberty and individuality (which makes it difficult for enforcement agencies) result in what Lawrence Cohen and Marcus Felson refer to as the convergence of three factors necessary for crime to occur. These include motivated potential offenders, suitable targets and the absence of capable guardians (Cohen & Felson, 1979, p. 289). Industrial societies, according to Cohen and Felson provide both incentives and opportunities for criminal activity.

Industrialization, especially capitalist industrialization, results in surplus production and encourages increased consumption. Stack (1982, p. 57) found that "the greater the consumer expenditures the greater the major larceny or theft rate." The view that increased productivity and availability of goods and services actually leads to crime is demonstrated by many studies (Clinard & Abbott, 1973; Sesay, 1977; Shelley, 1981).

Industrialization is said to be criminogenic not only because it provides goods that can be stolen, social anonymity conducive to candece behavior and a competitive individuality, but particularly because it provides unequal opportunities for social and economic benefits. Odekunle (1978) asserts that "it fosters unemployment, marginal and meaningless employment, and obvious, relative and
unaccepted poverty" (p. 88). This is because "it attracts far too many people than it can absorb" (Fisher, 1987, p. 25). The society ends up being affluent with many rich or wealth people who can offer most luxuries available of products and an over-increasing number of people who can neither afford the same luxuries or even the convenience decent regular provisions.

Modernization and industrialization are expected to reduce social inequalities and to promote greater levels of economic equalities (Messner, 1986, p. 39). In real life, however, modern industrial development has not made people more equal. The industrial structure of modern capitalist societies is one that rewards disproportionately people considered more important to industries at the expense of those concerned less important. To maximize profits from investments fewer people are employed and overworked in jobs where more people could have been hired. This makes unemployment and poverty rates high despite general affluence in the society. The relatively deprived become potentially criminal. Unequal access to affluence can result in reactionary subcultures and intensify criminal tendencies.

Urbanization as a Criminal Factor

The urban environment has been a bastion of criminality for centuries. With modernization more new cities emerge and older ones expand. The process of transition from rural to urban society has great social, economic and cultural impact on the society. It produces similar crime patterns in countries with very different cultural, economic and political histories (Shelley, 1981, p. 35).
Cities and urban areas in general tend to create social conditions very different from rural areas. The breakdown of traditional values and rural lifestyles which result in changing characteristics of life and social values can breed criminal subcultures (Sesay, 1977). Urban centers contain characteristics which are specifically criminogenic. Some of these are: High population density which creates social anonymity; poverty which (especially in the presence of relative affluence creates frustration, anger and jealousy; transience or high mobility which destroys a sense of belonging and dilapidation which produces social disgust, lack of price. All these, according to Stack (1982), result in moral cynicism among citizens or residents, increased opportunities for crime, increased motivation to deviate and diminished social control, all of which result in general increases in crime. These factors are considered criminogenic enough that they make the proceeds of urbanization itself a predictor of crime rates and trends (Fisher, 1987; Schnaiberg, 1971; Shelley, 1981).

Cities, like industries, provide opportunities for crime. If industries contribute to crime by making available things that can be stolen, tempting by exposure to those products, hiring and not hiring people, paying those hired different amounts, therefore establishing a class system of those who have and those who do not have cities do the same. Cities contain all classes, groups, and categories of people. They contain goods that can be desired, by providing anonymity and rapid transit and a sense of apathy among city dwellers crime becomes not only easy but very tempting.
Modernization theorists see crime as resulting not only from industrialization and urbanization but from the process of modernization itself and from the experience of trying to cope. To modernize the society must tolerate or encourage deviation or law violation (crime). Modernization depends on the originality of idealists. In order that this originality, which transcends popular thoughts, be expressed, it is necessary that the originality of the criminal who is below the level of his time also be expressed (Durkheim, 1966, p. 71). In fact, Durkheim (1966) argued that crime actually plays a useful role in progressive social evolution (or modernization). Crime implies that "the way remains open for necessary changes" (p. 71). "Where crime exists," Durkheim continued, "collective sentiments are sufficiently flexible to take on a new form and crime may help to determine what form they will take" (p. 71). Many great thinkers who contributed to major social, economic, and political development of their time were considered, and prosecuted, as criminals.

Modernization theorists of crime recognize real existence and increase in crime as a reflection of problems in attempt to cope with inevitable social changes associated with modernization. In many countries, especially those based on capitalist form of development, modernization is seen as the presence of high technology and service institutions and infrastructure. To boast the process of development and modernization countries go in debt to "modernize" roads, provide schools, hospitals, telephone, electricity television and public amenities and institutions. Often these are done not so much to meet specific needs of nations, but rather to convey the cherished Western
notion of modernization. Just like the governments bury borrowed monies in such ill afforded projects (commonly referred to as "White Elephants") their citizens, especially the elite, also engage in individualized "ivory tower" or "white elephant" building. Assuming a borrowed western style of living they develop a taste for western goods and lifestyles. To live these lifestyles they borrow beyond their means, embezzle, steal, and engage in several forms of crime and corruption to raise money.

Western scholars have a tendency to measure development in terms of freedoms and consumption. Emphasis on personal rights and freedoms, self-indulgence, conspicuous consumption (the consumption of energy and other natural and industrial resources) are seen as landmarks of economic development for nations and as signs of affluence for individuals. Even in the so-called developed countries much of this is borrowed or financed with debts encouraging the thinking that it is acceptable to own many things we might not be able to afford. In Nigeria, as in many developing countries, some embezzlers, thieves and robbers see their crimes as their way of getting their piece of the National pie.

In their attempt to develop a universal theory of crime, proponents of modernization theory of crime perceive of a world that must inevitably experience similar patterns of development and its criminological consequences. The criminological consequences of 20th century developing countries (Third World) in many ways parallel the experience of 19th Century developing countries (the First World) (Clinard & Abbott, 1973; Horton & Platt, 1986; Shelley, 1981).
relationship, these theorists insist, is demonstrated in countries very different in their social, economic and political characteristics, including countries developing under socialist ideology (Horton & Platt, 1986).

Summary

The ideological basis of modernization theory is ideologically procapitalist and imperialist, according to some critics (Horton & Platt, 1986, p. 119), because it sees the rest of the world as inevitably developing on a similar pattern as the Western capitalist and democratic societies.

The implication and assertion of modernization perspective are that development best occurs under democracy and capitalism. Democratic principles encourage freedom to be innovative and progressive. Durkheim saw the changes as resulting from the transition from traditional (mechanical) societies to modern (organic) ones. Capitalism as a social, economic and political philosophy encourages individualism and productivity. These together change the society and create criminogenic contexts and individuals. For these reasons modernization in all societies is associated with general increases in crime.

Critics of modernization theory of crime do not subscribe to the notion that development is always related to crime. In fact, some have observed that the process of development or modernization has occurred in some societies with decrease or no change in rates of crime. The major criticism of modernization theory of crime is that the theory "has not been able to explain variations in worldwide..."
crime rates" (Horton & Platt, 1986, p. 121).

Even in the capitalist Western industrialized and other developing countries modernization and its characteristic urban growth have not necessarily increased criminality. According to John Rogers (1986) despite rapid and sustained modernization, English homicide rates have declined steadily since the 13th Century. Between 1850 and 1941, during the earlier years of industrial revolution, when the population of Britain doubled, urban population tripled, national income more than tripled and the country was rapidly developing, serious crime, including both theft and violence fell by one third. Even in America, homicide rates declined in many cities during the 19th Century, though this was the period of rapid industrial development, growth and extensive migrations (characteristics of modernization often blamed on rapid increases in crime.

No country has modernized faster during this century than Japan. Yet, despite its rapid industrialization and the modernization, rates of various crimes have declined or remained the same (Adler, 1983; Clifford 1978). Other Western countries like Switzerland, Ireland, Sweden have sustained increasing development while at the same time keeping rates of crime low (Adler, 1983; Clifford, 1978; Clinard, 1978; Norstrom, 1988). The same inconsistency exists in the Third World, today's developing countries. "Analysis of crime patterns in Sri Lanka do not support the claim of a general relationship between crime and the various socio-economic changes implicit in the concept of modernization" (Rogers, 1986, p. 322). Other developing countries have also demonstrated ability to continue to develop with little
increases in crime. Countries such as Bulgaria, German Democratic Republic, Peru, Algeria, Saudi Arabia and Costa Rica are good examples. According to Clifford (1978) and Adler (1983) we can only maintain that every society is condemned to follow a similar pattern of development and experience with crime if we ignore what is happening in these countries.

There is still adequate evidence to support the major assertions of modernization theory of crime, especially if one looks at the pattern of development and trends in criminality in industrialized Western countries, the United States of America and in some Third World countries such as Nigeria. There is also sufficient evidence that the relationship between development and crime is not consistent, especially when one looks at other highly industrialized countries such as Japan, Sweden and Switzerland and some Third World countries, such as Costa Rica, Saudi Arabia and Peru where the rates of crime have remained low despite the relatively high rate of social and economic development. Clifford (1983) suggests that it is necessary to know as much about the areas of the world that are untroubled by crime, as well as those that are, to explain crime. Clifford (1978) argued that specific cultural characteristics such as religion, legal institutions and other geopolitical and historical characteristics are related to trends in criminality. In her study of nations not obsessed with crime, Adler (1983) found that these countries share specific characteristics, such as emphasis on the preservation of valid traditions despite modernization, evolution of judicial systems capable of accommodating traditional and modern social characteristics, group
orientation, strong family systems with emphasis on norms and social cohesion and an emphasis on religious or religious like values and commitment, which might explain the comparatively lower rates of crime in these countries.
CHAPTER III

THE WORLD COMMUNITY

The goal of social science theory is to explain a given phenomenon (such as crime) as accurately as possible, as it relates to every social system (Przeworski & Teune, 1970, p. 20). This means that for a phenomenon with a universal significance such as crime, theories which attempt to explain it must have explicit universal applicability. This causes a problem, since, though crime itself is a universal phenomenon, behaviors which are defined as criminal differ from one society to another. Even crimes by the same name may not necessarily refer to the same act. Yet for theories to have universal applicability, they must assume an extent of universality.

A true universal theory of crime must acknowledge the true nature of crime. Crime is a concept that does not apply to any particular acts indiscriminately. Though the concept may refer to certain acts it may only be applied to the acts if the society chooses to do so. The crime of murder refers to the act of wilfully taking a human life. Its occurrence however does not automatically result in the conviction of offender for the crime even if the perpetrator is known. States allow the behavior during wars, it is used by the state as punishment for specified serious crimes, it is allowed as self-defense or may be excused if the offender is considered mentally incapable of discovering right from wrong. Since states have the power to determine
whether an act has actually occurred and to determine whether the act, when it occurs, qualifies for criminal designation, it would seem that the reaction of the state may be as important (or even more important) as the act itself.

Social behaviors, including crimes, are products of factors unique to the general social contexts in which they occur. Durkheim (1966) argued that crimes represent the nature and extent of the moral tolerance of a particular society. It is the nature of all societies to determine, by definition, acts they consider unacceptable and, therefore, criminal. Factors leading to the occurrence of criminal acts and to the definitions of criminal behaviors are cultural and unique to specific societies. To understand why certain acts occur and why the societies consider them criminal, the culture of each society needs to be understood. Societies differ culturally. Their values, norms and other characteristics determine behavior patterns. The culture of any given society is also shaped by the resources available to it. Geographical and other related factors such as the amount and nature of raw materials, proximity to land and water, amount of land and water available, weather conditions, and the nature of neighboring nation states all influence the national self-image of every country.

When we talk of the world community it is tempting to think of the United Nations General Assembly, or of a universe of nations divided into the seven major continents, or the political and military alliances of Europe and North America (NATO) and Warsaw (PACK) nations with the rest of the world barely relevant. The world community can also be viewed as industrial Europe and America leading
the rest of the world in unilineal progression towards development or modernization. The community of nations is more than these collectivities. It includes a family of nations who differ in their cultures, administrative and political ideologies, in their access to critical resources transcending the classifications mentioned above. Geographical barriers and boundaries separate the nations. Historical and political characteristics shape and separate nations. Geographical, historical, and political characteristics do not only separate nations, they can also bring them closer to each other. In grouping nations, geographical boundaries and regions should always be considered as well as history and cultural characteristics.

In this study the world community includes all those nations from whom data were available through the sources used. This includes nations which have chosen to make these data available to the United Nations. This, unfortunately, excludes many nations from the socialist block and other nations of Europe, Asia, America and Africa. The countries from which data are available and on which this study is based, are grouped together based upon what are considered historical and geo-political similarities. Attempts are made to recognize cultural and historical circumstances which make the countries in each region unique. Specific political factors may make some countries fit better with others outside of their region than those in the same region. For example, though Israel is in the Middle East, and is deeply involved in regional politics and conflict and is presumably theistic like other Middle East countries, it is so different socially and politically that it does not fit in with its neighbors. It is, therefore,
excluded from the group of countries in that region in the study. Most Israelites are immigrants from Europe and so, though they share the Middle East, they share Western European cultural traits and maintain a culture, very different from other Middle East countries. New Zealand is not Scandinavia. It is far from Scandinavia. It also differs culturally, yet its political ideology and social and economic orientation and other characteristics make it similar enough to countries in this region to warrant a classification with that region.

Six regions are identified. These are:

1. Western World (Western Europe and North America),
2. Asian Societies (all Asian countries both on mainland and the islands),
3. The Middle East (all countries in the Middle East and the Mediterranean region, except Israel),
4. Sub-Saharan Africa (Africa South of the Sahara Desert excluding the Republic of South Africa),
5. Latin America (includes all countries south of the United States of America, both on the main continents and the Caribbean region), and

Lack of data from Australia, the Socialist countries and other countries has made it impossible to include them in the study.

The Western World

The term the Western World refers geographically to Western Europe. In the post-war era the term has been applied to countries
which share a similar history, culture, political, economic, and social philosophy. Historically these are countries or societies which have developed rapidly due to the direct experience of the industrial revolution, which resulted from cultural and industrial materialization of rationalism and enlightenment. These are societies which have reached beyond their boundaries not only to trade for raw materials, but to conquer territories and establish ownership over them during the period of colonization. Following the end of colonization they have continued to influence the whole world with their military, economic, technological, and histo-cultural superiority.

The combination of rationalism, enlightenment, and Judeo-Christian thought in these societies resulted in a unique set of values and attitudes towards work and life in general. Max Weber referred to this as "the protestant work ethic and the spirit of capitalism" (Giddens, 1978, p. 124). According to Weber, the Protestant religion, especially as taught by John Calvin and Calvinism emphasized hard work and acquisition of more and more money but also a strict avoidance of all spontaneous enjoyment. This resulted in high productivity and investment resulting in accumulation of capital which are responsible for rapid industrial and economic development.

The work ethic and capital accumulation in these societies has been helped greatly by the development of a free market system. Adam Smith (1976) had argued that "free market systems have more effective regulatory mechanisms than political ones" (p. 18). The free market systems, the work ethic and the capitalist spirit have resulted in high levels of economic and industrial development in these countries.
Political developments in these societies emphasize popular and representative democracy. These nations emphasize popular electoral processes, resulting in publicly elected popular government with potent popular political oppositions, who are accountable to the public who elect them. The political processes in these democratic nations discourage the use of its military on its own citizens but encourage aggressive military preparedness for national defense. This leads to massive production of military hardware and intelligence, and technological development in defense industries.

Among the characteristics distinctive in European and American development are "the existence of rational law, a modern capitalist enterprise, which demands rational calculation of profits and losses (emphasizing accountability) and the development of efficient bureaucratic institutions" (Giddens, 1978, p. 178). Also central to Western industrial development and modernization is the emphasis on individuality and change. Durkheim observed that the emerging industrial society with its emphasis on individuality required compromise as "individuals differ from the collective type" (Durkheim, 1966, p. 70). To continue to develop, the society changes from traditional emphasis on conformity to a new emphasis on individuality with perpetual demands for sacrifices. According to Durkheim the new modern "society cannot be formed without individuals being required to make perpetual and costly sacrifices" (Vold & Bernard, 1986, p. 147).

According to Durkheim this emphasis on individuality and division of labor, which are characteristics of the modern society, held together by organic solidarity is highly productive. Success is measured and
roles in the society defined by specific quality and quantity of contributions made by individuals.

Innovations or creativity involve new ideas, some of them good, others bad, some acceptable and others deviant and not beneficial to society. However, the risk of deviance is a necessary sacrifice for progress. According to Durkheim (1966, p. 66) "progress requires changes in behaviors and engagement in behaviors, some of which may be considered deviant." Many progressive ideas are considered absurd and their initiators ridiculed or even persecuted. Durkheim (1966, p. 66) correctly observes that "people whose ideas were considered most progressive, by future generations, were treated as deviants, social misfits and criminals during their time," even though progressive societies encourage creativity and change. The emphasis on change and creativity has greatly accelerated opportunity structures in the Western World. The European industrial policy emphasizes the establishment of effective large markets and industrial institutions to provide opportunities for trade. For example, the Commission of the European communities adopted a memorandum on March 18, 1970 which emphasized as a first requirement of industrial policy. "To enable all firms and industries to take advantage of large markets. This has entailed the removal of barriers to progress allowing individual and public growth opportunities" (Keesing's Report, 1975, p. 46).

Opportunities for personal and industrial growth are also major features of the American society. The American industrial policy promotes "innovation, research and the creation of new industries and markets" (Sewell, 1980, p. 35). To encourage creativity, productivity,
opportunity and the use of opportunities, the American policy also emphasizes a focus on manpower policies which "Provide training for new skills, facilitation of occupational mobility, distribution of the burdens of unemployment and assisting in reemployment of displaced workers" (p. 35).

Another characteristic of Western and American societies is their high rates of consumption of both local products and raw materials from the less developed world. The United States depends heavily on the raw materials it imports from many Third World countries. About 85% of its tin consumption is imported. Of all the tin imported into the USA, about 82% comes from developing countries. Ninety-eight percent of its manganese consumption is imported; more than half of it comes from the Third World (Sewell, 1980, p. 176). Though Western Europe and North America produce only 14.2% of the world's petroleum, they consume 51% of total world production (Sewell, 1980, p. 186). This tendency towards high consumption applies to many other commodities. Western Europe and America consume 31% of the world's coal and manganese, 57.5% of natural gas and 49.5% of hydro and nuclear electricity (Sewell, 1980). These high rates of consumption are social and economic results of affluence. Many scholars have suggested that the capitalist system fueled by access to abundant wealth results in increases in crime (Odekunle, 1978). There is much that can be stolen and there are social pressures to have as much property as the next person. The pressure to accumulate is high and the opportunities including illegal ones are abundant.

The centrality of the individual in the Western world also leads
to the tendency to look for the causes of problems outside the individual, rather than within. This achieving society evolves a general psychological profile of individuals the majority of whom are driven by the mind set that winning is everything. People become very competitive (McCleland, 1961). Institutions that evolve are individualistic and competitive with winning as always the goal. Adversarial system of justice which is characteristic of all this societies is a good example.

So much emphasis is placed specifying the victim by a vigorous legal battle to prove the offender as so bad to become useless to society. According to Adeyemi (1980) the process may result in greater cost and harm to the society. According to Durkheim, (in Giddens, 1978) the individual self-centered modern person would tend to be selfish and uncompromising except when doing so would be to his or her benefit.

Another major characteristic of the post-industrial Europe/America is the pervasiveness of secularized thought and the devaluation of traditional beliefs and social institutions in favor of scientific thought and secular institutions. Herman Dooyeweerd (1980) refers to this as "spiritual nihilism, whose motto is, let us eat and drink, for tomorrow we die" (p. 62). This secular scientific culture enables people to question and to use scientific and objective processes to arrive at answers. This "rediscovery of nature" (p. 65) has evolved in the use of human knowledge to achieve levels of development never achieved before. This development has been achieved at a price, the loss of "the norm of continuity" (p. 101). Psychologists and other behavioral professionals have influenced the role of traditional social institutions such as the family and influenced traditional process of discipline and decisions
According to Dooyeweerd (1980), the emphasis on modernity results in the tendency to abandon tradition for the sake of new ideas, even if the new ideas are not necessarily better. The emphasis on creativity encourages the evolution of new ideas and ways of doing things which may be harmful to the society. Change is good if it improves and has inherent and sustaining value. However, many changes in modern Western societies have appeal only because they break the monotony of tradition and may have immediate appeal, but no sustaining value. The high rates of crime and deviance result from the breakdown of traditional social institutions such as the family, the school, and religion. Dooyeweerd (1980) concludes that though Western nations have high rates of social and economic development, they suffer from moral decay leading to various social problems such as crime.

Despite its problems, the Western world still appears to be the model for the world. Third World countries which received their independence, some following a lot struggle with much loss of blood, still depend on the Western world to achieve their dreams of social and economic development. Recent social, economic and political development in Eastern Europe is another example of how the West and America appear to be the model of the world. These countries that have for many years based their political, economic and social systems on the principles of socialism are all struggling to change to Western style democracies and free enterprise market economies. These revolutions seem to confirm the belief in the superiority of democratic and free enterprise systems.

When modernization theorists propose a persistent relationship
between development (or modernization) and crime it is Western Europe and America they see as enduring examples. They predict that the experience of these societies will necessarily be repeated in all societies as they, too, experience development (Clinard & Abbott, 1973; Shelley, 1981).

Asian Societies

The continent of Asia includes a unique group of nations and cultures. Among them are China, India, Pakistan, Korea, Japan, Malaysia, Taiwan, Philippines, Singapore, Hong Kong, Indonesia, Thailand, and others. Asia is the largest and most populous continent.

The nations of Asia differ remarkably from the nations of other continents in their history, geographical circumstances, socio-political ideologies, cultures and religions. Despite their internal differences one still finds similarities among Asian peoples ranging from socialist totalitarian China, World showcase democratic India to the Islamic republic of Malaysia. Asian societies have long histories of civilizations, of contact with the rest of the world and even of colonization by West European countries. Despite such contacts, the influence of foreign cultures on these societies is comparatively limited. These societies have always maintained a cultural independence from foreigners.

This independence is due to the fact that Asians see themselves as Asians first and therefore unique from the rest of humanity (Welty, 1976). The geographical limitations of the continental mass has led to
unique historical experience by Asians. There are few raw materials in these areas. All habitable areas in Asia have always been overpopulated. "Whenever there is arable land in Asia, the land is also always crowded" (Welty, 1976, p. 25). Because of these geographical limitations, Asians themselves have to be particularly adaptable to survive. They do this by protecting and preserving everything they have, hence, there is culturally little emphasis on change (in fact there is deep suspicion for change), greater emphasis is placed on conformity and loyalty to traditions which have held the societies together. Whether Asia's political systems are socialist or democratic they maintain great emphasis on preserving traditional institutions.

All histo-cultural factors point to the uniqueness of Asian societies. They tend to emphasize deep religious commitment and practice, a commitment to traditional social institutions such as: family, community, work, religion, and educational processes which emphasize hard work and social conformity. With little or no emphasis on change, development becomes a tool for supporting the status quo rather than for changing it. These societies tend to be deeply religious with commitment to religious life, which is central in their social and political ideology. Religious commitment in Asia is often total and fundamentalist. Their religions from Hinduism and Islam in India to Shintoism, Confucianism, and Buddhism in China and Japan all emphasize living the faith one confesses. This is believed to be able to improve the person and the society. Transcendental idealism is a dominant religious orientation in Asia. There is very
limited secularization all religions practiced in Asia. In Communist China the socialist ideology (though Marxist) encompasses religious philosophies of Confucianism, Taoism, and Legalism which see the universe and humans as centers of all reality and as having potential for earthly happiness. In China traditional religions are not seen as contradictory to communism. They focus on the earth and humans not only as potentially good but as having the ability, responsibility, and the mandate to seek and maintain good, which accommodates political ideology of Marxism very well. The individual is seen as responsible to the community which, in turn, owes him or her support and protection. Communalism is central to the society which emphasizes the significant role of social institutions of family, work, the community and religion. Conformity and stability rather than change are emphasized. Faithful religious life, no matter what religion, is seen as improving the quality of individual and public life. It is encouraged and generally not scrutinized (Welty, 1976). The recent crack down of democratic movement demonstrates strong desires to maintain the status quo.

The ideology of the people of India is the result of a long and continuing search for the origin and meaning life. To them "thought is more important than action; meditation is valued over the incessant search for material goods" (Welty, 1976, p. 65). Wealth and power are important goals, but spiritual realization and self-contemplation rank higher in the scale of cosmic values. One of the results of this philosophy and the search for ultimate truth and reason is the three major religions of India: Hinduism, Buddhism and
Islam. Both Hinduism and Buddhism emphasize contemplative life concerned with the process of change which appears to be characteristic of the universe. Islam accepts the existence of a supreme deity and creator of the universe who blesses when pleased, but curses and destroyed when crossed. As a contemplative society, these religions all required pure hearts and the sacrifice of the body and material goods in honest sacrifice to superior living (Welty, 1976).

In Japan the social ideology is based upon Buddhism, Shintoism (ways of the gods) and other traditional beliefs. Shintoism, the most common religious tradition, is a collectivity of all religious lives. Shintoism appeals to a unique spiritual quality of the mind which demands a deep reverent feeling for the universe. This reverence must be shown by the tender and patient care given to land, people and universe. All universe is seen as Divine, so all that is in it must be treated as divine (Welty, 1976, pp. 200-269). These cultural conditions in Japan are responsible for the fact that despite its rapid development, industrialization and urbanization, Japan's rates of crime and delinquency are comparatively low (Chang, 1988).

Geographical limitations separate some Asian countries from the rest of the world. Their history and culture make them unique. Despite some differences in geo-political circumstances of countries within, they all share a deep commitment to religious and social ideologies which encompass all of life, emphasize conformity to traditions rather than change, a slow approach to change if change is inevitable, and community orientations with much demand for
maintaining the significant role of traditional social institutions in faith and livelihood.

The historical and cultural traditions of Asian societies include: (a) sustained public attitude which support traditional structures including authority and other social institutions; (b) emphasis on respect and conformity; (c) individual and public traditional sense of responsibility to the community, even in non-socialist countries such as Japan; (d) emphasis on family honor—many of them still practice arranged family marriages; (e) emphasis on social harmony and unity; (f) emphasis on interdependency, morality and gentleness; (g) they discourage high and rapid social and geographical mobility, therefore, sustaining a sense of community; and (h) strong emphasis on a sense of personal responsibility, honor and shame (Chang, 1988).

Such a tradition has resulted in cultures with very few crimes despite severe poverty in some cases such as in India, and rapid development and material abundance as in Japan. Political unrest has existed in these societies often as a result of ideology, ethnicity, and religious fundamentalism (e.g., India, Pakistan, Srilanka, and Malaysia), changed the Asian nature of the societies, but usually not.

The Middle East

The societies in this region include countries from North Africa, the Arabian Peninsula and the Mediterranean Sea. Counties in this region include: Egypt, Morocco, Kuwait, Turkey, Iran, Lebanon,
Iraq, Israel, Saudi Arabia, Syria, Libya, and others. Besides Israel, all these societies are predominantly Muslim and live by Islamic cultural traditions and may be governed under Islamic law. Most of them also have been colonies of Western societies and may have inherited some western influence, similar to those of Sub-Saharan Africa. Some of them have been major powers with international influence in the past (e.g., Egypt, Turkey, Greece, and Iran). Most of these countries have smaller national ethnic populations but have enormous wealth from large oil reserves which generate much revenue. These countries may have experienced political instability like countries in Sub-Saharan Africa. Political instability in these countries may be similar to that in other developing countries. Poverty is not a problem in most of these countries because of their wealth from oil.

The geo-political impact on these societies is a result of several historical, economic and political factors. Though some of them have comparatively small populations, small land area and poor agriculture lands, they are endowed with large deposits of petroleum. In a modern industrial era which depends on oil, this region has become very important. The wealth affords them extensive contact with the industrialized world, modern industries and products of modern technology.

Possession of the world's most valuable commodity has made them very important to the rest of the world who must court them, interact with them and give or take with them. Countries like Saudi Arabia, Kuwait and United Arab Emirates have foreign populations closely
equal to or even more than that of their indigenous natives. Since these foreigners do not own any of the land and wealth under it, their influence on indigenous populations and local culture may be limited. Though, they may contribute to social problems in some areas.

The Mediterranean region is strategically important, not only because of its oil reserves, but because of its centrality in world affairs. It is the home of three of the most important religions in the world (Judaism, Christianity and Islam). The three all worship one divine God who is perceived to be the maker of heaven and earth, and whose followers have a mandate to live what they teach, therefore shaping values and behaviors of people all over the world. The Jews, who practice Judaism, claim the region as their homeland, promised and given by God. Christians claim the area as the birthplace of Jesus Christ, the Father of Christianity; Muslims, who practice Islam, claim the area as home of their forefathers. The disputes on land, religious dogma and history have resulted in sympathies and resentment by different peoples and nations.

Religious fundamentalism as found in this region, shapes tradition and cultures. Strict adherence to religious dogma, for example, and the traditional way of life of its followers influences the culture of these people, their relationships with each other and with the rest of the world. Their approach to development, crime and other social phenomena are also shaped by their faith. Islam (which means surrender) is a religion which demands the total surrender of one’s body and soul to their faith in Allah (God). This means that their total
life should reflect this faith. Islam is a religion, which when faithfully followed, is both spiritual and cultural for the individual and society. Many Islamic societies have laws and legal systems which are based on Islamic (Shariah) law. Shariah Law is used both as a moralizing instrument as well as a preventive agent. According to Souryal (1988), it is effective by use of a five-prong approach:

1. It constantly endeavors to reform and purify individuals.
2. It warns people against crime by reminding them of its consequences.
3. It commands other muslims to assist each other.
4. Prevents crime by blocking temptation through prohibition and separation, and
5. Prepares Muslims against sin and crime by encouraging certain behaviors and practices (Souryal, 1988, p. 5).

By using these, Muslim societies encourage a total social order of faithful conformity. Studies have shown that religious fundamentalism increases intolerance to crime and sin (Evans, 1984). These societies emphasize religious fundamentalism, which encompasses all of life and which requires, through the five point prong, total social responsibility to resist crime and deviance. Secularization or retreat from fundamentalism may result in increases in various social problems. Kuwait experienced sharp increases in crime when it reorganized its legal system in a 1959 decree to conform with modern Western standards (Al-Thakeb, 1978).

Judaism is also a religion which controls and directs the total life of individuals and the community. This is based on Mosaic law
which includes the twelve commandments and many other laws in the Bible. These laws were prohibitions, codes of conduct and regulations on how the Jewish people are to live as individuals, as communities and in relationship with other nations. Like the five prong points in Islam the twelve prong laws in Judaism represented a way of life which provides the basis for social morality.

Christians claim faith in the Jewish God and while they subscribe to the twelve prong laws they also believe in a Christ who fulfilled the Mosaic law on their behalf. Freeing them from the law he gave them two which are based purely on the principle of love. Instead of emphasizing faithful conformity like Judaism and Islam, Christianity emphasizes forgiveness and redemption in Christ together with individualism. This makes religion for them a personal experience. Christianity also professes a global God rather than a regional one. Christians claim that the coming of Christ fulfilled all the promises which made the Jews a special nation and the Middle East the center of the world. The global view of Christianity, its emphasis on individualism and grace makes it more likely to be permissive and secularized. All these have led to the fact that the influence of Christianity in this region is limited.

Sub-Saharan Africa

This includes all countries south of the Sahara desert and north of the Union of South Africa. These are countries that were for many years colonies of various European countries. In fact, most of them were actually created by European colonial empires, who in some cases forged together tribal kingdoms they conquered to create new political
units which they ruled as colonies or protectorates. Eventually these became nation states, most of them as a result of protracted nationalist struggles against the colonial powers. The only identity of these nations was in reference to the colonial masters, despite the claims of nationalism.

Political, economic, and educational systems which were set up reflected the values of the colonial powers (Adeyemi, 1980, p. 17). Social systems which evolved in some of these societies are very different from traditional African institutions which existed before colonization. Unlike the democratic, free enterprise, political and economic cultures which existed in Europe, the superior attitudes of the Europeans in these colonies resulted in the development of an elitist class of educated natives who sought not just to be independent of the Europeans but to replace them in positions of political, social and economic advantage. European education which many of them acquired overseas, and attitudes towards that education created in these elite a feeling of superiority towards their fellow countrymen, whom they regarded as uneducated, primitive and inferior. A culture evolved in which, though supposedly independent from Europe, these nations have continued to depend on European values to define the social, political, and economic goals of their homelands. The penal system of every African country is molded after that of its former colonial ruling country, though the majority of people in the country often do not know or understand many of the laws, nor can they read or relate to them. Some of the laws do not even reflect the values of the people or are so contradictory to the cultures that no one even tries
to enforce them. Traditional African societies, for example, emphasize settlement of disputes rather than enforcement of rights. "To the traditional Africans, the invocation of judicial proceedings is virtually tantamount to a declaration of enmity, hence the need to reconcile the parties, since enmity cannot be tolerated in communal societies" (Adeyemi, 1980, p. 17). According to Adeyemi, the introduction of adversarial system of law, and the judicial process (Euro-American form of justice) associated with it is very unfortunate. "These approaches to justice are culturally very incompatible with African approach to the judicial process" (p. 17).

Since the elite of these countries seek to replace their European role models, the national and individual goals they set seems to be aimed at being like Europe or the European, rather than meeting the basic and specific needs of the people. There is great emphasis on having European products such as cars, radios, VCRs, televisions and stereo sets, even when individuals are not able to meet some of their basic needs such as food and shelter. Governments also see development as the presence of electricity, telephones, radio and television stations, sometimes at the expense of roads, schools and hospitals. Good markets, sewage systems, roads, medical and educational facilities, and other more critical needs are often passed in favor of new television and satellite communication systems. Besides the fact that there is little or no emphasis on the basic and most critical infrastructure and these public luxuries or amenities are concentrated in cities and urban areas where the elite live. The elite of these countries set standards for their countrymen by
developing the same tastes for luxury similar to those in industrialized countries. Since this creates the impression that people who have access to these luxuries and who own these technological gadgets are superior, many impressionable young people flood to the cities with no jobs, often with no support system or meaningful income but with strong desires to "become" modern. Unequipped to afford these luxuries through legitimate means they become criminals.

Third World countries, especially Sub-Saharan countries, are under considerable pressure to become developed like everyone else. Most African countries, which under colonial rule had international recognition on the world market for the sale of raw materials, lost those positions when they got independence. As colonies their markets were controlled by market institutions in the home country of the colonial powers. Though politically independent, economic independence has evaded these countries. They have continued to depend on European and American market forces. They have no control over the cost of their raw materials as their market institutions did during colonial periods. They have no control over their currencies either. Since they cannot determine the value of their products, they cannot determine the value of their money. This results in constant and extreme fluctuation in the value of their currencies which sometimes drop by over 80% within very short periods. Such sudden changes often make legitimate enterprise impossible. As purchasing power diminishes, increases in illegal economic activity becomes inevitable.

Attitudes towards and the relationship with the developed nations and the reciprocal attitudes of these nations towards the
developing countries contribute to many social and economic problems. The general lack of confidence in the Third World political, social and economic institutions by their own elite contributes to the lack of commitment to their own society by their youth people also. Some of the most valued commodities and ones stolen most in Nigeria are not the locally produced commodities, but imported technological gadgets such as VCRs, televisions, air conditioners and automobiles. These are European produced goods, which in industrialized nations are most often stolen because they are what is desired and available (Friday, 1988). In Nigeria and other African countries these items are status symbols.

Developed countries evolve their own political ideology, political institutions and processes, and control their relations with other societies. Despite political independence many African countries have not been able to evolve the means of meeting the needs of their people by using local resources. They continue to allow themselves to be influenced by what they see as acceptable Western standards. Western industrialized nations also contribute to this dependency by their use of Western oriented characteristics to define and measure development, e.g., development is often measured by how the society compares or ranks on the basis of Western characteristics, such as GNP, annual income, or the number of doctors per population. Multinational corporations from industrialized nations exploit this dependency by influencing economic, political and social institutions in these countries to continue to depend on the developed countries. As long as the Sub-Saharan African is defined and examined within the
context of Western European and American perspective, the dynamics in African societies will show characteristics and problems similar to those of the West European and American societies.

Latin America

National independence in most of these countries has been for over a century. However, the social revolution needed to dissolve the legacy of colonialism has not been achieved, except in Cuba. In many ways the political and economic experience of these countries are similar to those of other Third World countries (Worsley, 1972, p. 215). The region also shares two crucial features with the new countries of Africa: Backwardness and lack of full autonomy.

Because of the backwardness in this region foreign capital, especially from the United States, has exercised the final vote. A vote occasionally expressed through the use of military power rather than the ballot-box. The military overthrow of a popularly elected Ayende in Chile, to be replaced by a military dictatorship more friendly towards the United States. The creation and support of the contra military organization in Nicaragua, the recent invasion and arrest of Panama to arrest its leader, Noriega for crimes against the United States are good examples.

Latin America was not always dependent on the United States. Most of the countries in this region were colonized by Spain and Portugal powers of the colonial empires of Spain and were weakened during the Napoleonic wars (1810-1820). This led to decreased ability of these empires to effectively control the colonies which in turn
resulted in increased independence and power of local "creole bour­geoisie" who controlled the principal sources of wealth (Frank, 1974, p. 47). Most of these countries achieved independence through the successful rebellion of the creole bourgeoisie who represented a class of privileged producers and land owners who also maintained ties with the rest of Europe and America by supplying them with raw materials.

The independence of these countries was won not by indigenous natives, with nationalistic claims to land and heritage, but rather by economic class of land owners and merchants. Since independence, most of them have continued to suffer political and economic instability which has resulted in perpetual sluggish economic growth. "Stabilizing mechanisms necessary for effective social and economic development, such as large middle class sector, and demanded for social reforms by the public," (German, 1972, pp. 36-37) continue to elude the region.

Over the years the United States has influenced political developments in the region with or without the approval of those countries. In March, 1981, General Omar Tarrijos, the head of state of Panama, was quoted as saying "The only country that uses our territory against our will to interfere in El Salvador is the United States" (LaFeber, 1984, p. 11). In recent years the United States has used its military to quash a government in Grenada and in Panama. It has also contributed in electoral and military activities in Nicaragua, El Salvador and several other countries in the region because as the United States Ambassador to the United Nations, Jeane Kirkpatrick', warned in 1981, "Central America is the most important
place in the world for the United States" (LaFeber, 1984, p. 1).

Latin America, like other developing countries is a region that is very dependent on the United States and other industrialized countries. The dependency, for Latin America, includes the expectation of political, military and economic support. "The history of the Latin American republics during the 19th Century is the history of its indebtedness to the European world of finance" (Vega, 1987, p. 48). In the 20th Century the indebtedness has shifted from Europe to America and international financial institutions. Some of these countries were heavily in debt at the time of independence and have continued to be. The interests for the debts are so high that the countries can never finish paying. Vega refers to this as "usurious imperialism" (p. 45). According to Vega, "an even more dramatic case of a victim of usury is Haiti, whose debts first to France and then to the USA after its national independence became an unbearable burden and guaranteed that the economic development of this small nation would be impossible" (p. 55).

These countries are made to depend on the United States and other industrialized countries for sale of their raw materials, usually at prices determined by the industrialized countries. They are continuously given loans, on terms favorable to lending institutions and interest often so high that they could never finish paying. These loans are usually given with conditions attached to them, such as devaluation of local currencies and liberalization of their markets, which reduce their ability control their economic, social and political processes.
The process of political development in Latin America is greatly influenced by the United States. In countries that want to pursue the democratic process, the constitutions which evolve attempt to assume "the retention of political power by an economically powerful class" (Amaya, Amaya, Avilez, Ramirez & Reyes, 1987, p. 5). These constitutions tend to remain basically similar, with occasional pompous adoptions of pseudo democratic reforms without any real possibility of implementation. These democratic processes are often undermined by the fact that they are imposed by American pressure and not by the mandate of the people (Amaya et al. 1987, p. 5).

Any political processes which develop for any other reason and not for patriotic reasons has potential for many problems, the most important of which is political development which often requires a lot of sacrifice.

Another major problem which results from dependency is the inability to define national interests and identify social problems unique to the societies involved. Criminologists have often argued that crime in any society reflects the values of the individual societies. Durkheim (1966) argued that "what confers the character of criminality upon any given act is not the intrinsic quality of the act, but that definition which the collective conscience lends them" (p. 70).

Recent governments of the United States have maintained that the problem of drugs in the country is the result of mass production and exportation of drugs from Latin American countries into the United States. To control the abuse of drugs, various American regimes have
emphasized the destruction of drugs and the control of both production and exportation capabilities from these countries (Del Olmo, 1987, p. 29). The determination that production, use and exportation of drugs may not necessarily be criminal in these societies as it is in the United States is never even considered. If drug abuse is a problem in America, it must also be in Latin America seems to be the popular view in America.

The governments of Latin America, overwhelmed by an external debt that becomes more and more unpayable, and plagued by growing social problems which often result from the demand for drugs themselves, which are often produced at the expense of other agricultural products, are becoming victims of this crime which is considered by some American politicians as a transnational crime (Del Olmo, 1987, p. 30). Foreign Aid Authorization Act requires the American government to suspend foreign aid to countries which produce and export drugs. U.S. troops are also sent to assist anti-narcotic forces in many Latin American countries. This has resulted in increase in violence and other crimes in some of these countries. The invasion of Panama, arrest of its leader General Noriega for trial in the United States and hundreds of people killed and property destroyed in the process, and the current war on drugs in Columbia, which has claimed many lives are other examples of the cost of dependency on USA to Latin America.

Scandinavia

The term Scandinavia refers to the Nordic people in the countries of Norway, Denmark, Sweden, Finland and Iceland. "The twenty-two
million people who inhabit these countries have a common cultural tradition, have been in and out of various political combinations with one another, and think of themselves as a group" (Scott, 1975, p. 1). They have their differences, yet each is far more different than other nations outside the group than it is from any of the brother nations within the group. This unity is based on geographical position, community of culture and approach towards the issues of political and social survival.

Scandinavians (except the Finns and the Lapps) are thought to have been one people whose ancestors may have come from Asia Minor or the Balkans. Scandinavians are not blessed with much land and many natural resources as other parts of the world. Despite some superficial differences the Scandinavians are very much alike. In social customs and outlook on life they are closer than any other group of people. "In religion all Scandinavians once worshipped Odin and Thor together. They passed together from paganism to christianity. More than 90% of them are Lutherans" (Scott, 1975, p. 10).

"The legal systems all come from common origins and are dominated by a common philosophy from which many modern social laws are formulated" (Scott, 1975, p. 10). This fact is particularly important in explaining Scandinavian attitude and policies towards crime and deviance, which is more corrective than positive. Literacy is almost 100% in all of the countries (Sewell, 1980). "No where in the world can one find a higher per capita production and consumption of books" (Scott, 1975, p. 10) than in Scandinavia. Freedom of expression is an ideal and practice. Scandinavians do not cherish wealth. They live
simple lives and tax wealth with severity. Scandinavians are very progressive, but not greedy. They live better than most of the world. They have the highest physical quality of life compared to all other countries in the world (Sewell, 1980, pp. 160-162). Sweden and Iceland score highest on quality of life index at 98, Denmark and Norway at 97 and Finland at 95. Physical Quality of Life Index, (PQLI) is calculated by averaging life expectancy, infant mortality and literacy.

Scandinavians value individual liberties and freedom equally with unity. Unity is prized but individuality is encouraged to maintain cooperation with the group. Cultural homogeneity enables Scandinavians to value support of others. "Scandinavians see the justice system as a part of the management of society" (Friday, 1988, p. 57).

The criminal justice policy is used as reactive measures to the threat of social harm. There is emphasis on treating the offender with respect, though punishment is often firm, in order to return them to society. There is strong emphasis on prevention of crime, which is seen as threatening to society, rather than a manifestation of individual wickedness. The goal of the justice system of removing crime from society is pursued through two major tendencies:

1. Some form of control profile with emphasis on the view that crime is socially produced, therefore paying more attention to social control and prevention rather than punitive measures, and

2. Neo-classical approach to punishment. This involves a rigorous attempt at "balanced retribution" (Friday, 1988; Mathieson, 1981; and Stark, 1987). The effect of this unique approach according to some scholars is that the rate of criminal activities in these societies
may be less than in other European societies with comparable levels of development (Norstrom, 1988).

Many modern characteristics of Scandinavia either predate the modern states or simply have been adapted to fit the culture and traditions of the people. Laws regulate the relationships of individuals within communities based on the moral standards and ideals of such societies and religious beliefs. Usually these are defined and controlled by the state. "In Scandinavia the development of law preceded the establishment of the state" (Scott, 1975, p. 42). The cultures and traditions which have always emphasized fairness, individuality and community, the requirements of fair representation were already established before the development of modern laws and nation states.

Persistent characteristics of culture and tradition also shaped the foundations for the Scandinavian economy. The meager resources in these regions through history have intensified the value of cooperation. All Scandinavian countries practice a form of mixed economy which encourages both free enterprise and public welfare. Sweden, for example, has pursued a "decentralized economy dominated by private enterprise but with a rather ambitious government policy in the fields of public consumption and public savings, income redistribution, infrastructure and stabilization--a liberal-social democratic welfare state in the context of a mixed economy" (Lindbeck, 1974, p. 24).

The Scandinavian societies have a political system not easily copied by other societies--functioning social democracies.
"Fundamental for the Scandinavians in their planning of change is the individual and his needs" (Scott, 1975, p. 58). They emphasize the process and results which involve everyone and benefit all rather than motives which lend themselves easily to suspicion or doubt. Their emphasis on individual welfare allows these societies to meet the needs of their total population for education, food, shelter, health and general welfare while at the same time encourage innovations and hard work.

New Zealand data are combined with those of Scandinavian for the purpose of analysis. Though New Zealand is an oceanic island, several thousand miles away, there are characteristics about the New Zealandish society that makes it like Scandinavia. The major similarities between New Zealand and Scandinavia are social, political, and economic.

"Like the Scandinavian countries New Zealand is almost an ethnically and culturally homogeneous society. About 90% are British and other European immigrant descendants who have made it their home. The remaining 10% are native Maoris" (Johnson, 1982, p. 24). The distance of New Zealand from Europe has sustained a cultural homogeneity which makes this Island and Scandinavia unique. Like the Scandinavians they depended heavily on rural agricultural and pastoral life, New Zealand even more than Scandinavians in the 20th Century.

Religion, like in Scandinavia, is a major aspect of New Zealander life. They are mostly Anglicans, Presbyterians, Roman Catholics, and Methodists.

New Zealanders tend to be hard working, proud of their nation.
and work hard to defend the culture and support each other. "New Zealand society contains a deep humanitarian streak, one which is reflected in the equalitarian social policies erected to protect residents from the nicissitudes of a laissez-faire economic system" (Johnson, 1982, p. 30). Like the Scandinavian societies, New Zealanders do not put much emphasis on personal wealth, hence, "there are no substantial economic class differences within the country" (Johnson, 1982, p. 35). It also has a welfare state. Fundamental to the welfare state policy are the maintenance of full employment and of good working conditions, good wages, and an effective social security system to ensure good quality of life. Compared to other countries New Zealanders live very well too. "Their physical quality of life index is 95" (Sewell, 1980, p. 160).

The legal system of New Zealand also emphasizes public service and maintenance of the society rather than punitive to offenders. "The daily administration of law is in the hands of a centrally organized police service, members of which are unarmed" (Johnson, 1982, p. 48). Crime rates are generally low.

Summary

This discussion of the different regions of the world has attempted to demonstrate the uniqueness of different societies. The differences among nations suggest that the circumstances of each society are different. Since the historical, cultural, geographical, and political context of each society are so different and therefore contribute differently in causing and reacting to crime, any attempt
to construct a global theory of crime must take them into account. In order to explain crime and its control, it is necessary to know as much about the areas of the world that are troubled as well as those that are untroubled with crime (Clifford, 1983).

Geographical factors tend to give countries a shared identity, shared cultural values, shared problems, and, in fact, contribute to shared perspectives and coping mechanisms. Western European and American scholars have tended to see the whole world from their perspective only. They assume, therefore, that the rest of the world is or has to be similar in their experience with social processes and crime. They tend to generalize assuming that theories which explain social problems in the West will explain them in other societies as well. This may not be correct. It is only by ignoring what has happened in Muslim countries, Japan and other societies can we maintain that every society is condemned to follow the paths of development cut by the West and to suffer the same consequences (Clifford, 1978, p. 65). Other cultures have general ethics which may be expressed legally, religiously, culturally, or reflected harmoniously in aspects which enable them to accommodate technological development and social change (Clifford, 1978; Shelley, 1981) differently.
CHAPTER IV

RESEARCH DESIGN

Introduction

The major contention of modernization theory of crime is that the changes associated with modernization and the social pressures of adapting to these changes are criminogenic. The changes necessarily involve the violation of popularly accepted norms and laws. Durkheim (1966) suggested that development only occurs when change, which often is contrary to popularly held beliefs, is allowed to take place. In fact, he observed that people who have contributed most to modernization or development were considered deviant or even criminals during their time. Some of them were severely punished for some of their ideas, which have become pillars of modernization.

The process of modernization is socially disruptive as it involves the engagement of some people in acts that are not popularly accepted, some of which are forbidden by law. Even when the society reaches out to these changes it does so at the expense of existing traditions and social norms. The disruption of cultural and traditional beliefs and behaviors is what Durkheim referred to as anomie. The disruption created by modernization processes such as urbanization, industrialization and individualism includes great changes in individuals and communities. Adjusting to these changes can be a major source of social problems. It is for these reasons that modernization
theorists of crime see a link between the process and crime. The contention is that increases in characteristics of development lead to increases in the rates of crime.

To examine the relationship between development (modernization) and crime it is important to identify and quantify the process of modernization. It is also necessary to identify and quantify crim­inality. This chapter attempts both. Some discussion of the data used in the study is presented leading to the hypotheses to be tested and the method of analyses used.

Measuring Modernization (or Development)

Modernization (or development), the process by which a society evolves and utilizes the most effective means of meeting the goals or needs of its people, can be measured by visible changes and results.

Determining the most effective indicators of development is not easy. There is a pervasive tendency to use industrialized countries as models for development, and therefore to use economic and socio­political indicators in them to measure development in other countries. Such things as average income, rate of consumption (of energy and other resources) and Gross National Product (GNP) may re­present characteristics of some societies which are not relevant to others, or at least not to the same degree. In this study develop­ment (or modernization) is measured by urbanization, life expectancy, percentage of the population employed in agriculture and industries, Gross Domestic Product (GDP), and Gross Domestic Product in Manufactur­ing (GDPM). These are variables each of the countries studied uses to
show social and economic processes and change in them.

**Percentage of Population Living in Urban Areas**

This is important because urban centers provide industries and modern amenities which draw people into them. Increasing urbanization indicates modernization. Urbanization is the collecting of large populations who create and utilize economic and social characteristics of modernity such as schools, industries, hospitals, and public utilities such as water systems, electricity and sewage disposal and provide modern services which help in solving daily problems and entertain. Despite social problems often associated with urban life, urbanization is a major aspect of modernization. To accommodate the large populations, urban centers must provide goods and services and be creative (modern) in solving many problems of living.

**Life Expectancy**

Since modernization emphasizes higher quality of life, increased life expectancy may indicate increase in social development. Modernization, because it provides means of solving individual problems enabling people to live longer, will increase life expectancy. People eat better, live better and have better medical diagnostic, treatment and prevention resulting in increased longevity.

**Industrial Employment Percentage**

Industries are products of and for modernity. The more a society is developed, the more industries there are, and, therefore, an
increased percentage of the population is employed in them. The process of modernization involves focusing on needs and problems of humanity. The major task of industries is to meet these needs. Industries also represent purposeful social dynamics in the pursuance of answers and solutions to human needs.

**Percentage Labor Force in Agriculture**

In less industrialized societies, which are labor intensive, there are more people employed in agriculture to produce food, which is necessary for survival. As a society becomes more modern or developed and industrialized, more food is produced on a large scale by use of modern technology. This frees people to engage in other concerns. Therefore, as societies develop and more people engage in industries for livelihood and more food is produced by mechanization, fewer people will be employed in agriculture.

**Gross Domestic Product (GDP)**

Gross Domestic Product (GDP) is a good general indicator of economic activity in every society. Increases in Gross Domestic Product are progressive as they indicate increases in the society's ability to produce desired goods and, therefore, meet the needs of its people. Gross Domestic Product must not be seen as necessarily giving a good picture of a society's development. What is produced in a society may or may not be the most capable in solving specific needs of the society, e.g., the massive industrial production in military hardware has not solved the real economic problems of the Soviet Union.
Gross Domestic Product in Manufacturing (GDPM)

This refers to the industrial or manufacturing productivity of the society. Unlike the GDP, which is the total productivity of the society and may include manual and agricultural labor productivity, GDPM is specific. It includes only industrial productivity, which may be a better indicator of a society's actual development or modernization.

These indicators of modernization are useful in showing the direction and rate at which the society progresses in its attempts to meet its needs. The numbers used are standard ones given by each of the countries studied or those extrapolated and averaged from the data each country has given during the years covered by the study. No attempt is made to qualify, to defend or to criticize the data or the methods used in collecting them. They are used because the countries themselves use them to evaluate themselves. This writer is convinced that they are appropriate indicators of modernization processes in the societies, even if they are not the most effective measures for individual countries. In general, they provide a good basis for comparing social and economic dynamics in societies.

Typologies of Crime

Every society has a classification of types of behavior it considers criminal. Some types of crime have a general meaning which are generally understood in all societies. Some behaviors have different cultural impact and may be considered criminal in some societies but not others. Criminologists identify four types of crime which...
include: (1) Violent personal crimes, (2) Property crimes, (3) Victimless or moral crimes, and (4) White collar or corporate crime.

In violent crime, the personal safety of other individuals or the group is threatened. Homicide is a good example of violent crime. The impact of homicide is similar in most human societies. All societies have laws against assault and physical abuse. Most violent crimes are of this type. However, it is not possible to generalize and quantify. Adults fighting each other, domestic violence and other forms of assault are not easy to quantify and are not always considered criminal.

Property crimes are crimes in which property owned by one individual or group is removed or threatened to be removed from the owner without his knowledge or consent. In property crimes the acceptable method of distributing and acquiring economic resources and products is interfered with, and violated in favor of other devious methods, such as theft. Some property crimes may assume violent characteristics. Robbery is generally both a personal and property crime. Property is the goal, violent personal intimidation the means.

"Victimless" crimes are those behaviors which violate common standards of morality and decency without harming or threatening others directly. Prostitution, adultery, vagrancy, alcoholism or drug use are examples of crimes in which there are no direct victims besides the perpetrators themselves. Some of these socially unacceptable behaviors may be linked to other crimes and social problems such as violence and disease.

White collar or corporate crimes are generally behaviors engaged
in by people who are specifically expected to act contrary to the behaviors they may be guilty of in the position they hold. White collar or corporate crimes are usually property crimes in which offenders betray public trust. Fraud, embezzlement, cheating, and official corruption are examples of crimes in this category.

Some form of political crime also exists in every society. This includes all behaviors engaged in by people who are motivated by a country's political ideology, leadership and/or political processes. Political crimes may include vandalism, sabotage, terrorism, assassinations or other behaviors engaged in for the purpose of frustrating those in power or to force them to make certain decisions. Political crimes by those in power may include abuse of power, human rights abuse, nepotism and engagement in behaviors which benefit those in power at the expense of the masses. Governments can also commit political crimes by engaging in unlawful seizure and destruction of property or intrusion on personal rights, freedoms and liberties.

Vice and crimes against social morality such as prostitution, pornography, and indecency also exist in most societies. These are usually difficult to quantify since perpetrators and victims are often willing participants, and because sometimes there are no direct victims. Often victims who are willing participants are too embarrassed to report or to cooperate with investigators. Vice also represents behaviors the society sees as common but one that the society is not proud of. These crimes may represent private and secret lives of prominent citizens as well as the common people.

For the purpose of this study, three major types of crimes are
used. These are crimes with which all human societies tend to be concerned and on which data are more readily available. They are: Homicide or murder, theft (including only major theft), and fraud. Definitions and characteristics of these crimes also tend to be universal making it easier for generalizations about their nature.

**Homicide--Murder**

This is the criminal taking of life. All societies have laws against violence, especially murder, intentional violation of one's life or engagement in behavior which threatens another person's life and physical safety. The data on homicide seem to be the most reliable in most societies. As used here, homicide includes any act performed with the purpose of taking a human life unlawfully.

**Theft**

In general, theft is the removal of property that belongs to another person without his consent. Theft can be simple removal of property physically available to the offender, breaking and entering to remove property not physically available to the offender or robbery and mugging in which property is removed from victim by force or intimidation. The motive for the crime of theft is universal, i.e., the impulse or premeditation to acquire property. Only major theft, which includes a dangerous aggravating circumstance such as robbery, burglary, and housebreaking, are included here. Major theft is easier to quantify and the data more reliable. People are more willing to report and seek adjudication.
Homicide and theft are the major types of criminal activity which are reported. Other crimes such as rape, assault and some forms of personal victimization may receive far less attention because victims may not choose to report.

Fraud

Fraud is any act of gaining unlawful possession of another's property or of gaining unlawful benefits or opportunities by betraying public trust. It includes behaviors such as embezzlement, misappropriation, forgery, false pretenses, trickery and swindling.

Other crimes are excluded from this study because the data on them are less reliable. This may be due to the fact that attitudes towards those behaviors are so different that the data on them are very unreliable. This includes crimes such as rape, drug abuse, sexual abuse, child abuse, and prostitution. There is a general consensus within the cross-national research community that the data on these crimes are the least reliable (Bennett & Lynch, 1989, p. 5). Increases in specific crimes such as violent personal and property crimes indicate general trends in criminality in the society. This is because these are crimes about which there seems to be the most concern in all societies where records are kept. These are crimes reported and prosecuted most.

Some behaviors constitute criminality in one society but not in others. Corruption is an example of this. The determination of corruption is cultural. In traditional societies the positions occupied by people in power are more personal to them and so they
may be free to do as they want. In such situations, behaviors which would be considered corrupt in modern and legalistic societies may be acceptable traditional behaviors. Bribery is a behavior commonly associated with official corruption. In traditional societies the practice of paying homage to people in power, which includes giving gifts and honor to gain favor, is generally expected or even encouraged. Corruption may be defined only by the unfair distribution of opportunities and not by the fact that officials collect gratuities.

The head of state in Nigeria who appointed a disproportionate number of members of cabinet from one state, tribe, region or religious orientation, would be charged with corruption and removed immediately; the fact that he or she may have received gifts in excess of thousands of dollars as gifts and contributions would not be the issue. In America, the President may not receive a personal gift in excess of $1000.00, but may choose all his cabinet from among his personal friends, from any state or states, one region and even a specific religious orientation. The appointment of Robert Kennedy, who had minimum qualifications, as attorney general by his brother, J. F. Kennedy, would have been regarded as a severe case of corruption in Nigeria.

Criminal designations and definitions reflect values and trends in particular societies. Circumstances which lead to such designations may not be shared by other societies. In recent years the success of the feminist movement has resulted in legislation against rape, domestic violence and other such behaviors towards women. These changes may criminalize behaviors which are not criminal in other societies. In
many cultures husbands cannot be accused of or prosecuted for raping or beating their wives. Several states in America have passed or are in the process of passing laws which make such prosecutions possible. In many societies any girl who reaches puberty is a woman and may be married off. In America, in most states children under 16 years are minors, sexual activity with them with or without their consent is considered rape. Other social groups have also succeeded in influencing the development of laws regarding behaviors and attitudes toward them. Blacks, women, homosexuals and other "disadvantaged" groups have contributed to the passage of anti-discrimination and civil rights laws in America. This is not the case in other societies. Therefore, the laws and judicial attitudes in other countries are different from those in America.

Hypotheses

The modernization theory of crime is based on the hypothesis that there is a correlation between modernization and crime. To explore this correlation several hypotheses are explored. Though the variables used here do not tell everything about the extent and nature of development or modernization in any society, changes in them do indicate modernization processes. The crimes discussed are also not the only types of crime in any of the societies but are assumed to reflect the extent and nature of criminal activity with which the society is concerned.
Hypothesis 1: There is a Positive Relationship Between Urbanization and Crime.

It is clear from the reviewed literature and above discussion that urbanization is an indicator of modernization or development. Urban centers result from the establishment of industrial, administrative and public service units and amenities which appeal to public needs and demands. Urbanization may not cause modernization or development, but is a major characteristic of those processes. If urbanization indicates modernization or development and if modernization is causally related to crime then increases in urbanization should lead to increases in both person and property crimes. The assumption of this hypothesis is that increases in urbanization would be sufficient reason for increase crime rate.

Hypothesis 2: There is a Positive Relationship Between Life Expectancy and Crime.

This hypothesis deals with life expectancy. It is assumed that a major need of every society is good living conditions which improves the quality of life by reducing disease and death rates enabling people to live longer. A society better at meeting this need is farther along in the process of development. The lower the life expectancy, the farther behind or slower is the process. Since higher life expectancy is a desired goal and indicator of development societies, with higher life expectancy would also have higher crime rates.
Hypothesis 3: There is a Positive Relationship Between Industrialization and Crime.

Industrial participation is a major indicator of development or modernization. Industries are modern institutions which produce goods which make life easier. Since the process of development or modernization involves not only attempts to meet public and social needs but to meet those needs in the most convenient and effective manner, industries which produce goods needed by the society are good indicators of the process of development. A society which is developing would establish and expand industries, therefore increasing the percentage of the population employed in them. The hypothesis, therefore, is that as the higher the number of people employed in industries, implying industrialization or development the more crime there will be.

Hypothesis 4: There is a Negative Relationship Between the Percentage of Population Employed in Agriculture and Crime.

Agricultural participation is a major differentiating characteristic between developed and underdeveloped countries. With industrialization food production, the most important human industry is mechanized leading to more efficient and effective farming methods and mass production of food.

This usually means that fewer people need to be employed in agriculture and therefore are employed in industry. Societies which are less developed have a larger percentage of their population employed in agriculture. Industrialized societies have smaller percentage of their populations employed in agriculture. This hypothesis states that countries with larger percentages of their
population employed in agriculture are less developed and will have lower rates of crime, however, as development/modernization occurs, and less people will be engaged in farming while more of them employed in industries the rates of crime will increase.

**Hypothesis 5: There is a Positive Relationship Between GDP and Crime.**

Gross National or Domestic Product (GDP) is the total amount of goods and services a society produces. Since development is the extent to which a society is able to meet the needs of its people, the society will be better able to meet those needs if it produces more. Increasing GDP means increasing development. It is expected that increase in GDP will lead to proportional increase in crime.

**Hypothesis 6: There is a Positive Relationship Between GDPM and Crime.**

Gross Domestic Product (GDP) tells about the total productive capability and activities in the society. A high GDP tells about the total output of a society. Manufacturing productivity is a better indicator of a nation's creativity and industry. A high GDP which is in agriculture and natural resources such as oil and underground minerals does not tell enough about a society's actual development. Raw materials contribute to a society only if they are transformed or processed. Gross Domestic Product in Manufacturing (GDPM) is a total of what a society produces from its industries by using knowledge and technology available to it.

The research hypothesis is that increases in Gross Domestic Product in Manufacturing will lead to increases in crime. Since GDPM
is the most important indicator of modernity, its relationship to crime is very important in determining the effects of modernization on crime in every society.

The hypotheses presented above do not reflect all the theories of development or of crime discussed in the review of literature. They are constructed in order to examine the modernization theory of crime. A valid modernization theory shown to be valid in explaining trends in criminality makes other theories which challenge the major positions of the theory obsolete. On the other hand, if modernization theory does not adequately explain crime, it would be desirable to explore the arguments presented by alternative theories. As stated earlier, the major purposes of this study are twofold. One is to examine the validity of modernization theory of crime by examining the relationship between social and economic development and crime. Another purpose of this study is to explore the dynamics of both development and crime, in the hope of contributing to the search for a comprehensive criminological theory and to the knowledge and practice of comparative criminology. The hypotheses presented in this study will assist in evaluating the phenomena of development and crime or provide a basis for further exploring the other theories. Though the theories are not tested in the study, their relevance is demonstrated through the testing of modernization theory.

Comparative Design

Since modernization theory assumes that there is a single universal process of development with similar inevitable consequences
(i.e., crime), the theory is supported only if the above holds true in all societies. This means that there should be a similar pattern in the relationship between various indicators of modernization and crime in all societies in all regions of the world. This should be true irrespective of socio-cultural, historical, and geo-political variations. This means also that as development or modernization stabilizes, the rates of crime should do the same. Countries experiencing rapid modernization will have more rapid increases in the rate of crime. This is the true essence of causal relations. Not meeting the above conditions suggests spurious or no relationships at all.

Unfortunately, the data available for this study do not include countries from Eastern Europe (the socialist countries). This fact, though regrettable, does not negate the usefulness of this study. If the theory holds in the countries studied, one would expect that it would hold in the socialist countries as well or assume that any differences are due to basic social, political and economic differences between the socialist countries and the rest of the world. Any conclusions made will provide a good basis for future research of the hypotheses and therefore the theory is not supported in these societies, and one might reasonably argue that is may never have been supported in societies that are even more different.

The hypotheses presented earlier are tested using a sample of longitudinal data collected from 54 countries covering 25 years (1960-1985). The countries studied are divided into six different regions based upon their histo-cultural and geo-political character.
It is assumed that cultural and geographical proximity makes the countries in each region more similar than those outside of it. Developments in any country are more likely to influence other countries within the same geographical region than those outside the region. It is also assumed that with similar histo-cultural, geographical and political orientations evolve similar views of development and therefore may have similar approaches to it and experience similar benefits and problems from it. For comparative purposes the writer assumes more similarity than diversity among countries in the same region.

Each hypothesis is tested by the use of Pearson correlation coefficients, a graphic presentation of 25 year trends in modernization and criminality. A one-tailed test is used to the significant level of .05. Each of the hypotheses is tested in each of the six regions so that a discussion focuses both on the nature of a relationship or lack of it in each region. A one-tailed test is used because the theory assumes a one dimensional relationship between modernization and crime. Development or modernization are seen as a one directional process and as having one effect on the rates of crime, increases. The hypotheses tested are one dimensional. All of them assume that there is a positive relationships between indicators of modernization and crime.

Data

The data used in this study were made available by Richard Bennett (1989) at the School of Justice, The American University, Washington, D.C. The data set is titled Correlates of Crime (COC) data...
set. It is a sequential data archive file containing information on 54 nations covering the period of 25 years from 1960 to 1984. The data are extensive and come from nations that voluntarily make them available to the United Nations, i.e., they are non-random and include only those countries which were willing. Therefore, interpretations made are risky and must be read with that in mind.

Interpretations made in this study are based on the researcher's perception and do not reflect the perceptions or intentions of Bennett or the American University School of Justice. The conception of COC evolved as an attempt to provide a comprehensive data set of international comparative studies such as this one. Assuming that the data reflect the COC defined concepts the meanings of independent and dependent variables are the same as provided by Bennett (1989).

Two major problems are considered by the writer and must be considered by the reader. One is the non-randomness of the data. INTERPOL data and other national official data have often been criticized because of the suspicion that they contain systematic bias due to the reporting countries' failure to employ consistent operational definitions of crime. The writer's position is that the definition of crime that any society uses is sufficient since it reflects the problems inherent in that particular society. Academic operational definitions should be consistent with these or broad enough to encompass different systems and cultures. The definition of theft in any society is what that society considers as theft. The writer also accepts the data as fair representation of the situation in the countries providing the data because there is no
clear evidence that data collected by social scientists using other methods are more accurate. In fact, Bennett and Lynch (1989) found, in a comparison of crime data from INTERPOL, that other national crime data and data collected using social science operational definitions and methods to not be significantly different.

Another major concern is the fact that the data used do not include non-free market systems such as the Soviet Union, China and Cuba. The problem is regrettable though at no particular cost to the study. The countries studied are diverse enough that if the differences in their systems affect the impact of development on crime differently, the theory would be rejected and the missing countries would not have made a difference. In fact, such a conclusion will suggest a need for the exploration of the impact of specific in-system characteristics. If the data show consistent relationships in all regions, the hypotheses are not rejected and the theory is not rejected. Failure to reject a hypothesis or theory is not a proof for it, but rather a statement of its probable validity requiring further explorations. A new study would then be desirable which compares the socialist countries with the free world to see if the differences in political, social, and economic systems, which differentiates the countries from which the data are available and the ones from what data are not available, contribute differently to the impact of modernization. The findings from this study might provide the basis for further directions of inquiry on the relationship between modernization and crime.
CHAPTER V

DATA ANALYSES

Introduction

Though there were 54 countries from which data were available there were not the same number of countries from each region. Some regions had several countries and some had comparatively fewer nations from which data were available. To have a fair representation of nations, it was decided that the number of countries from each region be approximately the same. Since a larger sample is usually more representative of the population than a small one, it was decided that as many countries as were possible to be drawn from each region was a fair size of the sample of nations. Latin America and Scandinavia regions each had only five nations from which data were available. It was decided that all five countries or nations in these two regions would be taken as samples. This obviously is not a random sample and it cannot be said for certain the effect this non-randomness has on the representativeness of these countries for the region. The other four regions had more countries representing them out of which a random selection of six countries per region was made.

The non-randomness of the data as stated earlier requires that the interpretation of the findings is made cautiously. One might wonder the extent to which countries that make these records available
are similar to different from the other countries that do not. The expectation of the study is that if the theory being examined is confirmed by analysis of data from these nations one can assume that there may be validity to the theory and seek further research using more representative data. If the study finds the theory to not be supported by analysis of data from those regions and countries, one might conclude that the theory cannot be supported with more representative data either and suggest that the search for a theory of crime look beyond modernization.

The classification of countries into the six regions need to be explained. The regions as stated earlier are classified according to their historical, clinical and political similarities. The Philippines though actually Asian were included in Latin America because of its similarity to the countries in the region, especially in areas such as social, political and economic dynamics and its dependency on the United States for development and security. Its overwhelming Catholicism, underdevelopment and other social, economic, and political characteristics are similar to those of Latin American countries. Besides, the Philippines was once part of the Spanish empire and has some histo-cultural roots with Spain, as do parts of Latin America.

Scandinavian countries represent a unique group of nations because of their shared geography, history and political philosophies. New Zealand is a unique country as an island, and a multicultural society. Colonization and subsequent membership in the British commonwealth brought it closer to Europe. It has developed a social democratic process, industrialization and a socio-political stand on social,
political, military and economic issues similar to the Scandinavian countries. This is most true in its emphasis on being a modern service welfare oriented society and its Scandinavian like resistance or lack of interest in military growth. New Zealand places much more emphasis on social development than global military influence. It is classified in the study with the Scandinavian countries of Sweden, Denmark, Norway, and Finland.

The hypotheses are tested using data from each of the six regions. The data are averaged to obtain single scores for each of the regions. The regions are the units of analysis. Modernization theory of crime is not rejected if there is a consistent positive correlation between indicators of modernization and the different crimes and in all the regions over the period studied. Averaging data from different countries enable the use of regions as units of analysis since the study assumes that countries in each region are more similar than they are different and that these similarities affect the nature of their experience with both crime and modernization. The fact that some of the countries have larger populations, higher rates of crime, higher levels of development, and may have better records than other countries may skew the data by averaging. The impact of this skewness is regrettable, but is expected to be comparatively less than the traditional method of lumping all nations together to come to the kind of conclusions advocates of modernization theory assert.

Tables are used to show changes in the rates of crimes and indicators of modernization. Graphic presentation of trends in
both development and crime are presented to show both increases and decreases in modernization and crime during the 25 years. To be consistent with the theory the curves for indicators of modernization and the different crimes would show similar gradients. Each hypothesis is also tested using Pearson correlation coefficients in one-tail tests at alpha level .05. Multiple regressions are also done to determine the linear dependence of crime on the six independent variables. Stepwise regressions are also done to show which, if any, of the independent variables by themselves or operating jointly have the greatest impact on the rates of crime.

Hypothesis 1

The first research hypothesis is that urbanization causes increases in crime. This means that as a society becomes more urbanized the rates of crime will increase. The hypothesis implies that since the rates of crime are responsive to urbanization, if urbanization stabilizes the rates of crime will also stabilize. Alternative hypothesis (H1) is that urbanization leads to increase in crime. This is a directional hypothesis as it specifies the particular effects (positive) urbanization has on crime. The null hypothesis (Ho) is that urbanization does not lead to increase in crime. The null hypothesis is rejected if there is a positive relationship between urbanization and crime. It is not rejected if there is a negative or no relationship. Averaged data from each of the regions are used for analysis.
Analyses

Region 1--Western Europe and North America

Figure 1 shows the pattern of urban population growth \((X_1)\) and rates of crime \((Y_1, Y_2, Y_4)\) in Western Europe and North America. The percentage of the population living in urban areas has remained fairly constant in these areas during the 25 years at about 77%. The rates have gone up and down a little a few times, the lowest being 74% in 1960, peaking in 1974 at 77%, remaining at about 77% in 1984, indicating a stabilization. Though the rate of urbanization has stabilized, the rate of crime has continued to increase steadily (Figures 1, 2 and Table 5).

Homicide increased by 100%, major theft by 36%, minor theft by 464% and fraud by 259%. In fact, average total crime including other crimes not listed in the study increased by 335% during the period (Table 5).

Figure 1 shows the general slope of the changes in urban population \((X_1)\), mean life expectancy \((X_2)\) which are indicators of modernity and therefore independent variables and average increases in total crime \((Y_1)\), fraud \((Y_4)\) and major theft \((Y_2)\), which are dependent variables. The percentage of the population living in urban areas for all the years covered and the mean average life expectancy have remained steady while the rates of total crime have increased rapidly and those of major theft and fraud have shown moderate and steady increases. This suggests that these increases might be better explained by other factors rather than urbanization. This also seems
Figure 1. Urban Population/Life Expectancy and Crime from 1960 to 1984 in Western Europe/North America.

$X_1$ = Urbanization

$X_2$ = Life Expectancy

$Y_1$ = Total Crime

$Y_2$ = Major Theft

$Y_4$ = Fraud

Legend

Crime Type

- Mean Total Crime

- Mean Fraud

- Mean Major Theft

Modernity Indicators

- Mean Percent Urban Population

- Mean Life Expectancy
Figure 2. Urban Population/Life Expectancy and Homicide from 1960 to 1984 in Western Europe/North America.

$X_1$ = Urbanization

$X_2$ = Life Expectancy

$Y_3$ = Homicide
<table>
<thead>
<tr>
<th>Modernization Indicators/Crime</th>
<th>1960</th>
<th>1984</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Urban Population</td>
<td>74</td>
<td>77</td>
<td>+ 3</td>
</tr>
<tr>
<td>Average Life Expectancy</td>
<td>71</td>
<td>76</td>
<td>+ 7</td>
</tr>
<tr>
<td>% Agriculture Labor Force</td>
<td>12</td>
<td>5</td>
<td>- 7</td>
</tr>
<tr>
<td>% Industrial Labor Force</td>
<td>41</td>
<td>33</td>
<td>- 8</td>
</tr>
<tr>
<td>GDP Manufacturing</td>
<td>37,460</td>
<td>213,625</td>
<td>+470</td>
</tr>
<tr>
<td>GDP National</td>
<td>122,137</td>
<td>936,613</td>
<td>+667</td>
</tr>
<tr>
<td>Homicide</td>
<td>2,330</td>
<td>4,664</td>
<td>+100</td>
</tr>
<tr>
<td>Major Theft</td>
<td>221,888</td>
<td>1,036,867</td>
<td>+367</td>
</tr>
<tr>
<td>Minor Theft</td>
<td>358,770</td>
<td>2,024,682</td>
<td>+464</td>
</tr>
<tr>
<td>Fraud</td>
<td>80,908</td>
<td>290,320</td>
<td>+259</td>
</tr>
<tr>
<td>Total Crime*</td>
<td>996,716</td>
<td>4,331,697</td>
<td>+335</td>
</tr>
</tbody>
</table>

*Includes other crimes not included above.

Source: Calculated from Correlates of Crime Data.
to be true for homicide. Figure 2 shows that though urbanization 
\( (X_i) \) and life expectancy remained relatively stable during the 
period, the rates of homicide \( (Y_o) \) continued to increase rapidly.

The relationship between urbanization is further examined by us­
ing Pearson Correlation Analysis. The Pearson correlation analysis 
was done on the null (Ho) hypothesis that urbanization does not lead 
to increase in crime. The Ho is rejected if there is a positive 
relationship between urbanization and crime, but not if there is a 
negative or no relationship. Table 6 shows that there is a negative 
relationship between urbanization and homicide, therefore the null 
(Ho) hypothesis is not rejected for the crime. This means that the 
data show that there is no relationship between the amount or rate 
of homicide and urbanization. There is, however, a positive rela­
tionship between urbanization and fraud. This means that fraud may 
have kept pace with the rate of urbanization. The null hypothesis 
(Ho) is not rejected if there is a positive correlation between 
urbanization and any of the crimes provided the alpha level (2) is 
not greater than .05. There is no significant relationship between 
urbanization and major theft. There are no data on average popula­
tion change during the period, however, this is likely to be signi­
ficant. When controlled for even the positive relationship for 
fraud which is only .20 may disappear.
Table 6

Analysis of the Pearson Correlation Independent Variable, Percent Urbanization and Crime in Western Europe/North America (1960-1984) and Action Taken on Null Hypothesis

<table>
<thead>
<tr>
<th>Crime</th>
<th>r</th>
<th>p</th>
<th>Action on Ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Theft</td>
<td>-0.197</td>
<td>0.406</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>Fraud</td>
<td>0.2091</td>
<td>0.010</td>
<td>Reject</td>
</tr>
<tr>
<td>Homicide</td>
<td>-0.1930</td>
<td>0.009</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>Total Crime</td>
<td>0.0247</td>
<td>0.406</td>
<td>Fail to reject</td>
</tr>
</tbody>
</table>

\( \alpha = 0.05 \) -- 1 Tail Test

Region 2--Asia

Figures 3 and 4 show the pattern of urban growth \((X_i)\) and the trends in major theft \((Y_2)\), fraud \((Y_4)\), total crime \((Y_t)\), and homicide \((Y_3)\). The percentage of urban population has increased steadily in Asia, from 42.42\% in 1960 to 56.48\% in 1984, a total average of increase of 14.06\%. The rates of crime have not kept pace with the urban population increase. In fact, there have tended to be decreases in crime (Figures 3, 4 and Table 7). Besides a modest increase in the rates of homicide \((Y_3)\) the rates of all the other crimes and total crime have decreased rather than increase.

Analysis of the correlation between urban growth and the different crimes show that there is a rather strong negative correlation between urban population growth and both major theft and homicide (Table 8) and none at all with total crime. The null hypothesis
Figure 3. Urban Population/Life Expectancy and Crime from 1960 to 1984 in Asia.

\[
X_1 \quad \text{Urbanization} \\
X_2 \quad \text{Life Expectancy} \\
Y_1 \quad \text{Total Crime} \\
Y_2 \quad \text{Major Theft} \\
Y_4 \quad \text{Fraud}
\]
Figure 4. Urban Population/Life Expectancy and Homicide from 1960 to 1984 in Asia.

Legend

<table>
<thead>
<tr>
<th>Crime Type</th>
<th>Modernity Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Mean Homicide</td>
<td>○ Mean Percent Urban Population</td>
</tr>
<tr>
<td>□ Mean Life Expectancy</td>
<td>○ Mean Life Expectancy</td>
</tr>
</tbody>
</table>

Year

$X_1$ = Urbanization

$X_2$ = Life Expectancy

$Y_3$ = Homicide
Table 7
Averaged Indicators of Modernization and Crime in Selected Asian Countries (India, Japan, Korea, Hong Kong, Taiwan and Indonesia) 1960 and 1984

<table>
<thead>
<tr>
<th>Modernization Indicators/Crime</th>
<th>1960</th>
<th>1984</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Urban Population</td>
<td>42</td>
<td>57</td>
<td>+ 15</td>
</tr>
<tr>
<td>Average Life Expectancy</td>
<td>55</td>
<td>66</td>
<td>+ 20</td>
</tr>
<tr>
<td>% Agriculture Labor Force</td>
<td>51</td>
<td>18</td>
<td>- 33</td>
</tr>
<tr>
<td>% Industrial Labor Force</td>
<td>22</td>
<td>30</td>
<td>- 8</td>
</tr>
<tr>
<td>GDP Manufacturing</td>
<td>3,391</td>
<td>88,109</td>
<td>+ 2498</td>
</tr>
<tr>
<td>GDP National</td>
<td>13,907</td>
<td>279,575</td>
<td>+ 1910</td>
</tr>
<tr>
<td>Homicide</td>
<td>3,727</td>
<td>5,076</td>
<td>+ 36</td>
</tr>
<tr>
<td>Major Theft</td>
<td>79,764</td>
<td>49,280</td>
<td>- 38</td>
</tr>
<tr>
<td>Minor Theft</td>
<td>237,350</td>
<td>224,719</td>
<td>- 5</td>
</tr>
<tr>
<td>Fraud</td>
<td>38,588</td>
<td>37,995</td>
<td>- 2</td>
</tr>
<tr>
<td>Total Crime*</td>
<td>791,416</td>
<td>695,093</td>
<td>- 12</td>
</tr>
</tbody>
</table>

*Includes other crimes not included above.

Source: Calculated from Correlates of Crime Data.
that increases in urban population growth does not lead to increase in crime is not rejected.

The fact that urbanization in Asia occurs with decreases rather than increases in crime (as in Europe and America) suggests that there are other factors responsible for the increases or decreases in the rate of crime in either society. The positive relationship between urbanization and fraud though the relationship is negative for other crimes suggests that there is something unique about the nature of fraud as a crime that makes it to react differently to urbanization, such as opportunity of opportunities and social values which emphasize success.

**Table 8**

Analysis of the Pearson Correlation Independent Variable, Percent Urbanization in Asia (1960-1984) and Action Taken on Null Hypothesis

<table>
<thead>
<tr>
<th>Crime</th>
<th>r</th>
<th>p</th>
<th>Action on Ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Theft</td>
<td>-.7823</td>
<td>.000</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>Fraud</td>
<td>.1156</td>
<td>.042</td>
<td>Reject</td>
</tr>
<tr>
<td>Homicide</td>
<td>-.5040</td>
<td>.000</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>Total Crime</td>
<td>.0000</td>
<td>.500</td>
<td>Fail to reject</td>
</tr>
</tbody>
</table>

**Region 3--Middle East**

Countries in this region experienced steady growth in the urbanization. The total increase from 38% of the population living in urban areas in 1960 to over 57% in 1984, an increase of 19% (Table 9) means
## Table 9

**Averaged Indicators of Modernization and Crime in Selected Middle East Countries (Egypt, Morocco, Libya, Syria, Kuwait, and Turkey) 1960 and 1984**

<table>
<thead>
<tr>
<th>Modernization Indicators/Crime</th>
<th>1960</th>
<th>1984</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Urban Population</td>
<td>38</td>
<td>57</td>
<td>+ 79</td>
</tr>
<tr>
<td>Average Life Expectancy</td>
<td>50</td>
<td>63</td>
<td>+ 26</td>
</tr>
<tr>
<td>% Agriculture Labor Force</td>
<td>51</td>
<td>35</td>
<td>- 16</td>
</tr>
<tr>
<td>% Industrial Labor Force</td>
<td>18</td>
<td>27</td>
<td>+ 9</td>
</tr>
<tr>
<td>GDP Manufacturing</td>
<td>394</td>
<td>5,149</td>
<td>+1207</td>
</tr>
<tr>
<td>GDP National</td>
<td>3,128</td>
<td>30,247</td>
<td>+ 867</td>
</tr>
<tr>
<td>Homicide</td>
<td>771</td>
<td>315</td>
<td>- 59</td>
</tr>
<tr>
<td>Major Theft</td>
<td>2,824</td>
<td>4,050</td>
<td>+ 43</td>
</tr>
<tr>
<td>Minor Theft</td>
<td>14,844</td>
<td>9,551</td>
<td>- 36</td>
</tr>
<tr>
<td>Fraud</td>
<td>12,391</td>
<td>1,010</td>
<td>- 92</td>
</tr>
<tr>
<td>Total Crime*</td>
<td>23,899</td>
<td>61,065</td>
<td>+ 156</td>
</tr>
</tbody>
</table>

*Includes other crimes not included above.

Source: Calculated from Correlates of Crime Data.
that more than half the population now live in urban areas. The rate of many crimes has not kept pace with the increase in the rate of urbanization (Figures 5 and 6). In fact, for most crimes there have been decreases. The rates of homicide, minor theft and fraud decreased significantly. Major theft and other unidentified crimes have increased rather rapidly.

These increases in major theft while other crimes have significantly and consistently reduced are very unique to this region. In all the other regions the rates of major theft are comparable with those of other crimes. One can speculate as to the effect of unique social, political and economic dynamics on this difference. The economy of this region depends heavily on oil which has attracted industrial labor from many countries. The region has lots of crude oil underground, but lacks the technology to extract and refine it. Therefore, it has a large population of foreigners who may contribute to social problems. Major theft includes crimes which involve significant loss and threat to the society. It is also a crime which involves a lot of risks. One wonders the extent to which foreigners contribute to high rates of major theft. Minor theft includes petty thefts which are not significantly threatening to the society. Minor theft is usually engaged in by people with limited power and resources. The major percentage of urban population increase is due to large percentage of increase in the number of foreigners.

The table shows that though murder, minor theft and fraud were down, the rates of major theft and unclassified crimes in general increased. There is no record available to this study as to which
Figure 5. Urban Population/Life Expectancy and Crime from 1960 to 1984 in Middle East.

Legend

Crime Type
- Mean Major Theft
- Mean Fraud
- Mean Major Theif
- Mean Total Crime

Modernity Indicators
- Mean Percent Urban Population
- Mean Life Expectancy

Year

$X_1$ = Urbanization

$X_2$ = Life Expectancy

$Y_1$ = Total Crime

$Y_2$ = Major Theft

$Y_4$ = Fraud

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Figure 6. Urban Population/Life Expectancy and Homicide from 1960 to 1984 in Middle East.

\[ X_1 = \text{Urbanization} \]
\[ X_2 = \text{Life Expectancy} \]
\[ Y_3 = \text{Homicide} \]
crimes increased suggesting a more complicated picture of both crime and development in the area. As stated earlier, the crimes selected in the study are not the only crimes that exist. There are many crimes which are unique to particular societies and may be a major source of concern for them that are not for other societies. Usually this is a result of specific social and political dynamics in those societies. The rapid increase and influence of foreigners in the predominantly Islam and traditional Middle East societies may have led to increase in many non-conventional crimes.

Analysis of the correlation between urban growth and the different crimes (Table 10) shows that there is a negative relationship between urbanization and all the crimes in the study (major theft, $r = -.30$; fraud, $r = -.16$; and homicide, $r = -.37$). The hypothesis that urbanization does not lead to increases in crime is not rejected.

Table 10

<table>
<thead>
<tr>
<th>Crime</th>
<th>$r$</th>
<th>$p$</th>
<th>Action on Ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Theft</td>
<td>-.3067</td>
<td>.000</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>Fraud</td>
<td>-.1577</td>
<td>.027</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>Homicide</td>
<td>-.3737</td>
<td>.000</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>Total Crime</td>
<td>-.5004</td>
<td>.000</td>
<td>Fail to reject</td>
</tr>
</tbody>
</table>

$\alpha = .05 -- 1$ Tail Test
Region 4--Sub-Saharan Africa

Sub-Saharan African countries have experienced rapid increases in urbanization during the 25 years covered by the study. In the six countries studied (Nigeria, Kenya, Ivory Coast, Malawi, Tanzania and Zambia) the total average urban percentage population has increased from 11.03% to 26.81%, an increase of 15.78%. This is the most rapid increase. During the period the urban population has more than doubled. Table 11 and the graphs (Figures 7 and 8) both show increases in all forms of crime. The rate of homicide has increased by 186%, major theft by 141%, minor theft by 69%, fraud by 22% and average total crime, including ones not identified above by 141%.

Analysis of the correlation between urban growth and the different crimes in Sub-Saharan Africa shows a negative relationship between urban growth and homicide. The relationship between urbanization and theft is not significant, there is a positive relationship with fraud (Table 12). The null hypothesis that increases in urban population does not lead to increase in crime is not rejected in the case of major theft, homicide and for total crime. It is rejected for fraud as there is positive relationship between increase in percentage of population living in urban areas and rate of fraud (Table 12). Though Table 11 shows increases in the rates of major theft, homicide and total crime, an analysis (Table 12) shows a negative relationship between the increases in urbanization and crime. This is probably because the increases in the crimes are not proportionate to the rate of urbanization. The hypotheses are supported if modernization trends
Table 11
Averaged Indicators of Modernization and Crime in Selected Sub-Saharan African Countries (Nigeria, Kenya, Ivory Coast, Malawi, Tanzania and Zambia) 1960 and 1984

<table>
<thead>
<tr>
<th>Modernization Indicators/Crime</th>
<th>1960</th>
<th>1984</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Urban Population</td>
<td>11</td>
<td>57</td>
<td>+ 16</td>
</tr>
<tr>
<td>Average Life Expectancy</td>
<td>40</td>
<td>63</td>
<td>+ 28</td>
</tr>
<tr>
<td>% Agriculture Labor Force</td>
<td>84</td>
<td>35</td>
<td>- 43</td>
</tr>
<tr>
<td>% Industrial Labor Force</td>
<td>5</td>
<td>27</td>
<td>+ 5</td>
</tr>
<tr>
<td>GDP Manufacturing</td>
<td>53</td>
<td>5,149</td>
<td>+1800</td>
</tr>
<tr>
<td>GDP National</td>
<td>1,009</td>
<td>30,247</td>
<td>+1485</td>
</tr>
<tr>
<td>Homicide</td>
<td>300</td>
<td>315</td>
<td>+ 186</td>
</tr>
<tr>
<td>Major Theft</td>
<td>6,424</td>
<td>4,050</td>
<td>+ 141</td>
</tr>
<tr>
<td>Minor Theft</td>
<td>19,175</td>
<td>9,551</td>
<td>+ 69</td>
</tr>
<tr>
<td>Fraud</td>
<td>1,225</td>
<td>1,010</td>
<td>+ 22</td>
</tr>
<tr>
<td>Total Crime*</td>
<td>46,835</td>
<td>112,976</td>
<td>+ 141</td>
</tr>
</tbody>
</table>

*Includes other crimes not included above.

Source: Calculated from Correlates of Crime Data.
Year

X₁ = Urbanization
X₂ = Life Expectancy
Y₁ = Total Crime
Y₂ = Major Theft
Y₄ = Fraud

Figure 7. Urban Population/Life Expectancy and Crime from 1960 to 1984 in Sub-Saharan Africa.
Figure 8. Urban Population/Life Expectancy and Homicide from 1960 to 1984 in Sub-Saharan Africa.

\[ X_1 = \text{Urbanization} \]
\[ X_2 = \text{Life Expectancy} \]
\[ Y_3 = \text{Homicide} \]
Table 12

Analysis of the Pearson Correlation Independent Variable, Percent Urbanization in Sub-Saharan Africa (1960-1984) and Action Taken On the Null Hypothesis

<table>
<thead>
<tr>
<th>Crime</th>
<th>r</th>
<th>p</th>
<th>Action on Ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Theft</td>
<td>-.0408</td>
<td>.310</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>Fraud</td>
<td>.2620</td>
<td>.001</td>
<td>Reject</td>
</tr>
<tr>
<td>Homicide</td>
<td>-.1365</td>
<td>.048</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>Total Crime</td>
<td>.0395</td>
<td>.316</td>
<td>Fail to reject</td>
</tr>
</tbody>
</table>

\(\alpha = .05 \text{ -- 1 Tail Test}\)

show proportionate changes in the rates of crime. The changes do not take into account population changes, which are very high in this area.

Region 5--Latin America

In Latin America, like in other regions, there have been significant increases in the indicators of modernization. They have also experienced their share of increases in the number of different crimes (Table 13, Figures 9 and 10).

Like in Sub-Saharan Africa both indicators of modernization and numbers of crime in Latin America have increased steadily over the years (Table 13, Figures 9 and 10). The average percent urban population has increased steadily from 45% in 1960 to 61% in 1984. There is almost no fluctuation in the rate of increase (Figures 9 and 10). With some fluctuation all crime rates have also increased.
Table 13
Averaged Indicators of Modernization and Crime in Selected Latin American Countries (Jamaica, Chile, Peru, West Indies and the Philippines) 1960 and 1984

<table>
<thead>
<tr>
<th>Modernization Indicators/Crime</th>
<th>1960</th>
<th>1984</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Urban Population</td>
<td>45</td>
<td>61</td>
<td>+ 16</td>
</tr>
<tr>
<td>Average Life Expectancy</td>
<td>55</td>
<td>66</td>
<td>+ 20</td>
</tr>
<tr>
<td>% Agriculture Labor Force</td>
<td>46</td>
<td>29</td>
<td>- 29</td>
</tr>
<tr>
<td>% Industrial Labor Force</td>
<td>20</td>
<td>18</td>
<td>- 2</td>
</tr>
<tr>
<td>GDP Manufacturing</td>
<td>734</td>
<td>4,210</td>
<td>+ 458</td>
</tr>
<tr>
<td>GDP National</td>
<td>2,888</td>
<td>14,649</td>
<td>+ 407</td>
</tr>
<tr>
<td>Homicide</td>
<td>1,438</td>
<td>4,830</td>
<td>+ 236</td>
</tr>
<tr>
<td>Major Theft</td>
<td>4,616</td>
<td>23,896</td>
<td>+ 418</td>
</tr>
<tr>
<td>Minor Theft</td>
<td>10,062</td>
<td>16,226</td>
<td>+ 61</td>
</tr>
<tr>
<td>Fraud</td>
<td>3,771</td>
<td>4,000</td>
<td>+ 6</td>
</tr>
<tr>
<td>Total Crime*</td>
<td>35,805</td>
<td>89,538</td>
<td>+ 150</td>
</tr>
</tbody>
</table>

*Includes other crimes not included above.

Source: Calculated from Correlates of Crime Data.
Figure 9. Urban Population/Life Expectancy and Crime from 1960 to 1984 in Latin America.

Legend

Crime Type
□ Mean Major Theft
○ Mean Total Crime
■ Mean Fraud

Modernity Indicators
□ Mean Percent Urban Population
■ Mean Life Expectancy

Year

X₁ = Urbanization
X₂ = Life Expectancy
Y₁ = Total Crime
Y₂ = Major Theft
Y₄ = Fraud

Figure 9. Urban Population/Life Expectancy and Crime from 1960 to 1984 in Latin America.
Figure 10. Urban Population/Life Expectancy and Homicide from 1960 to 1984 in Latin America.

Year

$X_1$ = Urbanization

$X_2$ = Life Expectancy

$Y_3$ = Homicide
Analysis of the Pearson correlation between urban growth and the different crimes shows that there is a positive relationship between urbanization and major theft, fraud and total crime. The null hypothesis that increase in urbanization does not lead to increases in crime is rejected (Table 14). There is, however, a negative relationship between increase in urbanization and homicide, suggesting that in this region increases in urbanization does not lead to increase in homicide. For the crime of homicide, therefore, the null hypothesis is not rejected (Table 14).

Table 14

Analysis of the Pearson Correlation Independent Variable, Percent Urbanization in Latin America (1960-1984) and Action Taken on The Null Hypothesis

<table>
<thead>
<tr>
<th>Crime</th>
<th>r</th>
<th>p</th>
<th>Action on Ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Theft</td>
<td>.7565</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Fraud</td>
<td>.7398</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Homicide</td>
<td>-.4134</td>
<td>.000</td>
<td>Fail to reject</td>
</tr>
<tr>
<td>Total Crime</td>
<td>.2619</td>
<td>.004</td>
<td>Reject</td>
</tr>
</tbody>
</table>

$\alpha = .05 -- 1$ Tail Test

**Region 6--Scandinavia**

Scandinavian countries show increases in development as well as increases in various crimes. The rate urbanization has increased rapidly and steadily from only 59% in 1960 to 78% in 1984, with almost no fluctuation, an increase of 19%.
The rate of crime has also increased steadily and rather rapidly. The total recorded average of crime in 1960 was 154,064. It increased to 529,866 in 1984, a total increase of 244% (Table 15, Figures 11 and 12). Homicide increased by 231%, major theft by 300% and Fraud by 217%.

Analysis of the correlation between urban growth and the different crimes shows a positive relationship between urbanization and each of the crimes considered (Table 16). The null hypothesis that increase in urbanization does not lead to increase in crime is rejected suggesting that there is a correlation between urbanization and crime, at least in Scandinavia.

Summary

The research hypothesis, as stated earlier, is that urbanization leads to increases in crime. The null hypothesis is that urbanization does not lead to increase in crime. Though correlations do not prove causality, there can be no causality without correlations. The null hypothesis that urbanization does not cause crime is not rejected if there is no consistent correlation between urbanization and crime. This hypothesis has been tested using data from the six regions.

Analyses show no consistent correlations between urbanization and crime. In Europe and North America, though there has been steady increase in crime, there appears to be no correlation between this fact and urbanization, since urbanization has seemed to stabilize. The rapid increase in crime must be explained by factors other than urbanization, such as social and cultural conditions in the regions.
Table 15
Averaged Indicators of Modernization and Crime in Scandinavian Countries (Sweden, Denmark, Finland, Norway and New Zealand)
1960 and 1984

<table>
<thead>
<tr>
<th>Modernization Indicators/Crime</th>
<th>1960</th>
<th>1984</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Urban Population</td>
<td>59</td>
<td>78</td>
<td>+ 19</td>
</tr>
<tr>
<td>Average Life Expectancy</td>
<td>72</td>
<td>76</td>
<td>+ 6</td>
</tr>
<tr>
<td>% Agriculture Labor Force</td>
<td>21</td>
<td>8</td>
<td>- 13</td>
</tr>
<tr>
<td>% Industrial Labor Force</td>
<td>37</td>
<td>33</td>
<td>- 4</td>
</tr>
<tr>
<td>GDP Manufacturing</td>
<td>1,458</td>
<td>10,667</td>
<td>+ 632</td>
</tr>
<tr>
<td>GDP National</td>
<td>6,607</td>
<td>55,814</td>
<td>+ 733</td>
</tr>
<tr>
<td>Homicide</td>
<td>71</td>
<td>235</td>
<td>+ 231</td>
</tr>
<tr>
<td>Major Theft</td>
<td>20,149</td>
<td>80,667</td>
<td>+ 300</td>
</tr>
<tr>
<td>Minor Theft</td>
<td>70,898</td>
<td>179,363</td>
<td>+ 153</td>
</tr>
<tr>
<td>Fraud</td>
<td>10,592</td>
<td>33,618</td>
<td>+ 217</td>
</tr>
<tr>
<td>Total Crime*</td>
<td>154,064</td>
<td>529,866</td>
<td>+ 244</td>
</tr>
</tbody>
</table>

*Includes other crimes not included above.

Source: Calculated from Correlates of Crime Data.
Year

\[ X_1 = \text{Urbanization} \]
\[ X_2 = \text{Life Expectancy} \]
\[ Y_1 = \text{Total Crime} \]
\[ Y_2 = \text{Major Theft} \]
\[ Y_4 = \text{Fraud} \]

**Figure 11.** Urban Population/Life Expectancy and Crime from 1960 to 1984 in Scandinavia.
Figure 12. Urban Population/Life Expectancy and Homicide from 1960 to 1984 in Scandinavia.
Table 16
Analysis of the Pearson Correlation Independent Variable, Percent Urbanization in Scandinavia and New Zealand (1960-1984) and Action Taken on the Null Hypothesis

<table>
<thead>
<tr>
<th>Crime</th>
<th>r</th>
<th>p</th>
<th>Action on Ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Theft</td>
<td>.6322</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Fraud</td>
<td>.4365</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Homicide</td>
<td>.3267</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Total Crime</td>
<td>.4802</td>
<td>.000</td>
<td>Reject</td>
</tr>
</tbody>
</table>

\( \alpha = .05 \) -- 1 Tail Test

In Asia, also, there is no positive correlation between urbanization and crime, except fraud. In fact, in Asia there is a negative correlation between urbanization and both major theft and homicide. The null hypothesis (Ho) cannot be rejected. In the Middle East region, also, there is no positive relationship between urbanization and crime. In this region, also, there is actually a negative correlation between urbanization and crime. The null hypothesis cannot be rejected. In Sub-Saharan Africa also there is no positive correlation between urbanization and crime (except for fraud).

The situation is different in Latin America and in the Scandinavian countries. In these regions there is a strong positive correlation between urbanization and crime (except in Latin America where there is a negative relationship between urbanization and homicide). The differences in the relationship between particular crimes and
urbanization suggest further that each crime needs to be understood separately as it relates to social, economic and cultural conditions.

Since the apparent relationship in region one and six is not replicated in the other four regions, the hypothesis cannot be rejected. The correlation must be explained by other factors unique to those societies. It must be concluded that the null hypothesis (Ho) that urbanization does not lead to increase in crime cannot be rejected.

Hypothesis 2

The second hypothesis is that life expectancy, as an indicator of modernization, is related positively to crime. This is due to the fact that modernization (or development) improves the quality of life leading to longevity. The research hypothesis is, therefore, that increases in life expectancy would lead to higher rates of crime. Alternative hypothesis (H1) drawn from the research hypothesis is that increased life expectancy is proportionately related to the rate of crime. The null hypothesis (Ho) is that increased life expectancy does not lead to increase in crime. The null (Ho) is rejected if there is a consistent positive relationship between life expectancy and crime rates. This would support the alternative hypothesis that increase in life expectancy is positively related to crime.

Region 1--Western Europe and North America

During the period between 1960 and 1984, the average life expectancy of people in this region increased only moderately from 71 years to 76 years, an increase of 7%. During the same period, the rates
of all crimes have increased rapidly (Table 5, Figures 1 and 2).

The Pearson correlation coefficients of the effect of life expectancy on crime in Western Europe and North America show modest positive relationship for major theft, homicide and total crime but none for fraud (Table 17).

### Table 17

The Pearson Correlation Coefficient on the Effect of Life Expectancy on Different Types of Crimes in Western Europe and America (1960-1984) and Action Taken on the Null Hypothesis

<table>
<thead>
<tr>
<th>Crime</th>
<th>r</th>
<th>p</th>
<th>Action on Ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Theft</td>
<td>0.1558</td>
<td>0.040</td>
<td>Reject</td>
</tr>
<tr>
<td>Fraud</td>
<td>0.0880</td>
<td>0.167</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Homicide</td>
<td>0.1935</td>
<td>0.015</td>
<td>Reject</td>
</tr>
<tr>
<td>Total Crime</td>
<td>0.2012</td>
<td>0.012</td>
<td>Reject</td>
</tr>
</tbody>
</table>

α = .05 -- 1 Tail Test

### Region 2--Asia

In Asia life expectancy has increased by 11 years, from 55 to 66, an increase of 20% (Table 7). Since these societies have experienced decreases in crime rather than increases, life expectancy cannot be said to be positively related to crime. Figures 3, 4 and Table 7 show increases in life expectancy and decreases in total crime and specific crimes, except homicide which increased moderately. The Pearson correlation coefficient analysis shows significant negative relationship between life expectancy and all types of crime.
(Table 18). The negative relationship does not even take into account the major population increase that has taken place in the region.

Table 18
The Pearson Correlation Coefficient on the Effect of Life Expectancy on Different Crimes in Asia (1960-1984) and Action Taken on the Null Hypothesis

<table>
<thead>
<tr>
<th>Crime</th>
<th>r</th>
<th>p</th>
<th>Action on Ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Theft</td>
<td>-.7980</td>
<td>.000</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Fraud</td>
<td>-.3285</td>
<td>.000</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Homicide</td>
<td>-.5255</td>
<td>.000</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Total Crime</td>
<td>-.4856</td>
<td>.000</td>
<td>Fail to Reject</td>
</tr>
</tbody>
</table>

α = .05 -- 1 Tail Test

Region 3--Middle East

Average life expectancy in the Middle East region increased from 50 to 63, an increase of 26% (Table 9, Figures 5 and 6). During the same period the rate of homicide dropped by 59%, of fraud by 92% and minor theft by 36%. Only major theft and unspecified crimes have increased.

Analysis of the relationship between life expectancy and crime in the Middle East, using the Pearson correlation coefficients, shows a negative relationship for some crimes and none for other crimes (Table 19). This may mean that there is actually no relationship between longevity and crime or that the relationship is adequately neutralized by other factors. Whatever the case is, it seems from...
the correlation that in this region longevity, which has increased with modernization has not contributed much to increase in crime.

Table 19

The Pearson Correlation Coefficient on the Effect of Life Expectancy on Different Crimes in the Middle East (1960-1984) and Action Taken on the Null Hypothesis

<table>
<thead>
<tr>
<th>Crime</th>
<th>r</th>
<th>p</th>
<th>Action on Ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Theft</td>
<td>.0475</td>
<td>.282</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Fraud</td>
<td>-.3734</td>
<td>.000</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Homicide</td>
<td>-.2071</td>
<td>.006</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Total Crime</td>
<td>-.2954</td>
<td>.000</td>
<td>Fail to Reject</td>
</tr>
</tbody>
</table>

α = .05 -- 1 Tail Test

Region 4--Sub-Saharan Africa

Life expectancy in Africa has increased from 40 to 51, an increase of 28% during the 25 years. All indicators of modernization and all crimes have increased (Figures 7, 8 and Table 11).

Further analysis of the relationship between life expectancy and crime in Sub-Saharan Africa is done using Pearson correlation coefficients, as in the other regions. The results show a positive relationship for all crimes (Table 20), except that the relationship for fraud is not significant to X.05. In Sub-Saharan Africa there have been increases in both longevity and crime. This positive correlation may or may not be causal.
Table 20

The Pearson Correlation Coefficient on the Effect of Life Expectancy on Different Crimes in Sub-Saharan Africa (1960-1984) and Action Taken on the Null Hypothesis

<table>
<thead>
<tr>
<th>Crime</th>
<th>r</th>
<th>p</th>
<th>Action on Ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Theft</td>
<td>.6490</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Fraud</td>
<td>.1132</td>
<td>.084</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Homicide</td>
<td>.3109</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Total Crime</td>
<td>.4312</td>
<td>.000</td>
<td>Reject</td>
</tr>
</tbody>
</table>

α = .05 -- 1 Tail Test

Region 5--Latin America

Average life expectancy in Latin America increased from 55 to 66, a general average increase of 20%. During the same period there were general increases in all types of crime (Table 13, Figures 9 and 10).

The Pearson correlation coefficient analysis of the relationship between life expectancy and crime in Latin America shows a positive for crime in general, but negative for homicide and fraud. The relationship for major theft is not significant (Table 21). The hypothesis that there is a positive relationship between life expectancy and crime is not supported as far as this region is concerned.
Table 21
The Pearson Correlation Coefficient on the Effect of Life Expectancy on Different Crimes in Latin America (1960-1984) and Action Taken on the Null Hypothesis

<table>
<thead>
<tr>
<th>Crime</th>
<th>r</th>
<th>p</th>
<th>Action on Ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Theft</td>
<td>.0051</td>
<td>.480</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Fraud</td>
<td>-.1729</td>
<td>.043</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Homicide</td>
<td>-.1340</td>
<td>.092</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Total Crime</td>
<td>.1745</td>
<td>.041</td>
<td>Reject</td>
</tr>
</tbody>
</table>

$\alpha = .05$ -- 1 Tail Test

Region 6--Scandinavia

In Scandinavian countries which have enjoyed a high standard of living for a relatively long time, life expectancy has increased by only 6% during the 25 years, from 72 in 1960 to 76 in 1984. During the same period, the rates of crime have increased steadily and rapidly by comparison. Homicide increased by 231%, major theft by 300%, minor theft by 153%, fraud by 217% and total crime by 244% respectively (Table 15; Figure 11, Y₁, Y₂, Y₄; and Figure 12, Y₃). How much of these increases can be attributed to increases in life expectancy can be determined by examining the relationship between life expectancy and these specific crimes.

In this area of the world the Pearson correlation coefficients of the relationship between life expectancy and crime show a rather
significant relationship (Table 22). As stated earlier a correlation is a necessary condition though it does not prove causality. To examine and determine causality regression analysis will be done.

Table 22

The Pearson Correlation Coefficient on the Effect of Life Expectancy on Different Crimes in Scandinavia (1960-1984) and Action Taken on the Null Hypothesis.

<table>
<thead>
<tr>
<th>Crime</th>
<th>r</th>
<th>Action on Ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Theft</td>
<td>.6892</td>
<td>Reject</td>
</tr>
<tr>
<td>Fraud</td>
<td>.5069</td>
<td>Reject</td>
</tr>
<tr>
<td>Homicide</td>
<td>.3768</td>
<td>Reject</td>
</tr>
<tr>
<td>Total Crime</td>
<td>.4589</td>
<td>Reject</td>
</tr>
</tbody>
</table>

Summary

The second hypothesis states that life expectancy is positively related to crime. This means that in societies which are developing rapidly there will be increases in quality of life and longevity. However, if development or modernization and crime are positively related, there will also be proportional increases in crime.

Analyses of the data show no consistent correlations between life expectancy and crime. In Europe and North America and Sub-Saharan Africa there is a positive relationship for major theft, homicide and crime in general, but not for fraud. In Asia, the Middle East, and Latin America there is either negative or no correlations between life expectancy and crime. In Scandinavia there is a positive
correlation between life expectancy and all the crimes studied.

The inconsistency suggests that the rate of crime may depend on factors other than simply improved quality of life and longevity. In almost all societies crimes tend to be committed by young to middle age adults. Less developed and developing societies tend to have higher percentages of the population in this age group, which would suggest a negative relationship between life expectancy and crime. On the other hand, increased development leads to increased life expectancy. If development as well as high juvenile population causes crime, the relationship would be more complicated. However, since the theory assumes that development leads to increases in both crime and life expectancy, we simply need to examine the relationship between the two. Analysis of the data does not show a consistent negative relationship. Europe, North America, Scandinavia and Africa show a positive relationship between life expectancy and various crimes. One can argue that the positive relationship in Scandinavia and the West is due to development and in Africa due to high juvenile population. This, however, does not explain the negative relationships in Asia, which is highly developed, and Latin America which has a high juvenile population. The above analysis suggests that there is, at least from these data, no sufficient evidence to suggest that longevity and crime are indeed related. Since the null hypothesis states that they are not positively related, it cannot be rejected. However, not rejecting the hypothesis does not mean the two are negatively related. This means that the analysis has not established the exact nature of the relationship between longevity
Hypothesis 3

The research hypothesis is that industrialization, as an indicator of modernization, is related positively to crime. This does not mean that people who are employed in industries commit crimes. Rather, the higher the percentage of the population employed in industry the more the society produces that can be stolen or robbed and in general the more opportunity there is for crime. Industrialization is said to create social changes, including structured time, social and economic activities which in turn create opportunities for crime, absence of potential guardians against crime and increased desire for potential benefits of the criminal behavior (Cohen & Felson, 1979). This leads to increase in crime. This means that industrial societies or communities have more crime. The alternative hypothesis (H1) is that increase in the percentage of the population employed in industry is positively related to crime. The null hypothesis (Ho) is that increases in industrial employment is not positively related to crime. The null hypothesis (Ho) is rejected, if there is a consistent positive relationship between percentage of population employed in industries and crime in all the regions.

Region 1.--Western Europe and North America

Figure 13 (X3) and Table 5 show a decrease of 8 in the percentage of the population employed in industries from 1960 to 1980. During the entire period covered by the study the rates of all
crimes have increased steadily (Table 5 and Figure 13, Y₁, Y₂, Y₄), including homicide (Figure 14, Y₃). These graphs and table suggest that there is either a negative relationship between the percentage of the population employed in industries and crime or that there is no relationship at all.

The relationship between the percentage of the population employed in industry and the rates of crime is analyzed using the Pearson correlation coefficients. The result shows that there is a negative relationship between the percentage of the population employed in industry and major theft, homicide and total crime (Table 23). The hypothesis that there is no positive relationship between industrial employment and crime is not rejected.

Table 23

<table>
<thead>
<tr>
<th>Crime</th>
<th>r</th>
<th>p</th>
<th>Action on Ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Theft</td>
<td>-.3200</td>
<td>.000</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Fraud</td>
<td>.0087</td>
<td>.461</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Homicide</td>
<td>-.4228</td>
<td>.000</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Total Crime</td>
<td>-.3858</td>
<td>.000</td>
<td>Fail to Reject</td>
</tr>
</tbody>
</table>

Region 2--Asia

In Asia the percentage of the population participating in
Figure 13. Agricultural and Industrial Labor Force and Crime from 1960 to 1984 in Western Europe/North America.

$X_3$ = Industrialization

$X_4$ = Agriculture labor force

$Y_1$ = Total Crime

$Y_2$ = Major Theft

$Y_4$ = Fraud

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Figure 14. Agricultural and Industrial Labor Force and Homicide from 1960 to 1984 in Western Europe/North America.

Legend

- Mean Homicide
- Mean Percent Agricultural Labor
- Mean Percent Industrial Labor

Legend

- Crime Type
- Modernity Indicators

- Year

- Industrialization

- Agriculture labor force

- Homicide
industrial labor has increased steadily from 22 in 1960 to 30 in 1984 (Table 7; Figure 15, X_3; and Figure 16, X_3), an increase of 8%. During the same period the rate of all crimes declined except homicide which increased by 36% (Table 7, Figure 15, Y_1, Y_2, Y_4; and Figure 16, Y_3). The increase in homicide and decreases in other crimes do not take into account increases in population. It is possible that the population in the region has increased by more than 30% during the 25 years.

The rate of major theft dropped by 38%, minor theft by 5%, fraud by 2% and total crime by 12% (Table 7). The Pearson correlation coefficients of the relationship between the percentage of the population employed in industry and crime shows a negative relationship for all kinds of crime (Table 24). This suggests that, modernization as indicated by increase in the percentage of the population employed in industry is related negatively to crime in Asia, except for the crime of fraud in which there is no significant relationship.

Table 24

<table>
<thead>
<tr>
<th>Crime</th>
<th>r</th>
<th>p</th>
<th>Action on Ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Theft</td>
<td>-.6750</td>
<td>.000</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Fraud</td>
<td>-.0244</td>
<td>.394</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Homicide</td>
<td>-.4445</td>
<td>.000</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Total Crime</td>
<td>-.1583</td>
<td>.039</td>
<td>Fail to Reject</td>
</tr>
</tbody>
</table>

- .05 -- 1 Tail Test
Figure 15. Agricultural and Industrial Labor Force and Crime from 1960 to 1984 in Asia.

Year

\[ X_3 = \text{Industrialization} \]
\[ X_4 = \text{Agriculture labor force} \]
\[ Y_1 = \text{Total Crime} \]
\[ Y_2 = \text{Major Theft} \]
\[ Y_4 = \text{Fraud} \]
Figure 16. Agricultural and Industrial Labor Force and Homicide from 1960 to 1984 in Asia.

X₃ = Industrialization
X₄ = Agriculture labor force
Y₃ = Homicide
Region 3--Middle East

The percentage of the population employed in industries increased by 9, from 18 in 1960 to 27 in 1984. Though the total percentage increase is only 9, this is actually a very rapid increase as the population employed in industries actually increased by half (Table 9; Figure 17, X3; and Figure 18, X3). The rate of conventional criminal activity has generally not increased much (Figure 17, Y1, Y2, Y4). Homicide dropped by 59% (Figure 18, Y3), minor thefts declined by 36% and fraud by 92%. Major theft increased by 43% and unclassified total crime by 156%. It is not known which particular crimes increased to yield the 156% increase in total crime.

The Pearson correlation coefficient analysis of the relationship between the percentage of the population employed in industry and different crimes in the region shows that there is a negative relationship (Table 25). This means that increases in crime cannot be due to increases in industrialization in this region.

Table 25
The Pearson Correlation Coefficient of the Effects of the Percentage of the Population Employed in Industry and Different Crimes in the Middle East (1960-1984) and Actions Taken on the Null Hypothesis

<table>
<thead>
<tr>
<th>Crime</th>
<th>r</th>
<th>p</th>
<th>Action on Ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Theft</td>
<td>-.6106</td>
<td>.000</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Fraud</td>
<td>-.2520</td>
<td>.001</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Homicide</td>
<td>-.5524</td>
<td>.000</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Total Crime</td>
<td>-.5588</td>
<td>.000</td>
<td>Fail to Reject</td>
</tr>
</tbody>
</table>

α = .05 -- 1 Tail Test
Figure 17. Agricultural and Industrial Labor Force and Crime from 1960 to 1984 in the Middle East.

\begin{itemize}
  \item $X_3$ = Industrialization
  \item $X_4$ = Agriculture labor force
  \item $Y_1$ = Total Crime
  \item $Y_2$ = Major Theft
  \item $Y_4$ = Fraud
\end{itemize}
Figure 18. Agricultural and Industrial Labor Force and Homicide from 1960 to 1984 in the Middle East.

X₃ = Industrialization
X₄ = Agriculture labor force
Y₃ = Homicide
Region 4--Sub-Saharan Africa

Industrial labor force grew by 5% in Sub-Saharan Africa during the period covered by the study, from 5% in 1960 to 10% in 1984 (Table 11). The number of all major crimes has increased steadily over the period (Figure 19, Y1, Y2, Y4; Figure 20, Y3; and Table 11). Homicide rates have increased by 186%, major theft by 141%, minor theft by 69%, fraud by 22% and total crime by 141%.

The Pearson correlation coefficient analysis of the effects of the percentage of the population employed in industries in the Sub-Saharan Africa (1960-1984) on the rates of different crimes during the same period shows a positive relationship (Table 26). It is possible that in the Sub-Saharan region increased industrialization contributes to criminality. This relationship is explored later using regression analysis.

Table 26

The Pearson Correlation Coefficient of the Effects of the Percentage of the Population Employed in Industry and Different Crimes in Sub-Saharan Africa (1960-1984) and Actions Taken on the Null Hypothesis

<table>
<thead>
<tr>
<th>Crime</th>
<th>r</th>
<th>p</th>
<th>Action on Ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Theft</td>
<td>.4125</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Fraud</td>
<td>.3457</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Homicide</td>
<td>.5744</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Total Crime</td>
<td>.7358</td>
<td>.000</td>
<td>Reject</td>
</tr>
</tbody>
</table>

α= .05 -- 1 Tail Test
Figure 19. Agricultural and Industrial Labor Force and Crime from 1960 to 1984 in Sub-Saharan Africa.
Figure 20. Agricultural and Industrial Labor Force and Homicide from 1960 to 1984 in the Sub-Saharan Africa.

- $X_3$ = Industrialization
- $X_4$ = Agriculture labor force
- $Y_3$ = Homicide

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Region 5--Latin America

In Latin America the percentage of the population employed in industries has actually dropped by 2% during the 25 year period covered by the study, from 20 in 1960 to 18 in 1984 (Table 13; Figure 21, X₃; and Figure 22, X₃). The rates of all crimes increased during the period, homicide by 236%, major theft by 418%, minor theft by 61%, fraud by 6% and total crime increased by 150% (Table 13; Figure 21, Y₁, Y₂, Y₄; and Figure 22, Y₃). This suggests that if there is any relationship it is a negative one.

The Pearson correlation coefficient analysis shows that there is a negative relationship between the percentage of the population employed in industries and most crime in this region (Table 27). The relationships between the percentage of population employed in industry and major theft, and fraud are not significant to X.05. This means that either industrialization reduces crime or there are other factors which need to be explored.

Table 27

The Pearson Correlation Coefficient of the Effects of the Percentage of the Population Employed in Industry and Different Crimes in Latin America (1960-1984) and Actions Taken on the Null Hypothesis

<table>
<thead>
<tr>
<th>Crime</th>
<th>r</th>
<th>p</th>
<th>Action on Ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Theft</td>
<td>.0030</td>
<td>.489</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Fraud</td>
<td>-.0593</td>
<td>.285</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Homicide</td>
<td>-.4807</td>
<td>.000</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Total Crime</td>
<td>-.3677</td>
<td>.000</td>
<td>Fail to Reject</td>
</tr>
</tbody>
</table>

α= .05 -- 1 Tail Test

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Figure 21. Agricultural and Industrial Labor Force and Crime from 1960 to 1984 in Latin America.

Year

\[ X_3 = \text{Industrialization} \]
\[ X_4 = \text{Agriculture labor force} \]
\[ Y_1 = \text{Total Crime} \]
\[ Y_2 = \text{Major Theft} \]
\[ Y_4 = \text{Fraud} \]
\( X_3 = \) Industrialization

\( X_4 = \) Agriculture labor force

\( Y_3 = \) Homicide

Figure 22. Agricultural and Industrial Labor Force and Homicide from 1960 to 1984 in Latin America.
Region 6--Scandinavia

In this region the percentage of the population employed in industries has dropped from 37 in 1960 to 33 in 1984, a decline of 4%. The rate of all crimes have increased rather rapidly. Homicide has increased by 231%, major theft by 300%, minor theft by 153%, fraud by 217%, and total crime by 244% (Table 15). Figure 23 (Y₁, Y₂, Y₄) and Figure 24 (Y₃) show steady increases in the rates of these crimes. There is a particularly rapid increase in rates of the total crime and homicide.

According to Table 28, the analysis of the relationship between the percentage of the population employed in industries and the rates of crime during the same period shows that there is no direct

<table>
<thead>
<tr>
<th>Crime</th>
<th>r</th>
<th>p</th>
<th>Action on Ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Theft</td>
<td>.0483</td>
<td>.296</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Fraud</td>
<td>-.0035</td>
<td>.485</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Homicide</td>
<td>-.2832</td>
<td>.001</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Total Crime</td>
<td>-.1649</td>
<td>.033</td>
<td>Fail to Reject</td>
</tr>
</tbody>
</table>

α = .05 -- 1 Tail Test

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X₃ = Industrialization
X₄ = Agriculture labor force
Y₁ = Total Crime
Y₂ = Major Theft
Y₄ = Fraud

Figure 23. Agricultural and Industrial Labor Force and Crime from 1960 to 1984 in Scandinavia.
Figure 2. Agricultural and Industrial Labor Force and Homicide from 1960 to 1984 in the Scandinavia.

Year

\( X_3 \) = Industrialization

\( X_4 \) = Agriculture labor force

\( Y_3 \) = Homicide
relationship, but that there is a negative relationship between industrial employment and total crime and homicide, though a weak one, and no significant relationship for major theft and for fraud. This relationship is also explored further by regression analysis.

Summary

The hypothesis that industrialization and crime are related is supported if industrialization (demonstrated by increasing percentage of the population employed in industries) consistently concurs with proportional increase in crime. The null hypothesis that increases in industrial employment is not positively related to crime is not rejected if there is a positive relationship but is not rejected if there is a negative relationship or no relationship between the two in all the regions.

The analysis shows that there is a negative relationship between industrialization and major theft, homicide and total crime in Western Europe/North America, Asia, and Middle East. It is negative for industrialization and homicide, and total crime in Latin America and Scandinavia.

In all the regions, except Sub-Saharan Africa, there is either no significant relationship or a negative one. In Asia and the Middle East where industrialization has been most rapid (industrialization here is measured by increases in the percentage of the population employed in industries) there is a strong negative relationship between this and crime.

In Africa where development seems to be rather slow there is
a strong positive relationship. It seems that there are other factors rather than industrialization that are responsible for the rate of crime. The null hypothesis is not rejected. This means that the hypothesis that modernization and crime are related positively is not supported. These relationships are later explored by regression analysis.

Hypothesis 4

The research hypothesis is that as a society develops, large scale commercialization and industrial productivity results in decreased percentage of the population employed in agriculture. The research hypothesis is that this decrease leads to increase in the rate of crime. The alternative hypothesis is that decrease in the percentage of the population employed in agriculture is positively related to crime. This means that there is a negative relationship between the percentage of the population engaged in agriculture and crime. The null hypothesis (Ho) drawn from the above is that there is a positive relationship between the percentage of the population employed in agriculture and crime. This null hypothesis (Ho) is rejected if there is either a negative or no relationship between the percentage of the population employed in agriculture and crime. It is retained if there is a positive relationship.

Region 1--Western Europe and North America

The percentage of people employed in agriculture dropped from 12 to 5, a decrease of 7% (Figure 21, X₄ and Figure 22, X₄). The
rates of all types of crime have increased (Table 5; Figure 13, Y₁, Y₂, Y₄; and Figure 14, Y₃). These findings are consistent with the alternative hypothesis. This means that the null hypothesis is not supported.

Analysis of the relationship using the Pearson correlation shows that in Europe and North America there is a negative relationship between the percentage of the population employed in agriculture and crime (Table 29). The null hypothesis (Ho) is rejected.

Table 29

<table>
<thead>
<tr>
<th>Crime</th>
<th>r</th>
<th>p</th>
<th>Action on Ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Theft</td>
<td>-.4681</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Fraud</td>
<td>.0470</td>
<td>.301</td>
<td>Reject</td>
</tr>
<tr>
<td>Homicide</td>
<td>-.3530</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Total Crime</td>
<td>-.4312</td>
<td>.000</td>
<td>Reject</td>
</tr>
</tbody>
</table>

α = .05 -- 1 Tail Test

This means that in Europe and North America the decrease in the percentage of the population employed in agriculture is related to increase in crime. This is true for all crimes except for fraud, where the relationship is not significant to X.05.
Regional 2—Asia

In Asia, with recent rapid development, the percentage of the population employed in agriculture has dropped from 51 in 1960 to 18 in 1984 (Table 7; Figure 15, X₁; and Figure 16, X₄), a decrease of 33%. This rapid change has occurred while the rates of almost all crimes have dropped steadily (Figure 15, Y₁, Y₂, Y₄; Figure 16, Y₃; and Table 7) also. It seems that relationships are different in Asia than in Western Europe.

The Pearson correlation analysis of the relationship between the percentage of the population employed in agriculture and crime shows a strong positive relationship for major theft, homicide and negative relationship for fraud (Table 30).

Table 30
Pearson Correlation Coefficients of The Effect of the Percentage of the Population Employed in Agriculture in Asia on the Rates of Crime and Actions Taken on the Null Hypothesis

<table>
<thead>
<tr>
<th>Crime</th>
<th>r</th>
<th>p</th>
<th>Action on Ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Theft</td>
<td>.7217</td>
<td>.000</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Fraud</td>
<td>-.1601</td>
<td>.043</td>
<td>Reject</td>
</tr>
<tr>
<td>Homicide</td>
<td>.4313</td>
<td>.000</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Total Crime</td>
<td>-.0614</td>
<td>.256</td>
<td>Fail to Reject</td>
</tr>
</tbody>
</table>

α = .05 -- 1 Tail Test

The analysis shows that in Asia the higher the percentage of the population employed in agriculture the more crime there is, the lower
percentage the less crime. It appears from this analysis that in Asia the process of modernization may actually reduce some forms of criminal activity. The exact nature of the relationship is better understood by doing regression analysis. This is done later.

**Region 3--Middle East**

In the Middle East percentage of the population employed in agriculture dropped from 51% in 1960 to 35% in 1984 (Table 9), a decrease of 16%. The rates of major homicide (Figure 18, Y3) and fraud (Figure 17, Y4) have also dropped steadily during the period but major theft and total crime (Figure 17, Y1, Y2) have increased.

Analysis of the relationship between the percentage of the population employed in agriculture and crime using Pearson correlation shows that there is a positive relationship (Table 31). This means that like in Asia, decrease in agricultural employment leads to decrease in crime or at least the two variables are positively related. The null is not rejected. There is a rather strong positive relationship.

In this region the hypothesis that decreases in the percentage of the population employed in agriculture is positively related to increase in crime overwhelmingly rejected. Modernization as indicated by decrease in agricultural labor force and crime are negatively related. The negative relationship between employment in agriculture and crime suggests that as countries in this region develop and more people get employed in industry rather than agriculture crime rates would tend to go down.
Table 31
Pearson Correlation Coefficients of the Effect of the Percentage of the Population Employed in Agriculture in the Middle East on the Rates of Crime and Actions Taken on the Null Hypothesis

<table>
<thead>
<tr>
<th>Crime</th>
<th>r</th>
<th>p</th>
<th>Action on Ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Theft</td>
<td>.5004</td>
<td>.000</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Fraud</td>
<td>.2394</td>
<td>.003</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Homicide</td>
<td>.5699</td>
<td>.000</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Total Crime</td>
<td>.6664</td>
<td>.000</td>
<td>Fail to Reject</td>
</tr>
</tbody>
</table>

α = .05 -- 1 Tail Test

Region 4--Sub-Saharan Africa

In Sub-Saharan Africa the percentage of the population employed in Agriculture dropped from 84 in 1960 to 41 in 1984, a drop of 43% (Table 11; Figure 17, X₄; and Figure 18, X₄), the largest drop in any of the regions. The rates of all crimes have increased in the region (Table 11; Figure 19, Y₁, Y₂, Y₄; and Figure 20, Y₂).

Analysis of the data, using the Pearson correlations shows that there is generally a negative relationship between percentage employment in agriculture and crime (Table 32). The null hypothesis is that there is a positive relationship between the percentage of the population employed in agriculture and crime is rejected. This means that modernization as measured by decrease in the percentage of the population employed in agriculture is related positively to increase in crime. It would seem, therefore, that in Sub-Saharan Africa the
alternative hypothesis (H1) is supported.

Table 32
Pearson Correlation Coefficients of The Effect of the Percentage of the Population Employed in Agriculture in Sub-Saharan Africa on the Rates of Crime and Actions Taken on the Null Hypothesis

<table>
<thead>
<tr>
<th>Crime</th>
<th>r</th>
<th>p</th>
<th>Action on Ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Theft</td>
<td>-.4351</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Fraud</td>
<td>-.2575</td>
<td>.001</td>
<td>Reject</td>
</tr>
<tr>
<td>Homicide</td>
<td>-.3164</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Total Crime</td>
<td>-.4146</td>
<td>.000</td>
<td>Reject</td>
</tr>
</tbody>
</table>

α = .05 -- 1 Tail Test

Region 5--Latin America

Countries in Latin America have also experienced rapid decline in the percentage of the population employed in agriculture, from 46 in 1960 to 29 in 1984 (Table 13; Figure 21, X₁; and Figure 22, X₄), a decrease of 20%. During the same period the rates of all crimes have continued to increase (Table 13; Figure 21, Y₁, Y₂, Y₄; and Figure 22, Y₃).

The relationship between the decline in the percentage of the population employed in agriculture and the rate of crime is further examined by the Pearson correlation coefficient analysis. The analysis shows that the relationship is negative for major theft and fraud (Table 33), but positive for homicide and crime in general.

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Table 33

Pearson Correlation Coefficients of The Effect of the Percentage of the Population Employed in Agriculture in Latin America on the Rates of Crime and Actions Taken on the Null Hypothesis

<table>
<thead>
<tr>
<th>Crime</th>
<th>r</th>
<th>p</th>
<th>Action on Ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Theft</td>
<td>-.3408</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Fraud</td>
<td>-.2972</td>
<td>.001</td>
<td>Reject</td>
</tr>
<tr>
<td>Crime</td>
<td>r</td>
<td>p</td>
<td>Action on Ho</td>
</tr>
<tr>
<td>Homicide</td>
<td>.4832</td>
<td>.000</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Total Crime</td>
<td>.0021</td>
<td>.492</td>
<td>Reject</td>
</tr>
</tbody>
</table>

α = .05 -- 1 Tail Test

The hypothesis that development measured by decrease in the percentage of the population employed in agriculture does not lead to crime in general, but may do so for theft and fraud.

**Region 6--Scandinavia**

Scandinavian countries and New Zealand have also experienced continued decline in the percentage of their populations that were engaged in agricultural labor (Table 15; Figure 23, X₄; and Figure 24, X₄). A drop from 21% in 1960 to 8% in 1984 is a big decline and an indicator of a rapid modernization. The rates of crimes have continued to increase (Figure 23, Y₁, Y₂, Y₄ and Figure 24, Y₃).

To further explore this relationship the Pearson correlation coefficient analysis is done. The results show a negative relationship between the percentage of the population employed in agriculture
and crime (Table 34). The null hypothesis is rejected. In this region, too, the hypothesis that increasing development, at least as indicated by decreases in the percentage of the population employed in agriculture is related positively to crime.

Table 34

Pearson Correlation Coefficients of The Effect of the Percentage of the Population Employed in Agriculture in Scandinavia on the Rates of Crime and Actions Taken on the Null Hypothesis

<table>
<thead>
<tr>
<th>Crime</th>
<th>r</th>
<th>p</th>
<th>Action on Ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Theft</td>
<td>-.6416</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Fraud</td>
<td>-.4150</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Homicide</td>
<td>-.3063</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Total Crime</td>
<td>-.4470</td>
<td>.000</td>
<td>Reject</td>
</tr>
</tbody>
</table>

α = .05 -- 1 Tail Test

Summary

Industrialization is a process of developing which involves a shift from peasant farming to mechanized agriculture and therefore less people are employed in agriculture. Since the decline in the percentage of the population employed in agriculture indicates a shift to mechanization (an indicator of modernization) it is expected that this will consistently result in increase in crime. In other words, societies with small percentage of its citizens employed in agriculture will have more crime.

Analysis of the data does not show a consistent relationship or
correlation between agricultural employment and crime. In Europe, North America, Sub-Saharan Africa and Scandinavia there is clearly a negative relationship between the percentage of the population employed in agriculture and crime. The null hypothesis (Ho) is rejected for these regions and supporting the hypothesis of a positive relationship. In the Middle East and Asia there is a strong positive relationship between the percentage of the population employed in agriculture and crime in general, but a negative one for fraud (in the region 3). The null hypothesis that there is a positive relationship is not rejected. In Latin America there is a negative relationship for major theft and fraud but positive for homicide. The hypothesis that decline in participation and increase in crime are positively related is not supported in all regions or with all crimes.

It cannot be concluded, based on the above findings that there is a consistent relationship between the percentage of the population employed in agriculture and crime. The fact that there is strong positive relationship in some cases, a strong negative in others and no relationship in others suggests that the relationship may be more complicated and need further exploration.

Hypothesis 5

The fifth research hypothesis is that increase in Gross Domestic Product (GDP) will lead to proportional increase in crime. It is assumed that Gross Domestic Product is a good indicator of productive activity in the society. Societies will produce more to meet the needs of the people as they improve their means of production, knowledge and
necessary skills to utilize their resources. The alternative hypothesis (H1) drawn from the research hypothesis is that there is a positive relationship between Gross Domestic Product and crime. The null hypothesis (Ho) to be tested is that GDP is not positively related to crime. The hypothesis is rejected if there is a positive relationship between GDP and crime. It is not rejected if there is no relationship or if there is a negative relationship.

Region 1--Western Europe and North America

There has been rapid development or increase in modernization as represented by average National Gross Domestic Product. Between 1960 and 1984 the Gross Domestic Product has increased by 667% (Table 5; Figure 25, X₅; and Figure 26, X₅). The rate of crime has grown as fast also (Figure 25, Y₁, Y₂, Y₄ and Figure 26, Y₃). A look at individual crimes shows that most crimes have also increased steadily in this region.

The relationship is further examined by the Pearson correlation coefficient analysis. The result shows a strong positive relationship (Table 35). This analysis suggests strongly that in this region increases in GDP may actually be related to increases in crime.
Figure 25. Gross Domestic Product and Crime from 1960 to 1984 in Western Europe/North America.
Figure 26. Gross Domestic Product and Homicide from 1960 to 1984 in Western Europe/North America.

\[ X_9 = \text{GDP} \]
\[ X_6 = \text{GDPM} \]
\[ Y_3 = \text{Homicide} \]
Table 35

Pearson Correlation Coefficients of The Relationship Between the Gross Domestic Product in Western Europe/America and Crime, (1960-1984), and Actions Taken on the Null Hypothesis

<table>
<thead>
<tr>
<th>Crime</th>
<th>r</th>
<th>p</th>
<th>Action on Ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Theft</td>
<td>.9215</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Fraud</td>
<td>.6814</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Homicide</td>
<td>.8851</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Total Crime</td>
<td>.9541</td>
<td>.000</td>
<td>Reject</td>
</tr>
</tbody>
</table>

α = .05 -- 1 Tail Test

Region 2--Asia

Asian countries experienced the most increase in GDP of all the regions studied, an increase of 1910% (Table 7, Figure 27 and Figure 28). The rates of almost all crimes declined during the period (Table 7; Figure 27, Y₁, Y₂, Y₄; and Figure 28, Y₃) and fraud by 2%. Only homicide increased by 36%. The graphs (Figures 27 and 28) show that whereas the increase in GDP is rather rapid the decline in crime is gradual, not seeming to be immediate or direct response to the increases in GDP except as a cumulative effect.

The Pearson correlation analysis of the relationship between Gross Domestic Product and crime shows a varied relationship (Table 36). In general, there is no positive relationship between GDP and crime suggesting that GDP does not cause crime in Asia. It is interesting to note that though the GDP has increased rapidly and most
Figure 27. Gross Domestic Product and Crime from 1960 to 1984 in Asia.

\[
X_5 = \text{GDP} \\
X_6 = \text{GDPM} \\
Y_1 = \text{Total Crime} \\
Y_2 = \text{Major Theft} \\
Y_4 = \text{Fraud}
\]
Year

$X_0 = GDP$

$X_5 = GDPM$

$Y_3 = Homicide$

Figure 28. Gross Domestic Product and Crime from 1960 to 1984 in Asia.
crimes have decreased or increased only moderately there is some positive relationship between GDP and crime in general, except for theft where the relationship is negative and homicide where it is not significant.

Table 36

<table>
<thead>
<tr>
<th>Crime</th>
<th>r</th>
<th>p</th>
<th>Action on Ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Theft</td>
<td>-.2120</td>
<td>.009</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Fraud</td>
<td>.4778</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Homicide</td>
<td>.0047</td>
<td>.477</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Total Crime</td>
<td>.5174</td>
<td>.000</td>
<td>Reject</td>
</tr>
</tbody>
</table>

α = .05 -- 1 Tail Test

Region 3--Middle East

In the Middle East there has also been a rapid growth in Gross Domestic Product, up to 867% (Table 9; Figure 29, X₅; and Figure 30, X₆). The rates of most crimes have dropped during the period. Figure 29, X₅ shows a rapid increase in GDP compared to the rates of total crime (Y₁), theft (Y₂) and fraud (Y₄). Figure 30, X₆ shows the increase in Gross Domestic Product (GDP) compared to homicide (Y₃).

Analysis of the relationship between National Gross Domestic Product and crime in the Middle East, using the Pearson correlations

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Figure 29. Gross Domestic Product and Crime from 1960 to 1984 in the Middle East.

\[
\begin{align*}
X_5 & = \text{GDP} \\
X_6 & = \text{GDPM} \\
Y_1 & = \text{Total Crime} \\
Y_2 & = \text{Major Theft} \\
Y_4 & = \text{Fraud}
\end{align*}
\]
$X_5$ = GDP
$X_6$ = GDPM
$Y_3$ = Homicide

Figure 30. Gross Domestic Product and Homicide from 1960 to 1984 in the Middle East.
suggests varied relationships (Table 37). There is a positive corre-
lation between GDP and major theft and homicide, but no significant
relationship to fraud.

Table 37

Pearson Correlation Coefficients of The Relationship Between the
Gross Domestic Product in the Middle East
and Crime, (1960-1984), and Actions
Taken on the Null Hypothesis

<table>
<thead>
<tr>
<th>Crime</th>
<th>r</th>
<th>p</th>
<th>Action on Ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Theft</td>
<td>.4564</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Fraud</td>
<td>-.1302</td>
<td>.056</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Homicide</td>
<td>.3504</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Total Crime</td>
<td>.2309</td>
<td>.000</td>
<td>Reject</td>
</tr>
</tbody>
</table>

\[ \alpha = .05 \text{ -- 1 Tail Test} \]

Region 4-Sub-Saharan Africa

In Africa the Gross Domestic Product (GDP) has grown by 1485%
during the 25 years (Table 11; Figure 31, X_5; and Figure 32, X_6). The
rates of all crimes have also increased (Table 11; Figure 31, Y_1, Y_2, Y_4;
and Figure 32, X_6). The trends of increase in the GDP and all crimes
are shown in Figures 31 and 32. The graphs show that there appear to be
a positive relationship and steady increase in GDP and both total
crime and homicide. This relationship is further examined by Pearson
correlation analysis.

The analysis of the relationship between National Gross Domestic
Product using Pearson correlation coefficients show that in Africa
Figure 31. Gross Domestic Product and Crime from 1960 to 1984 in Sub-Saharan Africa.

\[
\begin{align*}
X_5 &= \text{GDP} \\
X_6 &= \text{GDPM} \\
Y_1 &= \text{Total Crime} \\
Y_2 &= \text{Major Theft} \\
Y_4 &= \text{Fraud}
\end{align*}
\]
Figure 32. Gross Domestic Product and Homicide from 1960 to 1984 in Sub-Saharan Africa.
there is a positive correlation between National Gross Domestic Product and most crimes (Table 38). The relationship is strong for total crime and homicide, though weak for theft and fraud. This region may also have very high increases in population, especially juvenile population. The relationships have not been controlled for either total or juvenile population.

Table 38

<table>
<thead>
<tr>
<th>Crime</th>
<th>r</th>
<th>p</th>
<th>Action on Ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Theft</td>
<td>.1344</td>
<td>.051</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Fraud</td>
<td>.3470</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Homicide</td>
<td>.4466</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Total Crime</td>
<td>.6567</td>
<td>.000</td>
<td>Reject</td>
</tr>
</tbody>
</table>

Region 5--Latin America

In Latin America the GDP has increased by 407% (Table 13; Figure 33, X₅; and Figure 34, X₄), a small rate of growth compared to the rates in Africa and Asia and the Middle East. The graphs (Figure 33, Y₁, Y₂, Y₄ and Figure 34, Y₃) show a rather rapid increase in the rates of total crime and of some specific crimes such as homicide and theft, though the rate of increase for fraud is relatively low.

The relationships between the National Gross Domestic Product and various crimes were analyzed using Pearson correlation coefficients
Figure 33. Gross Domestic Product and Crime from 1960 to 1984 in Latin America.

Year

\[ X_5 = \text{GDP} \]

\[ X_6 = \text{GDPM} \]

\[ Y_1 = \text{Total Crime} \]

\[ Y_2 = \text{Major Theft} \]

\[ Y_4 = \text{Fraud} \]
Figure 34. Gross Domestic Product and Homicide from 1960 to 1984 in Latin America.

Year

\[ X_5 = \text{GDP} \]
\[ X_6 = \text{GDPM} \]
\[ Y_3 = \text{Homicide} \]
(Table 39), shows a positive relationship between GDP and crime. There seems to be a strong relationship between GDP and crime in this region.

Table 39

<table>
<thead>
<tr>
<th>Crime</th>
<th>r</th>
<th>p</th>
<th>Action on Ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Theft</td>
<td>.5129</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Fraud</td>
<td>.3809</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Homicide</td>
<td>.5606</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Total Crime</td>
<td>.6235</td>
<td>.000</td>
<td>Reject</td>
</tr>
</tbody>
</table>

Region 6--Scandinavia

In Scandinavia and New Zealand the GDP has grown 733% between 1960 and 1984 (Table 15; Figure 35, X₅; and Figure 36, X₅). The rate of all crimes also increased significantly during the period. According to the graphs (Figures 35 and 36) the increases in general crime (Y₁) and especially homicide (Y₃) seem to proportional to increases in GDP (X₅). The relationships were further explored using the Pearson correlation analysis.

The Pearson correlation analysis of the relationship between National Gross Domestic Product and crime shows that there is a strong and positive relationship (Table 40) between GDP and crime in this region.
Figure 35. Gross Domestic Product and Crime from 1960 to 1984 in Scandinavia.

Year

\[ X_5 = GDP \]
\[ X_6 = GDPM \]
\[ Y_1 = \text{Total Crime} \]
\[ Y_2 = \text{Major Theft} \]
\[ Y_4 = \text{Fraud} \]
Figure 36. Gross Domestic Product and Homicide from 1960 to 1984 in Scandinavia.

\[ X_5 = \text{GDP} \]
\[ X_6 = \text{GDPM} \]
\[ Y_3 = \text{Homicide} \]
Table 40

Pearson Correlation Coefficients of The Relationship Between the Gross Domestic Product in Scandinavia and Crime, (1960-1984), and Actions Taken on the Null Hypothesis

<table>
<thead>
<tr>
<th>Crime</th>
<th>r</th>
<th>p</th>
<th>Action on Ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Theft</td>
<td>.7687</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Fraud</td>
<td>.6968</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Homicide</td>
<td>.8035</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Total Crime</td>
<td>.7901</td>
<td>.000</td>
<td>Reject</td>
</tr>
</tbody>
</table>

Summary

The purpose of this hypothesis was to find out if there is a positive correlation between Gross Domestic Product (GDP) and crime. The null hypothesis (Ho) states that there is a negative correlation. It is not rejected if there is a negative or no significant relationship.

Analysis of the data using the Pearson correlation coefficients shows a positive relationship, though this is not consistent in all regions and with all crimes. In Western Europe (and North America), Latin America, and Scandinavia the relationship is strong and consistent for all the crimes studied and for total crime. In Asia the relationship though positive for crime in general is negative for some major conventional crime such as theft and homicide. This suggests that though some crimes may increase possibly as a result of increase in productivity this is not always the case even with conventional crimes.
In the Middle East the relationship is positive for crime in general and for specific crimes such as theft and homicide, but negative for fraud. In Africa there is a positive relationship between GDP and crime in general and for specific crimes such as homicide though relative weak for fraud and no significant relationship for theft. This is interesting as modernization theorists suggest that increased productivity is particularly related to theft as there is more that can be stolen.

The analyses show that of all the indicators of modernization studied so far, GDP has shown the strongest positive relationship to crime. The fact that this relationship differs in strength among the regions showing strong relationships to some crimes in some regions, a negative one in others and no significant relationship in some regions suggests a need to explore the significance of some factors unique to each society. The relationship between GDP and crime is further explored by using regression analysis.

Hypothesis 6

The sixth research hypothesis is that increases in Gross Domestic Product in Manufacturing (GDPM) will lead to proportional increases in crime. In the previous hypothesis (Hypothesis 5) it was reasoned that increased development results in a society’s ability to utilize its resources better and therefore become more productive. Sometimes, however, this increased productivity results from simple increase in raw materials which are exchanged for cash but which does not involve much industrial productivity. Industrial productivity is a better
indicator of a society's ability to convert its natural resources and skills to actual products. This is the true essence of development.

To examine the relationship between GDPM and crime an alternative hypothesis (H1) was developed which states that increase in GDPM is positively related to crime. From this the null hypothesis (Ho) is that GDPM is negatively related to crime.

The null hypothesis (Ho) is tested by use of the Pearson correlation coefficients. It is rejected if there is a consistent positive correlation between GDPM and crime. It is also rejected if there is no significant relationship. It is not rejected if there is a negative relationship.

Region 1--Western Europe and North America

During the 25 years covered by the study the average Gross Domestic Product in Manufacturing in Europe and North America grew by 470% (Table 5). The rates of all crimes increased steadily and rapidly during the 25 years. Figures 25 and 28 are graphic representations of these changes. Increases in GDP (X) have been modest compared to GDP, but steady. The rates of crime especially homicide (Y) have increased much more rapidly. Analysis of the relationship using the Pearson correlation shows a very strong positive relationship for crime in general (r = .96) and for specific crimes such as theft (.93) and homicide (.89), see Table 41.

Analysis of the relationship between Gross Domestic Product in Manufacturing and crime in Europe and America shows a strong and
consistent positive (Table 41). This suggests that in this region increase in GDPM might actually be responsible for much of the increase in crime. This relationship will be further examined by use of multiple regression and stepwise regression analysis. The null hypothesis is rejected.

Table 41

<table>
<thead>
<tr>
<th>Crime</th>
<th>r</th>
<th>p</th>
<th>Action on Ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Theft</td>
<td>.9322</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Fraud</td>
<td>.6588</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Homicide</td>
<td>.8865</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Total Crime</td>
<td>.9559</td>
<td>.000</td>
<td>Reject</td>
</tr>
</tbody>
</table>

Region 2--Asia

The average increase in GDPM in Asia during the period was 2498% (Table 7; Figure 27, X₆; and Figure 28, X₇). This is the highest and most rapid increase of all regions during the period. During the same period most crimes decreased. The graphs show that while the GDPM has grown rapidly the trends in all crimes has been downward except homicide which has increased moderately, (Figure 27, Y₁, Y₂, Y₄ and Figure 28, Y₃).

The Pearson correlation analysis of the relationship between GDPM and crime in Asia shows that though there appears to be a positive
relationship for crime in general (.50) there is a negative relationship for theft and no significant relationship for homicide (Table 42). Though there appears to be a positive correlation between GDP and crime in Asia, one wonders why the relationship is so weak compared to region one. This relationship will also be examined further using multiple and stepwise regression analyses.

Table 42

<table>
<thead>
<tr>
<th>Crime</th>
<th>r</th>
<th>p</th>
<th>Action on Ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Theft</td>
<td>-.2749</td>
<td>.001</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Fraud</td>
<td>.4970</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Homicide</td>
<td>-.0678</td>
<td>.208</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Total Crime</td>
<td>.5071</td>
<td>.000</td>
<td>Reject</td>
</tr>
</tbody>
</table>

Region 3--Middle East

There was also a rapid increase in GDP in the Middle East of 1207% (Figure 29, $X_6$ and Figure 30, $X_6$) during the period studied (Table 9). The table and graphs show that during the same period there was an increase in general crime though conventional crime such as homicide, fraud and minor theft decreased. Major theft and other unidentified crimes increased. While GDP grew rapidly the rates of conventional crime where it increased was rather slow, major theft by 43% total, including unspecified crimes increased by 156%.
The analysis of the relationship between Gross Domestic Product in Manufacturing using the Pearson correlation shows a positive relationship for major theft (.45), for homicide (.50) and for total crime (.32) (Table 43). The correlation for fraud is not significant. The positive for homicide is interesting since the actual rate of homicide has dropped by 59% (Table 9). This apparent discrepancy is resolved by a regression analysis which shows whether the change in homicide is explained by GDPM.

Table 43

Pearson Correlation Coefficients of The Effects of Gross Domestic Product in Manufacturing on Crime in the Middle East and Actions Taken on the Null Hypothesis

<table>
<thead>
<tr>
<th>Crime</th>
<th>r</th>
<th>p</th>
<th>Action on Ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Theft</td>
<td>.4535</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Fraud</td>
<td>-.0422</td>
<td>.304</td>
<td>Fail to Reject</td>
</tr>
<tr>
<td>Homicide</td>
<td>.5027</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Total Crime</td>
<td>.3231</td>
<td>.000</td>
<td>Reject</td>
</tr>
</tbody>
</table>

Region 4--Sub-Saharan Africa

In Africa GDPM grew by 1800% during the period (Figure 31, X₉; Figure 32, X₆; and Table 11). The rates of all crimes have also increased. The graphs show persistent increases in both GDPM and all types of crimes.

Analysis of the relationship between GDPM in Africa and crime shows some positive relationship for crime in general and for all
the conventional crimes studied (Table 44). The strength of the relationship varies from a strong relationship for total crime (.63) to a rather weak relationship for major theft (.18). A regression analysis will be done to show how much of the increases are actually explained by increases in GDPM. The null hypothesis is rejected.

Table 44

Pearson Correlation Coefficients of The Effects of Gross Domestic Product in Manufacturing on Crime in Sub-Saharan Africa and Actions Taken on the Null Hypothesis

<table>
<thead>
<tr>
<th>Crime</th>
<th>r</th>
<th>p</th>
<th>Action on Ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Theft</td>
<td>.1767</td>
<td>.015</td>
<td>Reject</td>
</tr>
<tr>
<td>Fraud</td>
<td>.3606</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Homicide</td>
<td>.4109</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Total Crime</td>
<td>.6262</td>
<td>.000</td>
<td>Reject</td>
</tr>
</tbody>
</table>

Region 5--Latin America

In Latin America the GDPM grew by 458% (Table 13) during the period, a rather modest increase. At the same time all crimes increased, some rather rapidly (Figures 33 and 34). The rate of increase of total crime is 150%, fraud increased by 6%, and homicide by 236%. The most increase is in major theft by 418%.

Analysis of the relationship between the GDPM and crime in Latin America using the Pearson correlations shows a positive relationship (Table 45) for all crimes though not as strong as in region one and six. Once again, a regression analysis is done to see how much of...
these changes are actually explained by the increases in GDPM. On the basis of the Pearson correlation analysis, the table and graph show the null hypothesis is rejected. The alternative hypothesis is supported.

Table 45

<table>
<thead>
<tr>
<th>Crime</th>
<th>r</th>
<th>p</th>
<th>Action on Ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Theft</td>
<td>.3844</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Fraud</td>
<td>.2206</td>
<td>.014</td>
<td>Reject</td>
</tr>
<tr>
<td>Homicide</td>
<td>.5251</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Total Crime</td>
<td>.4673</td>
<td>.000</td>
<td>Reject</td>
</tr>
</tbody>
</table>

Region 6—Scandinavia

In Scandinavia and New Zealand GDP manufacturing grew by 632% (Table 15; Figure 35, X₆; and Figure 36, X₇). The rate of all crimes increased steadily during the period (Figure 35, Y₁, Y₂, Y₄ and Figure 36, Y₃). Pearson correlation analysis of the relationship between GDPM and crime shows a strong and consistent positive relationship between GDPM and all the crimes included in the study (Table 46). The null hypothesis is rejected meaning that the H₁ is supported.
Table 46

Pearson Correlation Coefficients of The Effects of Gross Domestic Product in Manufacturing on Crime in Scandinavia and Actions Taken on the Null Hypothesis

<table>
<thead>
<tr>
<th>Crime</th>
<th>r</th>
<th>p</th>
<th>Action on Ho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Theft</td>
<td>.7606</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Fraud</td>
<td>.7867</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Homicide</td>
<td>.8678</td>
<td>.000</td>
<td>Reject</td>
</tr>
<tr>
<td>Total Crime</td>
<td>.8763</td>
<td>.000</td>
<td>Reject</td>
</tr>
</tbody>
</table>

Summary

The null hypothesis tested here is that there is a negative relationship between GDPM and crime. It is rejected if there is a positive relationship between the two. It is not rejected if there is a negative relationship or one that is not significant. Not rejecting the null hypothesis means that either GDPM and crime are related negatively or that an apparent relationships is not significant.

Analysis of the data shows a strong positive correlation between GDPM and crime in Europe and North America and in Scandinavia. The relationship is moderately positive in Asia for some crimes, but negative for major theft and not significant for homicide. It is moderately positive in Sub-Saharan Africa and Latin America. In the Middle East region there is also a generally positive relationship for crime in general including major theft and homicide but not significant for fraud.
In general there seems to be a positive relationship between GDPM and crime. However, the relationship is much stronger in the regions where the level of development or modernization is highest and where the indicators of modernization used here seem not to be changing rapidly (Europe/North America and Scandinavia). It is by comparison weaker in the region in which the rate of development is most rapid (Asia). This means that there may be other factors that are important in explaining the relationships.

Chapter Summary

The purpose of this analysis was to see the extent to which modernization or development is related to crime. The central argument of modernization theory of crime is that the social and economic changes associated with modernization or development are universal and inherently criminogenic. This means that the process of development involves specific social and economic changes which include urbanization, increased life expectancy, industrialization, attrition of agricultural labor force, increased national gross domestic product (GDP), and increased gross domestic product in manufacturing (GDPM) and that these changes lead to increase in crime. The attempt made in these pages has been to examine the nature of the relationship between these changes, which are used as independent variables, and different crimes in the six different regions. Since modernization theory assumes that the process of development is universalistic and these relationships as constant, this study posits that the theory is supported if similar changes in these variables produce similar changes in the rates of
crime in different regions of the world.

The analysis of the data using the Pearson correlation coefficients shows no consistent relationship between the independent variables (indicators of development) and either specific crimes or crime in general. Hypothesis 1 states that there is a positive relationship between urbanization and crime. The analysis shows that the relationship is positive for all the crimes studied in Scandinavia, all the crimes, except homicide in Latin America, fraud only in Western Europe and North America, in Asia and in Africa, but not in the Middle East. This inconsistency does not support the hypothesis (Table 47).

The second hypothesis is that there is a positive relationship between life expectancy and crime. This is supported for all the crimes in Scandinavia, for major theft, homicide and total crime, but not for fraud in Africa, Western Europe and North America. It is supported for average total crime in Latin America, but not for the specific crimes covered in the study. The variables have a negative or no significant relationship with crime in Asia or the Middle East. The hypothesis is not supported (Table 47).

Hypothesis 3 is that there is a positive relationship between industrialization and crime. This is supported in Africa for all the crimes studied, but not for any crime in any of the other regions (Table 47). The hypothesis is rejected.

The fourth hypothesis is that there is a negative relationship between agricultural participation and crime, meaning that attrition in the percentage of the population employed in agriculture leads to
Table 47
Summary of Findings on the Relationship Between Different Indicators of Modernization and Crime in Six Regions From 1960 to 1984

<table>
<thead>
<tr>
<th></th>
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<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Europe/</td>
<td>Major Theft</td>
<td>X</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>North America</td>
<td>Fraud</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Homicide</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Total Crime</td>
<td>X</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Asia</td>
<td>Major Theft</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Fraud</td>
<td>+</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Homicide</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>X</td>
<td>X</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Total Crime</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Middle East</td>
<td>Major Theft</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Fraud</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Homicide</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Total Crime</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Sub-Saharan</td>
<td>Major Theft</td>
<td>X</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>X</td>
<td>+</td>
</tr>
<tr>
<td>Africa</td>
<td>Fraud</td>
<td>+</td>
<td>X</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Homicide</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Total Crime</td>
<td>X</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Latin America</td>
<td>Major Theft</td>
<td>+</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Fraud</td>
<td>+</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>+</td>
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</tr>
<tr>
<td></td>
<td>Homicide</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Total Crime</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>X</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Scandinavia</td>
<td>Major Theft</td>
<td>+</td>
<td>+</td>
<td>X</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Fraud</td>
<td>+</td>
<td>+</td>
<td>X</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Homicide</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Total Crime</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
</tbody>
</table>

+ = There is a positive relationship between given variables
- = There is a negative relationship between given variables
X = There is no significant relationship
α - .05 -- 1 Tail Test
increase in crime. This is supported by the data from Scandinavia and Africa for all crimes studied, for major theft, homicide and average total crime, but not for fraud in Western Europe and North America. It is supported for major theft and fraud in Latin America and for fraud in Asia (Table 47). Once again, the inconsistent findings require the rejection of the hypothesis.

Hypothesis 5 states that there is a consistent positive relationship between Gross Domestic Product (GDP) and crime. This is supported by analysis of data from Scandinavia, Latin America, Western Europe, and North America for all the crimes studied. It is supported for all the crimes except major theft in Africa and Asia and fraud in the Middle East (Table 47). This hypothesis is also rejected.

The last hypothesis, number 6, states that there is a positive relationship between Gross Domestic Product in manufacturing (GDPM) and crime. This supported for all the crimes in Scandinavia, Latin America, Africa, Western Europe, and North America. It is not supported for fraud in the Middle East, or for homicide and major theft in Asia. This hypothesis is also rejected.

The analyses show that there is no consistent relationship between the indicators of development and either specific crimes or crime in general in all the regions. This means that the data analyses do not support the modernization theory of crime.
CHAPTER VI

CONCLUSIONS AND IMPLICATIONS

The study attempted to accomplish three tasks. First, the study examined the relationship between modernization and crime as proposed by the modernization theory of crime. The second purpose of the study was to examine the process and impact of development on trends in criminality. The study also purported to underscore the significance of comparative theories in the study of crime which are sensitive to unique characteristics of societies studied but which are broad enough for universal application. Conclusions drawn from this study are based upon the exploration of the above purposes.

Modernization Theory of Crime

Modernization theorists presume that "as people form independent nation states, these states start on a course of development that will eventually transverse the same stages of development which the reigning Western European societies have apparently transversed historically" (Hopkins, 1982, p. 10). According to these theorists, "there is one universal, unilinear pattern of development which all nations go through; consequently, there is a single pattern of crime associated with modernization, as exemplified by the history of advanced Western nations" (Horton & Platt, 1986, p. 118). The modernization theory of crime sees crime as inevitable product of the process of development or transition from more primitive to modern social forms. The theory
is a descriptive model which assumes that the West European sociohistorical, political and economic developmental processes are universalistic and must be experienced by the rest of the work with similar results and consequences. Advocates of this theory conclude that there is not only a similar pattern of development for all societies, but also a similar pattern of relationships between the process of development and crime in all societies (Clinard & Abbott, 1973; Sesay, 1977; Shelley, 1981).

One major conclusion that can be drawn from this study is that the above assumption is either incorrect or presumptuous. The process of development does not seem to follow similar patterns of change with similar effect in all societies.

This study has shown that the relationship between development and crime is a complex one. The industrialized Western countries have continued to have rapid increase in all forms of crime at rates much higher than the rates of measurable development. The study has shown that characteristics or indicators of the process of modernization have tended to stabilize in these societies. Rather than stabilize or slow to reflect the rate of development the rates of crime have continued to rise significantly. These increases can therefore not be simply a result of increasing development. Since development has been a major character of these societies for centuries, the explanation that crime is a result of the process of development does not seem to apply.

Another conclusion that can be drawn from this study is that the process of development or modernization does not necessarily lead to increase in crime. Some societies that are developing rapidly have
experienced actual decrease in most crimes. This especially true of countries in Asia and the Middle East.

The study also shows that whatever factors are responsible for increases in crime affect particular crimes differently. Though there have been general increases in crime the rate of increase for fraud in Western Europe and North America (259%) and Scandinavia (217%) are much higher than comparative increases in other regions. Fraud decreased by 12% in Asia, and 92% in the Middle East. It can be concluded that social, cultural and other societal aspects of each society contribute to the changes in the rates of specific crimes.

These findings lead to the conclusion that criminological theories must be responsive to social, historical, geographical, political and other cultural aspects of individual societies. Societies which have developed with less crime are said to have evolved some differences in their approach to development. These societies, while developing, have endeavored to retain some of their traditions and social characteristics. Certain characteristics are common among societies which are developing but have low rates of crime. Some of them have traditions which include: emphasis on maintaining useful informal traditions such as emphasis on the community rather than the individual, on preserving rather than changing traditions which serve useful purposes, and the combination of traditional methods of defining and treating offenders with the development and use of modern jurisprudence. Group orientation, traditional social cohesiveness, traditional family systems,
community emphasis, religious beliefs which emphasize private and public morality and the integration of new ideas with old ones rather than simple abandonment of traditional ideas in favor of new ones and ethnic/cultural homogeneity (Adler, 1983, p. 132), are major characteristics of the culture of societies with less crime.

Japan, probably the most rapidly developed country in recent history, has decreasing rather than increasing rates of crime. Several explanations are given for this. The most common reason is that "Japanese people, for the most part, are homogeneous, sharing a common history, language and culture. It is a nation of coexisting old and new values" (Chang, 1988, p. 141). Middle East countries and other Islamic nations also maintain social homogeneities based on religious beliefs and traditions. The Shariah Law on which these societies depend is used as a unifying and moralizing agent as well as a preventive one against crime. It is used to reform and encourage, to warn people against evil, to educate and command people to assist one another, to prevent crime by blocking temptations, the use of severe punishment for those failing to conform and to prepare people to resist sinful and criminal behaviors (Souryal, 1988, p. 5). They too have lower rates of crime despite their great wealth and rapid development.

Many of these societies develop and experience inevitable social and economic changes but they still maintain certain traditional characteristics (Shelley, 1981) or incorporate them into new ones (Linbeck, 1974; Scott, 1975) avoiding great increases in crime.
generally associated with development. It can be concluded from this that the process of development does not have the same consequences in every society. Therefore, the impact of development on societies must be determined by social, historical, geographical, political and other characteristics unique to those societies and not to simply development itself. Social characteristics do not only influence the process of development; they also influence the impact of development on each society.

Implications of the Study

There are many implications that can be drawn from this study. Some are based upon what the study has failed to do but some are based upon what the study found or failed to find that can be useful for future studies. These implications can be divided into four parts: (1) implications for the nature of development, (2) implications for the nature of criminality, (3) implications for comparative research, and (4) implications for theories of development and of crime.

The Nature of Development

Development is often seen as social change. The societies which are considered developed are often assumed to inevitably experience both structural and social changes which are disruptive and criminogenic. Modernization theorists assert that the process of development in all societies must proceed in the same manner with similar consequences for all societies as has been experienced by the Western societies. This study shows that this is not necessarily the case.
Development in certain regions such as Asia and the Middle East clearly has characteristics and effects on the societies which do not replicate the system in the Western societies.

Modernization theory of crime suggests that changes associated with development are inevitable and criminogenic. It does not tell us how these changes actually cause crime or how crime sometimes increases and sometimes does not increase with similar measures of these indicators of development. It cannot explain how Japan and other Asian countries have achieved so much rapid development without becoming westernized in structural and cultural characteristics. Perhaps the best implication is that the study demonstrates non-Western cultures can be models of development.

The Nature of Crime

One implication of modernization theory of crime is that since social changes generally associated with development are criminogenic that these processes affect almost all kinds of crimes similarly. This study shows that conventional crimes are not necessarily the crimes societies suffer the most from. In Asia all the conventional crimes decreased during the period but homicide actually increased. In the Middle East most conventional crimes decreased; fraud by 92%, homicide by 59%, but major theft increased by 43% and total crime increased by 156%. Different factors must be responsible for different types of crimes. The implications of the above facts is that to adequately understand the nature of specific crimes one needs to study each crime specifically. To understand criminality in any society we
also need to understand specific cultural and social contexts of each society in which the crimes occur.

To say that each type of crime needs to be studied specifically and in the content or society in which it occurs does not preclude the possibility or necessity of comparative criminological theory and study. The implication is that such theories and studies must include consideration for these factors.

Comparative Research

In his discussion of cross national research as analytic strategy, Melvin Kohn (1987) identifies four types of cross national research. The four types are "those in which nation is object of study, those in which nation is the context of study, those in which nation is unit of analysis, and those that are transnational in character" (p. 714). The type of comparative research used in this study is one in which nations or regions are contexts of study. In this method we are concerned with the relationship between modernization and crime. Our focus is on the extent to which nations, as contexts of development, affect the rates of crime. In comparative studies "finding cross-national similarities greatly extends the score of sociological knowledge. Cross national similarities lend themselves readily to sociological interpretation" (Kohn, 1987, p. 716). Studies that have found positive relationships between modernization and crime have been used readily by researchers to draw conclusions on the nature of the relationship between them. In this study we observed that on the average there appears to be...
increases in crime in general in societies which also seem to be experiencing development. This has led to the assumption that similar experience with development leads to similar experience with crime. However, "apparent similarities can mask profound differences; what seems to call for a unitary interpretation may actually require entirely different explanations" (Kohn, 1987, p. 716). This seems to be the case in the relationship between development and crime. It seems that the process of development results, in some societies, in social and structural changes which may seem evidently criminogenic. Rapid urbanization, individualism, unemployment, social and economic inequalities, unequal distribution of resources, services and opportunities, neutralization of public and social morality (which are characteristic of Western cultures) are considered to be inevitable results of modernity. Most attempts at comparison of different societies tend to assume that these characteristics occur every time a society develops. If this were true, all developed societies would have similar cultures. The cultural, social, political, and economic differences which exist between the United States (and Europe) and Japan are good indicators of the fact that this is not the case. The fact that these characteristics are not typical of all modernized or modernizing societies leads to the conclusion that the relationship between modernization and crime, if any exists, is determined by some characteristics unique to individual societies. This inevitable conclusion underscores the need for comparative studies which focus on the unique characteristics of different societies that influence both development and crime.
Profound differences exist within societies that are developed, rapidly developing and those considered underdeveloped. Some of these differences are due to geographical and historical factors but many are due to economy and culture. How they cope with their economic and social problems may depend on these unique characteristics. Studies of crime in each society by its scholars link the incidence of crime in the society to unique social, economic and cultural conditions such as poverty, distribution of wealth and opportunities, state of morality, the process of defining and treatment of offenders, and various factors very unique to each individual society.

The study has shown that correlations and total numbers can be misleading. The Pearson correlation analysis done earlier in the study is a measure of association which shows the strength of relationship between variables. Though correlations are necessary for causality they do not necessarily imply causality. Averages of total numbers indicating development do not give a complete picture of what happens in individual states. Averages of increases in crime do not give a complete picture of what is happening with crime in individual countries either. The increases identified in both development and crime in this study have not included increases in population and improved methods of documentation and how those affect either of the rates. Even then, the study has shown that the patterns of development and crime are not universal. They differ from one society to another.

To understand the nature and process of development and of trends in criminality it is important to examine the numbers within the
context of each country or region. Similar changes of some variables may have different effects for different countries and regions. Urbanization has been linked to criminality because in industrialized Western Europe and North America it is associated with industrialization. In Africa urbanization is not necessarily due to industrialization. This is important because, unlike in Europe and America where urbanization and industrialization occurred together because people moved to the cities to work in industries, in Africa people have moved to the city to work for government bureaucracy or to stay with relative who do. Since industrialization is rather slow, due to slow technological development, urbanization may not actually indicate development or progress.

Attempts to explain crime by focusing on the unique characteristics in the society being studied are very important. This is obviously not easy especially in most comparative studies where there is a desperate desire to generalize. It is easy and tempting to want to understand other cultures using our ethnocentric values and therefore assume that characteristics and effects we see in our cultures should be seen in others also.

Theories of Development and of Crime

A look at theories of development and of crime reminds one of the six blind men of Calcutta who went to "see" an elephant. Each of them touched a different part of the elephant's body and came back with a description of the elephant based purely on the part he touched. Many theories of development and of crime are based on the perceptions
of scholars that are based upon their experiences and perceptions shaped by their individual cultures or societies.

The theories for development and crime discussed earlier provide strong basis for developing comprehensive models for society which can be integrated to produce a meaningful and effective theoretical model(s) for studying social phenomena. The evolutionary theory which sees development as a natural process may be naive and simplistic but it correctly calls attention to natural tendencies to strive for change with different consequences due to unique characteristics of every society. It also appropriately acknowledges the disruptive nature of change and the social processes through which behaviors are considered normal or abnormal, desirable or undesirable and/or criminal. Comparative studies of social processes, such as crime and development, much involve some insight into the evolutionary scenario in each society studied.

The view of development as a strategy moves the evolutionary process from being automatic and natural to being purposeful and calculating. This involves conscious decisions resulting from evaluations of history, calculating prospects and advantages and predicting impacts and consequences. This approach enables the appreciation of the inevitability of change but also the manipulation of the process of change by different social forces. Behaviors, including crime are not simply seen as random and productive but as calculating and often exploitive.

The conflict approach sees development as both the cause and product of conflict. The social and economic problems or benefits
associated with development (including crime) are seen in terms of how segments of the population are related to power. These relationships are national, cultural, traditional and differ from one society to another. Comparative researchers must not make summary assumptions about how the process of developments effects citizens of a country and how the benefits of development are distributed.

As we examine the global nature of progress theories of development which emphasize the dynamics of international relations become very important. Dependency theorists see development as a product and perpetuation of cultural, political and economic diffusion in which the developing countries by choice or necessity depend on the developed nations. Dependency theory can be appropriately criticized for not addressing why the less developed nations do not evolve the mechanism of development or how it evolved in the developed countries. The criticism does not change the fact that many countries depend on others for resources necessary for their development. This dependency involves the transfer of goods, values, attitudes and behaviors which become major aspects of the culture of the recipient developing country. Attempts to understand the process of development and resultant social problems, including crime in those societies must include perspectives on the nature of this dependency.

World systems theory as a perspective challenges the dependency perspective by presenting a picture of a world order in which all nations progress toward the core. Problems and benefits in each society reflects the characteristics of the stage of development. World system is a descriptive model which emphasizes dependency and
interrelational dynamics of progress and social problems. External pressures rather than the dynamics of change or progress are seen as being criminogenic. The perspective is interactional and contributes to the understanding of political, economic, and social problems of developing countries. This means that crime is seen as a product of their interactional process and the pressures to move to the core.

Integrating Theories of Development With Theories of Crime

The theories for development above differ from each other by their perspectives on the dynamics of development. These perspectives are not necessarily contradictory. In fact, they collectively present an integrative model of social progress. The natural instincts for survival and pleasure require instinctual craving for creativity and change. This may be random or purposeful (or strategic) resulting in and including conflicts regarding problems (including crime) and benefits available in the society. The need to use resources available and social processes to develop requires the immediate social context, existing social and economic resources available in the society, and ones other societies which the society must interact with.

Just as modernization theories attempt to explain modernization at different levels, criminal behavior must also be explained at different levels. Ecological theories of crime focus on immediate social contexts in which crimes occur. Though urban and poor neighborhoods and other social contexts of crime may have characteristics conducive to criminality these environments are greatly influenced by social process extending far beyond the immediate contexts of criminal
behaviors.

Structural strain theory which sees criminal behavior as a result of structural processes which influence adaptation those structural and cultural characteristics are also products the larger society including diffused cultural elements from other societies. Control processes which succeed or fail to create and ensure conformity in the minority who commit crimes though they succeed with the majority of the population are both immediate and broad characteristics of the total society. Conflict theorists emphasize social conflicts in immediate social context, the society and global context which influence all forms of social behavior including criminality.

The above theories may not individually adequately explain criminal behavior but integratively they may explain the nature and incidence of all criminality in all societies whether modern or ancient, developed or underdeveloped, and rich or poor. In emphasizing the need for integrating criminological and criminal justice theories Friday (1988) claims that no criminological theory exhaustively explains criminal behavior and that the theories are not mutually exclusive. He proposes theoretical integration as means of increasing criminal explanations.

Summary

There are several implications to this study, all of which are related to what may or may not be inbred from the study. Limitations of the study are many, but its contributions have significant implications. Among major limitations of the study is the difficulty in
establishing the exact meanings of concepts used. The concept of modernization or development in the study has been used to mean the extent to which a society is able to meet the needs of the people. This definition assumes that every society has a fair understanding of what the needs of its people are, that the people themselves know and that the social economic and political activities in the society are directed towards the fulfillment of these needs. It is doubtful if this is ever the case. Indicators of modernization are identified and have been used as independent variables. The assumption that processes such as urbanization, employment, longevity and GDP are adequate indicators of modernization may be over-assuming. Countries like Iceland have demonstrated that living well does not depend on the kind of economic and social changes seen in other more aggressive capitalist countries. In fact, the other societies have pursued a development process which does not emphasize rapid growth or increased surplus productivity, but simply meeting basic needs through centralized planning.

Another major limitation of the study is that the data used do not include socialist societies who approach development from a Marxist and centralized political and economic orientation rather than, free enterprise market oriented political and economic one. The study recognizes the significance of social, historical, cultural, political and geographical differences among societies. These differences make societies so different that current attempts to generalize on social processes may be misleading. Despite this, the study uses some characteristics to compare them. It is desirable, when doing
comparative studies, to determine whether and how the societies compared are similar or different. This usually is not possible as beneath apparent similarities there may be very potent differences (Kohn, 1987, pp. 720-721). The fact that the study finds no consistent relationship between them in the different societies may not tell us much about the differences or similarities of societies, but it tells us that the relationships between modernization and crime is not consistent. The implication here is that there is a need to explore further the nature of the concepts of crime and development and how they relate to specific societies before we can attempt to generalize internationally.

This requires continued examination of the alternative theories of development and of crime. The significance of specific social dynamics in societies as proposed by dependency, evolutionary, structural, world system and other theories cannot be overstated. Criminological theories which focus on social and cultural patterns in the determination, control and evaluation of behaviors need to be underscored.

The creation of states, the emphasis on the sovereignty of these states and the recognition of individual, national, ethnic, regional and other structural differences suggest that more emphasis should be placed on differences as well similarities in comparative studies. The desperate attempt to find and draw conclusions on similarities between and among nations should be changed to include rigorous studies on the differences that exist and on the impact of these differences. Comparative studies which assume and focus on
cross-national differences and which attempt to draw universal conclusions are more difficult to design and to conduct, but they have the most potential benefit in the true understanding of societies and of crime. This true understanding is only possible when varied theoretical explanation of these phenomena are integrated to produce a more comprehensive understanding.
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