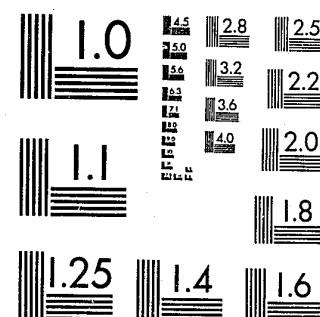


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# The Development of an Agenda for Basic Research into Crime Correlates and Criminal Behavior

The MITRE Corporation  
MITR-80W00051

MITRE Technical Report  
MTR-80W00051

**The Development of  
an Agenda for  
Basic Research into  
Crime Correlates and  
Criminal Behavior**

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**ACQUISITIONS**

**ABSTRACT**

This study provides the National Institute of Law Enforcement and Criminal Justice with suggestions for basic research into the correlates and determinants of crime and criminal behavior.

The suggestions are based on opinions of experts in the field of criminal justice research. Opinions were gathered through a literature review, two colloquia which brought together leading researchers in the field, and a two-stage mail survey of individuals working in criminal justice research. A survey of ten federal agencies was also carried out to discover what, if any, research they were supporting was relevant to the correlates and determinants of crime.

Nine major research program areas were identified based on the suggestions: white collar and corporate crime; intrafamily violence; definition of crime; social control and deterrence; economic factors and processes; developmental factors and processes; biological factors and processes; cultural-ethnic factors and processes; and neighborhood and community factors and processes. Specific research topics and questions are presented.

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EXECUTIVE SUMMARY

Within the last several years, the National Institute of Law Enforcement and Criminal Justice (NILECJ) has begun to sponsor basic research programs investigating the correlates and determinants of crime. These programs have been concentrated in the Center for the Study of Crime Correlates and Criminal Behavior (Center) which was formed in 1977 and is a division of the Office of Research Programs. The NILECJ started their program of comprehensive, long-term studies with the Research Agreements Program in 1975.

In order to aid the NILECJ in developing a program of research into the correlates and determinants of crime The MITRE Corporation was awarded a grant to identify broad programmatic areas as well as more specific topics for each of the larger program areas. In order to accomplish these tasks several methods were used all employing the knowledge and opinions of experts. In addition, a survey of ten federal agencies was undertaken to discover funded research that might be relevant to the correlates and determinants of crime.

Three major methods of obtaining expert knowledge and opinion were employed:

- a review of a selected sample of research and theoretical literature;
- two colloquia which brought together leading researchers to present the results of their work, discuss ideas and make suggestions for research; and
- a two-stage mail survey of opinions of individuals directly or indirectly involved in research relevant to correlates and determinants of crime.

The literature review concentrated on a limited and select sample of current works. Materials included journal articles, reports, books and transcripts of talks. Their content was classified into eight substantive areas of current research activities: economic factors; correlates of intrafamily violence; crowding/density (including building design); correlates of delinquency; race and crime; personality factors; biological factors; and comparative study of high and low crime communities. These topics were considered important contemporary subjects of research. In addition to reviewing the substantive areas, methodological issues raised by the readings were discussed. Research ideas were derived from the direct suggestions of

the authors of the material reviewed as well as from MITRE's analysis of the gaps in knowledge uncovered by the review.

Two colloquia were held for the purpose of obtaining ideas for research from some of the leading researchers in criminal justice and related areas. The major topics of the papers and the discussions of the first colloquium included: biological factors in criminality; developmental factors related to crime and delinquency (especially drug and alcohol use); intrafamily violence; and methodological issues. The second colloquium was focused around the theme of stress and crime. The concept of stress was used in presentations on: cultural factors in sociopathy; intrafamily violence; type and magnitude of life events preceding arrest; life change, coping and mental health; adaptation in prison; nutritional and hormonal deficits; crowding and density; brain functions associated with violent and sex crimes; and unemployment and social pathology. There was also much discussion of methodological issues in the design, implementation and analysis of studies dealing with stress and crime. In both colloquia, ideas for research were gleaned from the presentations, papers and discussions. Major themes and research suggestions emerging from the colloquia were identified.

Another source of ideas for the NILECJ's basic research program came from a two-part mail survey of researchers in criminal justice and related fields. The first questionnaire asked the respondents to state needed basic research on the correlates and determinants of crime and their reasons for their statements. The format was "free response", with seven very general topic areas delineated (psychological, developmental, biological, sociological, economic, demographic and political-legal) within which they could respond. Over 300 research ideas were gleaned from the responses and classified by three MITRE staff into 48 research categories. The second questionnaire asked the respondents to select 10 of the 48 research categories derived from replies to the first questionnaire and rank them in terms of priority for support. Examples of specific research suggestions on each of the 48 were also included.

Taking the major research areas reviewed in the literature and the major themes which emerged at the colloquia along with the research topics most highly endorsed on the second questionnaire, MITRE identified nine broad-scope programmatic areas for NILECJ's consideration. In addition, specific research suggestions within each of the nine programmatic areas were listed. These specific suggestions came from various sources including the responses to the first mail questionnaire, the material used in the literature review, the papers prepared for the colloquia as well as the presentations and discussions at the colloquia.

Each of the nine research areas fits the following criteria:

- it constitutes a major theme of the literature review, of either colloquium, and/or it figures among the highest ranked on the second questionnaire;
- it is broad in scope;
- it furthers the understanding of factors and processes which influence criminal behavior; and
- it has implications for criminal justice policies and programs.

The nine suggested research program areas are:

- intrafamily violence
- white collar and corporate crime
- social control and deterrence
- definitions of crime
- economic factors and processes
- developmental factors and processes
- biological factors and processes
- cultural-ethnic factors and processes
- neighborhood and community factors and processes

In addition to suggestions for broad scope program areas and specific topics within these areas, methodological approaches were briefly discussed and suggestions for the continuing, interactive input of researchers and others to NILECJ's research program were also made.

## 1. INTRODUCTION

### 1.1 Background

The National Institute of Law Enforcement and Criminal Justice (referred to hereinafter as the NILECJ or the Institute) awarded a grant to The MITRE Corporation to aid in developing an agenda for a program of basic research into the correlates and determinants of crime and criminal behavior. The need for such an agenda and for such a program came about because of recent emphasis the Institute has placed on basic research. Funding for major programs in basic research is a relatively new activity for the Institute. Starting with the Research Agreements Program (RAP) in 1975, the NILECJ began to fund research programs oriented toward fundamental (basic) research on a long-term and cumulative basis. The RAP has included programs conducted by universities and research organizations which explore such areas as: unemployment and crime; community response to crime; econometric models of crime; white collar crime; and the habitual offender. Prior to the RAP, the involvement of the Institute in basic research of a long-term nature was minimal.

The role of basic research among the Institute's many and varied activities has a basis in the law which created the NILECJ and LEAA, and was given impetus by a report and recommendations made by the National Academy of Sciences-National Research Council.<sup>1</sup> The National Academy of Sciences Report (NAS Report) was based on an 18-month study of the NILECJ. With regard to the research efforts of the NILECJ the NAS Report felt that the Institute should put much more emphasis on cumulative, basic research, concentrating its efforts on high calibre research. Among the many recommendations in the NAS Report those most relevant to MITRE's efforts to develop an agenda for a basic research program follow:<sup>2</sup>

- NILECJ should foster the development of a coherent set of program areas that will lead to research questions with manageable parameters for good research design and be a productive base for cumulative knowledge;

<sup>1</sup>Understanding Crime: An Evaluation of the National Institute of Law Enforcement and Criminal Justice. National Academy of Sciences - National Research Council Assembly of Behavioral and Social Sciences, 1977.

<sup>2</sup>Ibid.

- the Institute should develop a long range set of priorities to guide individual project choices which should not require immediate payoff; and
- close relationships should be maintained with other federal agencies and other research institutes with similar pursuits.

Following the recommendation of the NAS Report, the Institute developed a set of ten long-range (five-year) priority research program areas, most of which are subjects of current activities. The inputs to these program areas came from several sources, including an Institute survey of a wide range of practitioners, researchers and administrators. The ten research program areas (not confined to basic research) are:

- correlates of crime and determinants of criminal behavior;
- violent crime and violent offenders;
- community crime prevention;
- career and habitual offenders;
- utilization and deployment of police resources;
- pretrial processes (consistency, fairness and delay reduction);
- sentencing;
- rehabilitation;
- deterrence; and
- performance standards and measures for criminal justice.

The first of the listed priority program areas, "correlates of crime and determinants of criminal behavior", is the one most relevant to the basic research function of the Institute (although others certainly may involve basic research). This program area is primarily sponsored by the Center for the Study of Crime Correlates and Criminal Behavior (Center), a division of the Office of Research Programs. The Center was created in 1977 as part of a reorganization of the Institute. Figure 1 presents a recent organization chart of the NILECJ.

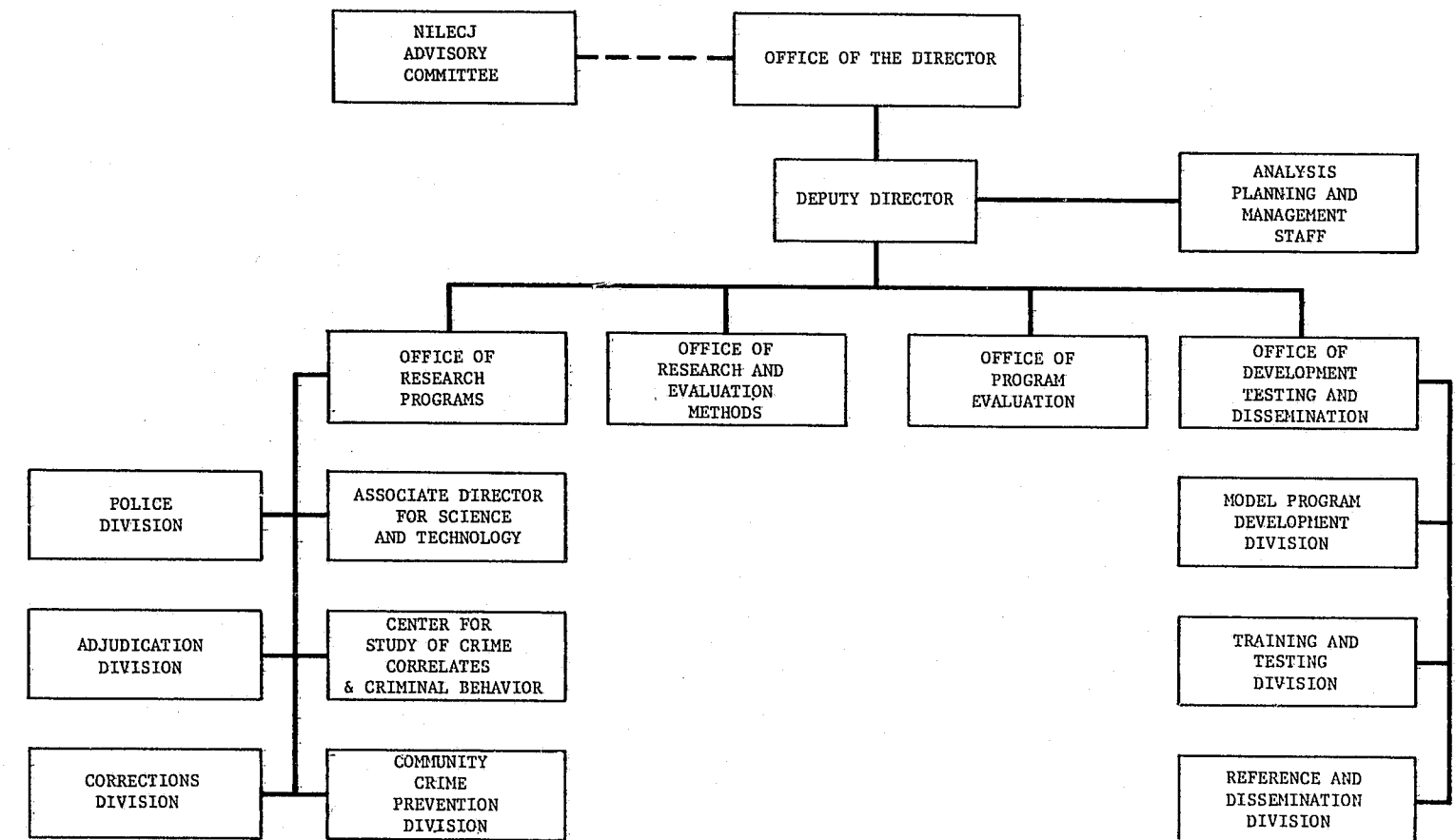


FIGURE I-1  
ORGANIZATION CHART OF THE NATIONAL INSTITUTE OF  
LAW ENFORCEMENT AND CRIMINAL JUSTICE



The Center's functions now include:

- monitoring the Research Agreements Programs (RAP) which are long-term research programs conducted by universities and research organizations which explore such areas as: unemployment and crime; economic models of crime; white collar crime; community response to crime; and habitual offenders. The RAP has been operating for about 4 years and represents the first major effort of the NILECJ to fund long-term and cumulative research of a more "basic" nature;
- developing and monitoring grants which explore the relationships between minorities and crime from the community point of view, alcohol and crime, drugs and crime and female crime;
- planning and initiating a program to create several research centers for interdisciplinary, long-term and cumulative studies of major substantive areas related to the correlates and determinants of crime. The centers will be a major innovation for the Institute (with some precedent in the Research Agreements Program) and is expected to become a substantial and important part of the total research program during the next few years.

It is to the last function, that the present MITRE project is most directly oriented in that the development of a substantive agenda of basic research areas is intended to include those areas appropriate as foci for interdisciplinary research centers. However, the findings to be reported also have relevance to other Center activities as well as to other research programs within the Institute.

## 1.2 Project Goal and Objectives

The goal of the MITRE project is to provide suggestions for substantive areas of research concerning crime correlates and the determinants of criminal behavior as well as ways of approaching this research. Although the primary interest in the project stems from the Center, the findings (general and specific research ideas) should find an audience throughout the Institute as well as in the larger research community concerned with criminal behavior.

In order to attain this goal, certain project objectives were formulated:

- to identify promising large-scale research topic areas based on a broad spectrum of expert knowledge and opinion;
- to identify specific research questions within these larger topics; and
- to identify general methodological issues relevant to conducting research into the correlates and determinants of crime and criminal behavior.

MITRE's final set of suggested substantive research program areas represents a wide range of topics all derived from sources of expert knowledge and opinion. They are not prescriptive. We do not claim that these suggestions are either definitive or comprehensive. In fact, there are many ideas not included among our suggestions (to be found in Sections 3.0, 4.0, 5.0 and Appendix B) which were obtained from the various sources of ideas. MITRE's project is but one of several current and future activities of the NILECJ designed to initiate, develop and maintain research for the purposes of gathering, disseminating and utilizing knowledge on the basic correlates and determinants of crime.

## 2. METHODOLOGY

### 2.1 General Approach

MITRE's general approach to identifying topics for the Institute's basic research program was to obtain and synthesize the knowledge and opinion of experts. Such individuals include many who are considered by peers to be leading scholars in criminology, sociology, anthropology, psychology, physiology, economics, etc. (See Sections 4.1 and 4.2 and Appendix C for the names of colloquium participants and respondents to the mail survey). Most of these individuals have written on topics relevant to research on the correlates and determinants of crime.

There are several reasons for using the knowledge and opinions of a wide range of experts as the basis for identifying program areas for a research agenda. Among them are:

- the presence of a research community of individuals with information and ideas about what needs to be done to further knowledge of crime and criminal behavior;
- the existence of a large body of written knowledge concerning the correlates and determinants of crime which can be drawn upon to help define what is known and what needs to be known;
- the credibility that is achieved when suggestions are based on a wide range of expert knowledge and opinion; and
- the recommendation from the NAS Report to involve the research community in both the determination and execution of the NILECJ's research program.

To further investigate current basic research, a survey of ten federal agencies was conducted to discover the extent and type of federally funded (including in-house) research relevant to the correlates and determinants of crime.

Three methods were employed to obtain expert knowledge and opinion. They were: a review of a select sample of recent literature concerned with research and theory in crime; two colloquia which brought together leading researchers to present their work, review the work of others, engage in discussion and make suggestions for Institute-sponsored research; and a two-stage mail survey of leading researchers in criminal justice and related areas asking for their ideas and opinions about needed research.

Ideas for general areas of programmatic research, as well as for specific research topics, questions, hypotheses, etc. were gathered using all three methods. In order to develop an agenda of broad-scope research areas, information from these methods required analysis, synthesis and interpretation. With the exception of the mail survey of criminal justice researchers the ideas were not in a quantitative format. Thus, synthesizing the input from the literature review, two colloquia and mail survey to determine a limited list of programmatic research areas was not a straightforward procedure. Judgment on the part of the author of this report played a part in: classifying the major themes of the colloquia; selecting the topics and authors used in the literature review; grouping the ideas from the first mail questionnaire into categories of research topics (along with independent judgments of two other MITRE staff members); synthesizing the ideas from all three sources to select a limited number of broad scope research program areas; labeling these program areas; and choosing specific topics for inclusion within each of the program areas. It should be noted that the research ideas were those found (or implied) in the literature, stated during the colloquia, contained in the papers written for the colloquia and stated in the questionnaires making up the mail survey. Thus, the author did not produce the ideas, but rather played a role in categorizing them and selecting those to present for the Institute's consideration.

The use of a wide range of expert opinion seems to be a useful approach to developing ideas for a research agenda. The great variety of ideas which were produced and the wide range of individuals who served as experts (authors of the literature reviewed, participants and discussants at the colloquia and respondents to the mail survey) attest to the catholicity of the viewpoints represented and the wide coverage of the field of research related to criminal justice. However, it should be pointed out that the selection of the experts was not random nor were formal means used to insure representativeness of a universe of ideas or individuals relevant to research into the correlates and determinants of crime. The topics and materials used in the literature review were selected by the author; the participants in the two colloquia were selected by Institute and MITRE staff, the topics and the participants for the first colloquium were selected by the Institute and those for the second colloquium were chosen by MITRE staff. The potential respondents to the mail survey were selected by the Institute and MITRE (some were recommended by other respondents), and there was self-selection in terms of those who actually responded. This selectivity and possible non-representativeness of the experts in no way obviates the legitimacy or meaningfulness of the ideas suggested.

It does, however, constrain any attribution or generalizability to some larger population of experts or ideas.

Although all three methods of using expert opinion were relatively independent of each other there was some overlap. Most participants in the first colloquium were asked to respond to the mail survey and did so. Two of the participants in the second colloquium were selected on the basis of the literature review, and several of the papers presented at the first colloquium were included in the literature review.

## 2.2 Literature Review

A review of the literature dealing with crime correlates and determinants was one of the methods employed to gain knowledge and opinions concerning ideas for research. The purposes of the review included: developing knowledge about current empirical and theoretical work in various topic areas dealing with crime; discovering possible gaps which need further research; obtaining suggestions for needed research from the authors of the material; and discovering innovative ideas. Ideas for research were obtained by means of direct statements contained in the readings and MITRE's analysis of what research needs to be done based on the readings.

A literature review of so large an area as the correlates and determinants of crime could conceivably take the entire time allocated to the project or much longer. In order to make the task manageable within the project's resource constraints it was decided to use the Institute's National Criminal Justice Reference Service (NCJRS) as the primary source of the documents to be reviewed. The author identified a number of topic areas of research interest in criminal justice based on personal knowledge, some of the topics presented at the first colloquium and a preliminary search of several current issues of Crime and Delinquency Literature. NCJRS files were accessed by means of key words and phrases signifying these topics. Listings were produced for each of the key words and phrases which included title, author, publisher and usually a thorough abstract.

The abstracts included under the original list of topics were carefully perused and a limited number of current readings (published in 1970 or after) were chosen for review. Most readings were selected on one or more of the following characteristics:

- review of the literature;
- empirical study of fairly broad scope;

- development of theoretical ideas; and
- critical or controversial.

Several readings not selected from the NCJRS abstracts were also included in the review. Among these were several papers written for the first colloquium. A further factor in determining what was reviewed was the availability of the document.

The material read was classified into eight substantive topics: economic factors; correlates of intrafamily violence; crowding/density (including building design); correlates of delinquency; personality factors; biological factors; and comparative study of high and low crime rate communities.

A MITRE report of the literature review was prepared<sup>3</sup> which included research suggestions made by the authors of the material as well as suggestions based on analysis of the readings. A summary of methodological issues derived from the readings was also included. Section 3.0 presents a summary of the readings and the research ideas for each of the eight topics employed in the literature review.

### 2.3 Colloquia

Two colloquia were conducted by MITRE during the project. This again was a method for obtaining the benefit of expert knowledge and opinion. Unlike the literature review and mail survey the colloquium has the advantage of direct interaction among the experts and with MITRE and NILECJ staff. Each colloquium brought together 10 leading researchers who presented papers which contained summaries of their work and, in several cases, reviews of literature relevant to their work. Each of the colloquia included much time for discussion after the presentations and during the last half day of each meeting. The first colloquium also included work shops during which time participants discussed ideas for future research and then reported them to the entire meeting.

The participants (presenters and discussants) for the first colloquium were chosen by Institute staff on the basis of their active involvement and expertise in specific research areas (drug and alcohol abuse, biological factors in crime, developmental

<sup>3</sup> Molof, M. J., Correlates and Determinants of Crime and Criminal Behavior: A Review of a Selected Sample of Current Literature and Suggestions for Further Research, The MITRE Corporation, Metrek Division, MTR-79W00276, McLean, Virginia, September 1979.

factors and intrafamily violence).<sup>4</sup> The participants in the second colloquium were chosen for their expertise and involvement in research areas associated with use of the concept of stress in relation to criminal behavior.<sup>5</sup> The colloquia were chaired by distinguished criminal justice researchers. Professor Marvin Wolfgang chaired the first colloquium and Professors Albert Reiss and Leslie Wilkins co-chaired the second.

The proceedings of each of the colloquia were recorded and edited. To date, the Proceedings<sup>6</sup> and Invited Papers<sup>7</sup> for the first colloquium have been published and disseminated. Similar publications for the second colloquium are in preparation. The written transcripts of the proceedings and the written papers for both colloquia were perused. From this perusal, major themes were extracted and specific research ideas noted. Both the major themes and the specific ideas were significant factors in determining the final recommendations.

Chapter 4.0 presents the topics of the colloquium papers, the names of the presenters and discussants, the major and minor themes of the suggestions for research and lists of the specific research suggestions.

<sup>4</sup> The ideas and participants for the first colloquium were the product of the prior research and interests of the Institute, especially those of Dr. Helen Erskine who had devoted much of her work to on-going developments in the fields of biological and sociocultural determinants of criminal behavior.

<sup>5</sup> The topic for the second colloquium emerged from discussions among Drs. Helen Erskine and Richard Barnes of the Institute and Mrs. Eleanor Chelmsky of MITRE as an inquiry into the relationship of stress and crime. This was a relatively new focus on the stress concept which had typically been used in association with physical and mental disease. Based on some earlier work by Chelmsky on stress and health (1972) the colloquium was structured around such topics as racism, over-crowding, low socioeconomic status and coping mechanisms. Participants having employed the concept of stress in relationship to criminal and other behaviors, were selected by the NILECJ and by MITRE.

<sup>6</sup> Otten, L. (ed.), Colloquium on the Correlates of Crime and the Determinants of Criminal Behavior - Proceedings. National Institute of Law Enforcement and Criminal Justice and The MITRE Corporation, Metrek Division, M78-81, McLean, Virginia.

<sup>7</sup> Otten, L. (ed.), Colloquium on the Correlates of Crime and the Determinants of Criminal Behavior - Invited Papers. National Institute of Law Enforcement and Criminal Justice and The MITRE Corporation, Metrek Division, M78-82, McLean, Virginia.

## 2.4 Mail Survey

Another method to extract ideas from experts was a mail survey of individuals involved in criminal justice and related research. A two-stage survey using a Delphi-type procedure was employed. Because of the limitations of time and the slow responses to the first questionnaire, more stages were not included. The Delphi technique is basically a method of working toward consensus using iterative questioning and feedback from previous results.<sup>8</sup>

A key advantage of conducting this survey is that a much larger number of ideas can be generated than by means of a limited review of the literature or a few colloquia, and a larger number of individuals can formally respond to the many ideas generated than by means of the other methods used. A survey can be characterized as providing less "intensive" information in terms of the depth and details of research ideas than that which can be obtained from written literature or a colloquium but as being more "extensive" in terms of the number of ideas and the number of people generating and responding to these ideas than the other methods.

In the MITRE survey we employed two mail questionnaires; the first used an open-ended format which asked the respondents to state specific research topics, variables, hypotheses and/or relationships which they believed needed investigation. Seven very general topic areas representing various general approaches to crime (psychological factors, developmental factors, biological factors, sociological factors, economic factors, demographic factors and political-legal factors), and examples defining each general topic were presented in the questionnaire to help respondents to organize their ideas. In addition, extra pages for general topics not covered by the above seven were included. Each respondent was asked to pick as many or as few of these seven general topic areas as they wished and within each area selected was asked to state specific research topics, variables, etc. In

<sup>8</sup> Linstone, H.A., and M. Turoff (eds.), The Delphi Method, Addison-Wesley, Reading, Massachusetts, 1975. The Delphi Technique has been employed by MITRE in work for the National Institute of Mental Health; see Bergman, H. and J. Salasin, The Delphi Technique: Analysis of Responses to a Survey of Children's Mental Health Services Development, The MITRE Corporation, Metrek Division, MTR-7631, January, 1977 and Salasin, J., et. al., A Comparison of Two Group-Process Techniques: The Use of a Delphi Survey and Nominal Group Technique Meeting to Identify Objectives for Research in Children's Mental Health Services, The MITRE Corporation, Metrek Division, MTR-8007, January, 1979.

addition, respondents were asked to state the reason(s) for selecting the specific topics, variables, hypotheses, etc. Using the seven very general research topic areas was a method of structuring responses and was not used for purposes of analysis. A copy of the first questionnaire is shown in Appendix A.

The second questionnaire was based on the analysis of the responses to the first. Each statement written by a respondent to the first questionnaire which was judged as a separate research idea (no matter what level of generality-specificity) was typed on a card. Over 300 research ideas were derived from the written responses to the first questionnaire. The author initially classified the responses into 53 categories. The 300 plus cards were given to two colleagues at MITRE's Program Evaluation Department to perform an independent classification.<sup>9</sup> Instructions emphasized specificity of categories and encouraged a large number of categories. (In order to derive meaningful information for NILECJ's research program it was considered important that as many of the ideas stated on the first questionnaire be represented on the second questionnaire and that the categories be much more specific than those seven used to structure the first questionnaire.) Thus, the use of many categories was encouraged.

The author compared his categories (and the specific research ideas which were subsumed under each) with those of his two colleagues and came up with a set of categories based on all three classifications. A discussion among all three judges resulted in a final set of 48 categories of research topics. The categories, which subsumed almost all the research ideas found in response to the first questionnaire, varied in scope, and level of abstraction.

On the second questionnaire, the respondents were asked to examine the 48 categories along with examples (taken from the responses to the first questionnaire) which helped define each research category and choose 10 of the 48 which they believed deserved the highest priorities for research support. They were asked to rank order the 10 research topics in terms of priority and were encouraged to respond to the category rather than the specific examples. In addition they were asked to briefly state their reason(s) for choosing the topics. The instructions, list of the 48 research topics, examples for each research topic and the answer sheet are shown in Appendix B.

<sup>9</sup> The author would like to express his appreciation to Judith S. Dahmann and Joseph C. Calpin for performing this arduous task.



The selection of the respondents started with a list of 24 well-known academic researchers in criminal justice and related areas selected by the Institute and MITRE. Other names were obtained from some of the original 24 when they were contacted. In addition all participants in the first colloquium were asked to participate. The list of potential respondents was then expanded further through suggestions from varied sources. Ninety-three (93) individuals were contacted by phone, of whom 82 agreed either to participate or at least to look at the first questionnaire. Follow-up efforts were made 2-3 months after the initial group of potential respondents were sent the questionnaire. A total of 41 individuals, 50 percent of the 82, completed the first questionnaire.

The second questionnaire was sent to the 41 who completed the first plus the others who received, but did not complete the first questionnaire.<sup>10</sup> Thirty-four of those who responded to the first questionnaire also completed the second questionnaire. Ten respondents who did not respond initially responded to the second questionnaire. Altogether 44 completed the second questionnaire. One follow-up request was sent to those who did not respond to the second questionnaire within one month.

The questionnaire included three items about the respondent: the type of employer (university, government, other); the discipline(s) with which they identified; and relationship to criminal justice research (See Appendix A). Table 2-1 describes the characteristics of respondents to each questionnaire according to the three items.<sup>11</sup>

The large majority of the respondents work in an academic setting (approximately three-quarters) with the rest working for government agencies with the exception of one respondent to the first

<sup>10</sup> Six individuals who received the first questionnaire subsequently indicated that they were not interested in participating and were not sent the second questionnaire.

<sup>11</sup> One respondent to the first questionnaire did not answer the three questions, but identified himself and was included in the university group. One person who responded to the second but not the first questionnaire was inadvertently not sent the page with the three personal questions. One respondent had two different member of his staff answer the first and second questionnaires. The person responding to the second questionnaire did not receive the page with the three questions. Thus, the data on respondents to the second questionnaire is based on an N of 41 instead of 44.

TABLE 2-1  
CHARACTERISTICS OF RESPONDENTS TO THE FIRST AND  
SECOND QUESTIONNAIRES

Characteristic	1st Questionnaire		2nd Questionnaire	
	N	%	N	%
<u>Employer</u>				
College, university or professional school	31	75.6	31	73.8
Government Agency	9	21.9	9	21.4
Federal	5	12.2	6	14.3
State	3	7.3	2	4.8
Regional, county, city	1	2.5	1	2.4
Other	1	2.5	2	4.8
<u>Discipline</u>				
One discipline listed	21	52.5	22	53.5
Sociology	6	15.0	7	17.0
Psychology	4	10.0	7	17.0
Criminology	3	7.5	2	4.9
Operations Research	2	5.0	2	4.9
Psychiatry	2	5.0	1	2.4
Economics	2	5.0	2	4.9
Political Science	1	2.5	1	2.4
Criminal Justice Research	1	2.5	0	0
More than one discipline or more than one branch of a discipline listed	19	47.5	19	46.3
Criminology, Sociology	6	15.0	5	12.2
Psychology, Psychophysiology	3	7.5	1	2.4
Psychology, Criminology	2	5.0	2	4.8
Psychology, Sociology	1	2.5	-	-
Social Psychology, Sociology	1	2.5	1	2.4
Social Psychology, Epidemiology	1	2.5	1	2.4
Sociology, Criminology, Law	1	2.5	1	2.4
Criminology, Law Enforcement	1	2.5	1	2.4
Political Science, Public Administ.	1	2.5	1	2.4
Social Work, Counseling	1	2.5	1	2.4
Social Work, Planning and Administ.	1	2.5	-	-
Sociology, Criminology, Correctional Administration	-	-	1	2.4
Psychology, Criminal Justice Research	-	-	1	2.4
Psychiatry, Psychophysiology	-	-	1	2.4
Criminal Justice, Psychology, Criminology	-	-	1	2.4
Criminal Law, Public Policy Research	-	-	1	2.4

TABLE 2-1

(conc)

	1st Questionnaire		2nd Questionnaire	
	N	%	N	%
<u>Relationship to Criminal Justice Research</u>				
Active in conducting research directly related to crime and criminal behavior	26	65.0	26	63.4
Teaching related to crime, criminology, law, deviance, etc.	23	57.5	25	61.0
Administering research activities directly or indirectly related to crime or criminal behavior	16	40.0	19	46.3
Planning research activities, writing RPF's monitoring research grants, etc.	14	35.0	11	26.8
Active in conducting research indirectly related to crime and/or criminal behavior	9	22.5	9	22.0
Using results of research to plan, develop and/or implement programs and policies	7	17.5	6	14.6
Other (writing, editorial work, consulting, developing theoretical models)	4	10.0	5	12.2
No direct relationships to research activities dealing with crime and/or behavior	0	0	1	2.4

\*Almost all respondents checked more than one of the above activities, the average being about 2.5 of the 8 possible responses.

questionnaire and one more respondent to the second questionnaire. Almost half identify with more than one discipline. A little over one-third stated criminal justice, criminology, criminal justice research and/or criminal law as one or their only discipline.

The majority of the respondents were engaged in research and/or teaching activities directly related to the study of crime. Other frequent activities related to criminal justice research were administering research activities and planning research. A large majority of the respondents indicated they were involved in more than one of the activities related to criminal justice research listed on the questionnaire.

A list of individuals who answered either or both questionnaires is presented in Appendix C.

A probability sampling of criminal justice researchers was not used to select the potential respondents. Of those who were asked to participate many were well-known senior academicians with extensive research experience. Younger academics, state and local level researchers, practitioners and those outside criminal justice research but whose work may be related, those working in the criminal law and in system change were under-represented in the sample. Furthermore, those who actually completed the questionnaire represented a self-selected subgroup of those who were asked. Despite the non-randomness and nonrepresentativeness of the respondents we believe that those who did respond comprised an important group of researchers in criminal justice and related disciplines. In addition, the wide range of responses and the many different ideas for research which emerged from the first questionnaire makes the survey an important instrument in developing an agenda for a program of basic research.

#### 2.5 Selection of Research Program Areas for the NILECJ's Agenda

The use of research ideas from the literature review, two colloquia and the mail survey to develop a research agenda was not a straightforward task. Section 2.1 mentioned judgments that were made at several points in this process. The final set of program areas recommended to the Institute met certain selection criteria. These include:

- adds to current knowledge regarding criminal behavior or to knowledge of the conditions leading to, supporting or discouraging criminal behavior;

- aids in understanding what and how various factors, processes, etc. influence the initiation, maintenance, frequency, cessation, prevention and/or type of criminal behavior (i.e., is of theoretical importance);
- represents a subject area of broad scope, but whose content can be defined through specific research questions, variables, hypothesis, etc.;
- has implications (although not necessarily direct or immediate) for policy and programs or for testing basic assumptions on which criminal justice programs and policies are based; and
- represents one of the major themes of the first and/or second colloquia, among the most highly endorsed by respondents to the second questionnaire or inclusion of any combination among the three sources of expert opinion.

In making the final selections (see Chapter 7) we used the criteria listed above (especially the second and last) to limit the number of choices among the many program areas which emerged from the three sources. Several themes or topics were combined or subsumed under more general areas in the final set of suggestions. Another consideration in making the selections was that the program areas should be suitable to the efforts of a major, long-term, cumulative, interdisciplinary program as envisioned for NILECJ's interdisciplinary research centers. The current availability of data relevant to the various areas was not taken into account as a criterion.

It should be noted that current research activities by the NILECJ or other agencies and research organizations did not prevent the inclusion of a particular program area among the suggestions. Several of the suggested program areas discussed in Chapter 7 include aspects of current Institute-sponsored research.

#### 2.6 Survey of Federal Agencies

A survey of ten federal agencies was conducted to determine what research is being funded that may be of relevance to basic research regarding the correlates and determinants of crime, to gain awareness of these agencies' priorities and planned future activities in these areas, to examine the possibilities of inter-agency cooperation with the NILECJ in funding of specific projects

and/or broad program areas, to avoid unnecessary duplication and to build on existing knowledge.<sup>12</sup>

Ten agencies were selected as those whose work might include basic research related to crime. They were:

- Administration on Aging
- Department of Housing and Urban Development
- Department of Labor
- National Institute of Child Health and Human Development
- National Institute of Corrections
- National Institute of Mental Health - Center for Studies of Crime and Delinquency
- National Institute on Alcohol Abuse and Alcoholism
- National Institute on Drug Abuse
- National Science Foundation
- Office of Education - National Institute of Education

Information was obtained by means of informal interviews with appropriate agency personnel, written materials from the agency (e.g., annual report, program documentation and grants' lists when available) and computerized information systems. The information systems were searched for relevant project/program titles and abstracts. The systems were: The Information Storage/Retrieval System of the Interagency Panel on Early Childhood Research and Development, and the Interagency Panel for Research and Development on Adolescence; the Scientific Project Analysis and Retrieval System; and the Smithsonian Science Information Exchange. Abstracts of projects which appeared to be most appropriate to basic research into the correlates and determinants of crime have been included as an appendix to the report.<sup>13</sup>

<sup>12</sup> Otten, Laura, Research Related to the Correlates and Determinants of Crime: A Survey of Ten Federal Agencies, The MITRE Corporation, Metrek Division, MTR-7995, McLean, Virginia, October 1978.

<sup>13</sup> Ibid.

The results of this survey were not employed in selecting the programmatic research areas for the Institute's agenda. The survey may be helpful, however, in alerting the Institute to those agencies which have sponsored research relevant to the programmatic area(s) which will be chosen and funded.

Chapters 3, 4, 5 and 6 to follow will present the results of the literature review, two colloquia, mail survey and federal agency survey, respectively. Chapter 7.0 presents the nine programmatic areas selected by MITRE, a list of specific research ideas within each area and suggestions for continuing input into the Institute's research program.

### 3. LITERATURE REVIEW

The selected, small sample of current literature relevant to the correlates and determinants of crime was divided into nine categories based on the content of the material: economic factors; correlates of intrafamily violence; crowding/density (including building design); correlates of delinquency; race and crime; personality factors; biological factors; comparative study of high and low crime communities; and methodological issues.<sup>14</sup> The latter category (methodological issues) was derived from issues presented or implied by the readings in the other eight areas. Suggestions for research, directly stated by the authors of the material read or derived from the analysis of the readings, are briefly discussed for each of the eight substantive categories.

#### 3.1 Economic Factors

The literature reviewed included material on the use of models of rational choice behavior to explain crime, individual economic factors and criminality, and relative deprivation. Gillespie<sup>15</sup> reviewed many studies of the relationships between macroeconomic data and crime rates and interpreted them using a model of rational choice behavior. This model employs such economic concepts as opportunity costs and risks. Based on his review Gillespie made the following recommendations concerning further research using rational choice models:

- refine the predictive models through inclusion of non-opportunity cost (or risk) measures e.g., "taste" variables;
- incorporate uncertainty factors into the predictive equations since choice takes place under conditions of uncertainty;

<sup>14</sup> Molof, M.J., Supra

<sup>15</sup> Gillespie, R.W., Economic Factors in Crime and Delinquency - A Critical Review of the Empirical Evidence. National Institute of Law Enforcement and Criminal Justice, 1975.

- use alternative indicators of opportunity costs of crime other than employment in the prediction equations (e.g., labor force participation rate);
- use age-specific crime data to test the predictive models;
- apply the predictive models to specific crime rates as the economic factors used in the models may be differentially related to different type of crime; and
- apply the models to samples of individuals as well as to aggregated units such as geographic divisions.

In addition, several articles<sup>16,17</sup> reported studies using individualized measures of economic factors as related to criminal behavior. These measures go beyond demographic measures of income and employment to look at various types of economic supports in the individual's life and several indices of strength and expectations of illegal vs. legal economic activity. Research using these and other individual measures may provide greater understanding of how economic factors are translated into individual psychological propensities with regard to criminal behavior.

Readings on economic correlates of crime rates, including those used in the Gillespie review, show variations (or possibly inconsistencies) which lead to suggestions for research to further establish the reliability of these variations and to understand them. Variations have been found in the size, direction and consistency of the relationships between various economic measures (unemployment rate, average income, percent below established poverty levels, disparity between high and low ends of the income distribution, etc.) and crime rates as a function of time period, geographic region and unit of analysis (state,

<sup>16</sup> Jenkins, W.O., DeVine, M.D., deValera, E.D., Muller, J.B., Nichols, W.L. and Ray, S.O., The Behavioral Demography of the Young Adult Male Offender. Rehabilitation Research Foundation, Montgomery Alabama, 1975, 237 pages.

<sup>17</sup> Murphy, B.C. Foundations of Scientific Corrections Classification and Programming-Structured Applications of the Law of Effect and Differential Association to Legal and Illegal Earnings. Canadian Journal of Criminology and Corrections, 17, 2, April 1975, pp. 154-164.

SMSA, city, census tract, police district). These variations lead to the following research:

- determine which measures of economic factors are related to general rates of crime and those which are related to specific crime rates;
- establish geographic differences in the relationships between economic indicators and crime rates and study possible reasons for these differences, using non-economic data;
- determine the differences and similarities in the relationships between economic indicators and crime rates for different units of analysis (individual, Standard Metropolitan Statistics Areas, city, section of a city, different sized cities, states); and
- determine what social factors modify the relationships between economic indicators and crime.

Chester,<sup>18</sup> in a theoretical article, discusses perceived relative deprivation as a causal factor in crime which may help explain the higher crime rate among lower socioeconomic classes. Much of the deprivation is directly or indirectly related to economic factors. To examine perceived contrasts in affluence, power and status is another way of looking at crime determinants from an individual psychological perspective while at the same time recognizing larger structural factors such as income disparity, unemployment, unequal access to resources. Knowing the relationships between perceived relative deprivation and variables such as income disparity within a geographic unit, physical distance between affluent and less affluent groups, ability to purchase and pay for necessities and luxuries desired and an individual's reference groups would aid in understanding this concept as well as the processes by which relative deprivation may influence the propensity to engage in criminal behavior.

It appears that for progress in knowledge of what economic factors influence crime and criminal behavior and the processes by which this influence operates, requires separate and integrative research on both the macroeconomic (or aggregate) and individual levels.

<sup>18</sup> Chester, C.R. Perceived Relative Deprivation as a Cause of Property Crime. Crime and Delinquency, 22, 1, January 1976, pp. 17-30.



### 3.2 Correlates of Intrafamily Violence

Another substantive area choosen for review concerned research in intrafamily violence. The material reviewed included a paper by Straus, Gelles and Steinmetz<sup>19</sup> in which they argue that the family is one of, if not the most, violent institutions in our society. They also consider the family a unique setting for violent behavior and enumerate a list of theoretical reasons why this condition exists. They briefly mention many theoretical constructs which can be used to explain family violence, and suggest that family violence be a subject of study apart from violence in general. Finally, they propose a series of questions which they believe need to be answered through research. Among them are:

- What is the extent and type of violence which occurs among family members?
- Does violence occur only among "pathological" families? What kinds of violence are associated with family pathology?
- Is mental illness prevalent in those family members who use violence?
- Does alcohol use generate family violence?
- Do lower socioeconomic status families produce more intrafamily violence?
- Are men in the family more violent than women?
- Do excessive restraints on aggression and violence lead to greater stress and more destructive violence?
- Is violence in the family a reflection of violence in the society at large?
- Is the use of physical punishment one of the factors leading to child abuse?

<sup>19</sup> Straus, M., Gelles, R.J. and Steinmetz, S.K., Violence in the Family: An Assessment of Knowledge and Research Needs. Presentation to the American Association for the Advancement of Science, February 23, 1976.

The answers to these questions would provide a solid base of normative, demographic and correlative data to test various theories of family violence and to place violence in the context of the basic structure and functions of the family.

Curtis<sup>20</sup> deals with intrafamily violence in discussing his ideas about a contraculture shared by certain young, male, urban, poor blacks. He attributes a realtively high rate of black intrafamily violence to factors such as the acceptance of violence to resolve disputes and to respond to built-up conflicts. The latter often has its origin in conflict between the more conventional values of the woman with regard to the role of a husband as a provider of income, security and a home as well as one who should devote most of his attention to her and the contracultural values of the man (dominance, toughness, sexual exploitation and adventurousness). Sexual jealousies, economic marginality and lack of economic power are mentioned as other factors leading to violence. A finding which may be important in explaining intrafamily violence among blacks is the higher percent of female offenders in homicide and assault incidents among blacks than whites. Curtis proposes a large survey study, using multiple measures of value orientations to test his ideas about the youthful, urban, poor black male contraculture. (See Section 3.5.) Such information may provide further enlightenment on the role of values, value conflict and how family situations become violent especially among certain groups of urban, poor blacks.

A paper by Perry, Harburg and Crowley<sup>21</sup> presented at the first MITRE-NILECJ colloquium also deals with theoretical and empirical aspects of intrafamily violence. Their approach emphasizes somewhat different concepts and variables than does that of Curtis, but is not necessarily in conflict with his. Perry, et al. look at intrafamily assault as a function of such factors as: neighborhood (high and low stress neighborhoods based on stability and disorganization); family structure (composition,

<sup>20</sup> Curtis, L.A., Violence, Race and Culture. Lexington, Massachusetts: Lexington Books, 1975.

<sup>21</sup> Perry, L., Harburg, E., and Crowley, J.E., Urban Families and Assault: A Framework for Research Focused on Black Families. Paper Presented to the Colloquium on the Correlates of Crime, National Institute of Law Enforcement and Criminal Justice and The MITRE Corporation, March 30-31, 1978.

sex-roles, child rearing practices); management of stress (coping processes and coping devices); and economic powerlessness (leading to the use of violence to exercise power and gain status). The authors propose a program of research on various components of intrafamily assault concentrating on the black family. They suggest several hypotheses including:

- likelihood of assaultive behavior is higher in families in which the female has the more stable income than the male, where the family has few resources that yield power, where there is low friendship, love and respect between mates, where there is degradation of the female by the male and male economic instability, and where open expression of anger and hostility is sanctioned;
- differences in rates of intrafamily assaults between high and low stress neighborhoods and between blacks and whites can largely be accounted for by differences in economic stability;
- appropriate coping mechanisms can offset the effects of economic instability, neighborhood stress, financial problems and decrease the likelihood of intrafamily assault.

Other subjects of possible research discussed by Perry, et. al. include: coping mechanisms; selection of which child will be abused; viewing the family as a conflict management system; role of community supports; and the effects of economic and status degradation. The authors call for comparisons of black and white families in high and low stress neighborhoods as well as an assessment of both instigating and inhibitory forces in and out of the family which affect assaultive behavior.

### 3.3 Crowding, Density, Building Design

Several studies relating measures of density/crowding to crime rates were reviewed in addition to one article discussing building design and crime. The studies of density-crime rate correlations showed mixed results with two demonstrating positive

correlations,<sup>22,23</sup> one with aggravated assault and homicide rates even after social-demographic factors were controlled. Two other studies showed very weak or no density-crime relationships especially when other factors were controlled.<sup>24,25</sup> A paper by Freedman<sup>26</sup> presented at the second NILECJ-MITRE colloquium concluded that there does not appear to be any consistent, meaningful crowding-crime relationship and that any effects of crowding are probably interactive. It appears that crowding/density, at least at the aggregate level, may not be an important variable in understanding criminal behavior in general. For those crimes, geographic areas and/or time periods which show strong independent or interactive relationships with density, further research into how this factor operates to influence criminal behavior may be useful. In addition, research comparing conditions where crowding/density is statistically related to crime and where it is not may also provide information as to how this variable is involved in criminal behavior.

<sup>22</sup> McCarthy, J.D., Galle, O.R. and Zimmern, W. Population Density, Social Structure and Interpersonal Violence--An Intermetropolitan Test of Competing Models. American Behavioral Scientist, 18, 6, July-August 1975, pp. 771-791.

<sup>23</sup> Mladenka, K.R. and Hill, K.Q. Reexamination of the Etiology of Urban Crime. Criminology, 13, 4, February 1976, pp. 491-605.

<sup>24</sup> Gillis, A.R. Population Density and Social Pathology--The Case of Building Type, Social Allowance and Juvenile Delinquency. Social Forces, 53, 2, December 1974, pp. 305-314.

<sup>25</sup> Booth, A., Johnson, D.R. and Welch, S. Crowding and Urban Crime Rates. Urban Affairs Quarterly, 11, 3, March 1976, pp. 291-307.

<sup>26</sup> Freedman, J.L., Crowding, Stress and Crime. Paper presented to the Colloquium on Stress and Crime, National Institute of Law Enforcement and Criminal Justice and the MITRE Corporation, December 4-5, 1978.

In an article by Mawby<sup>27</sup> concerning the concept of building design and defensible space he criticizes the work of Oscar Newman on this subject and calls for a more careful and complex definition and measurement of the concept of defensible space. An important point was that certain design characteristics of buildings and their surroundings may have both positive and negative implications for surveillance and opportunities for crime. To promote further understanding of the role of building design and the ecology of neighborhoods, it appears that in addition to better definition and measurement of defensible space, research is needed on the following:

- comparison of crime committed by those living in an area (or building) versus those committed by outsiders in a particular building-ecological design;
- types of crimes committed in various areas of a building for various types of buildings and environments;
- how and by whom the crime was discovered as a function of building design;
- perceptions by apprehended offenders of risks of surveillance and apprehension in various environments; and
- comparison of types, location and rates of crime in building environments with similar design across neighborhoods which differ in population characteristics, land use and other factors related to crime.

Of tangential relevance to population density is a potential research area suggested by Curtis<sup>28</sup> among his ideas concerning the contraculture of violence of certain urban, poor, youthful, blacks. He mentions the possibility that there may be a critical mass of individuals who adhere to such a cultural orientation and the existence of this critical mass may contribute to the disproportionately high violent black crime rates.

<sup>27</sup>Mawby, R.I., "Defensible Space: A Theoretical and Empirical Appraisal," Urban Studies, 14, 1977, pp. 169-179.

<sup>28</sup>Curtis, L. A., *Supra*.

He cites a study which demonstrated a population threshold of the number of black people below which riots did not develop during the 1960s. Of some interest here is a finding by Danziger<sup>29</sup> in his study of 222 SMSAs, which showed that burglary and robbery rates increased with the proportion of the black population up to 20 percent, after which they declined. Using estimates of the number of individuals who endorse or are part of the contraculture that Curtis describes (using his or other methods) may be helpful in testing ideas concerning threshold subpopulation levels and minority crime rates. Replication and further analysis of Danziger's findings may also aid in furthering understanding of the relationships between the proportion of minority population to rates and types of crime.

#### 3.4 Correlates of Delinquency

A review and analysis of the relationship between learning disabilities and delinquency were conducted for the National Institute for Juvenile Justice and Delinquency Prevention by Murray.<sup>30</sup> He concludes from his literature review, consultation with experts and analysis of programs that: the existence of a causal connection between learning disabilities and delinquency has not been established and existing evidence for such a relationship is slight; there is no evidence that the average delinquent is more likely to suffer from learning disabilities than comparable non-delinquents; and that despite lack of clear statistical evidence there is much clinical evidence that delinquents show a pattern of learning handicaps which deserves further research. He suggests the following research:

- determine the incidence of learning handicaps, including learning disabilities (defined in a narrow manner), among chronic juvenile offenders, first time and status offenders and non-delinquents;
- conduct a national inventory of learning handicaps among youth which would permit profiles of critical populations and age groups; and

<sup>29</sup>Danziger, S., "Explaining Urban Crime Rates," Criminology, 14, 2, August 1976, pp. 291-296.

<sup>30</sup>Murray, C.A., The Link Between Learning Disability and Juvenile Delinquency, National Institute for Juvenile Justice and Delinquency Prevention, April 1976.

- conduct a test of the value of identifying and treating learning disabilities in an inner city elementary or pre-school facility, with thorough follow-up research.

Longitudinal studies of large samples of young children with and without learning disabilities would be of crucial import in determining: the link between delinquency and these disabilities; the magnitude of such a relationship; the populations in which these links are strongest; and the other factors which influence the relationship.

Friday and Hage<sup>31</sup> account for delinquent behavior by looking at effects of social structure on socialization through role relationships. They name five areas of role relationships which are considered crucial to normative socialization: kin; community or neighbor; school; work; and peer (not included in the other role relationships). The key process in normative socialization is the extent of intimate relationships across the five areas as producing strains toward conformity. The total number of normative socialization opportunities, not any particular pattern or any one role relationship, is crucial. When there are few and/or less intimate role relationships across all five areas, youth gravitate toward peer relationships which become much more salient in terms of their values and behavior. The peer group is likely to contain members who also lack other intimate socializing role relationships. Values and behavior then are less likely to be influenced by normative, integrative socialization experiences and this isolation often leads to delinquent behavior.

Friday and Hage do not suggest research to test their ideas but research implications are clear. For example, a longitudinal study of the development, change and maintenance of role relationships from preadolescence through young adulthood in cohorts of individuals from various socioeconomic strata, racial-ethnic groups and geographical locations (urban, suburban, rural) would provide important evidence concerning role relationships, socialization and delinquency. Both range and intimacy of relationships could be measured at various developmental points as well as the normative versus deviant orientations of relationships. Another research approach would compare role

<sup>31</sup>Friday, P. C. and Hage, J., "Youth Crime in Postindustrial Societies--An Integrated Perspective," Criminology, 14, 3, November 1976, pp. 347-68.

relationships of known delinquent and matched non-delinquent samples at various ages.

Savitz, Lalli and Rosen<sup>32</sup> studied victimization experiences, behavior relevant to fear of attack and perceptions of young black and white adolescents (14 and 15 years of age) in Philadelphia with and without an official delinquent record and who were and were not gang members. In general, there were few statistical differences between officially recorded delinquents and non-delinquents in victimization and behavior due to fear of victimization. Youngsters who were members of fighting gangs reported less fear than others, but did not report higher victimization rates than non-gang members (or members of non-fighting gangs). This type of study leads to possibilities of research efforts designed to look at criminal behavior (and delinquency) from the perspective of the individuals involved and to discover what aspects of the social and physical environment tend to support and reinforce or stimulate these behaviors.

Stephenson<sup>33</sup> points out an important methodological consideration in studying delinquents. Those labelled delinquent are not a homogeneous group and in her study delinquent groups differed importantly on several background and personal dimensions based on whether or not they were institutionalized, referred for treatment or assessment, etc. Findings based on specific subpopulations of delinquents (institutionalized, probationers, referred for treatment) should be replicated with other groups labelled as delinquents before general statements about delinquents or delinquency can be made.

### 3.5 Race and Crime

The high rates of crime (as reported in official statistics) for minorities, especially blacks, found in most (but not all) studies and the disproportionate representation of blacks among corrections populations continue to call for serious basic research. Several of the studies reviewed showed that percent

<sup>32</sup>Savitz, L.D., Lalli, M. and Rosen, L., City Life and Delinquency--Victimization, Fear of Crime and Gang Membership. National Institute of Law Enforcement and Criminal Justice, April 1977.

<sup>33</sup>Stephenson, P.S. Myths About Juvenile Delinquency. Canadian Journal of Criminology and Corrections, 15, 1, January 1973.

non-white (or black) in the population is highly related to crime rates, especially violent crime rates.<sup>34,35,36,37</sup> Hindelang<sup>38</sup> explored the idea that perhaps high violent crime rates for blacks may be due in part to the operation of the criminal justice system and not necessarily reflect greater violent criminal behavior than whites. He compared UCR estimates of the number of blacks arrested for rape, robbery, simple and aggravated assault with estimates based on victimization surveys in which those reporting being victimized for these offenses also reported the race of the assailant. Estimates based on the FBI Uniform Crime Reports arrest data and those based on nationwide victimization surveys can be considered independent of each other and, in a gross manner, as estimates of the same thing (numbers and rates of people of various racial groups engaging in these behaviors). Results showed that for robbery the percent of blacks arrested (UCR data) was the same as the estimated percent of black offenders reported by victims (victimization survey). However, for the other three offenses under study the percent of black arrestees was greater than the estimated percent of assailants reported by victims. Although this data provide some indirect evidence that blacks may be disproportionately arrested (or whites disproportionately not arrested) for the violent personal crimes, both UCR and victimization estimates show blacks substantially over-represented among arrestees and reported assailants compared to their numbers in the general population.

Curtis<sup>39</sup> attempts to explain the high rates of violent crime and violent behavior among blacks by postulating a contraculture which has developed among some blacks under conditions of institutional

<sup>34</sup> Mladenka, K.R. and Hill, K.Q., Supra

<sup>35</sup> Danziger, S., Supra

<sup>36</sup> McCarthy, J.D., Galle, O.R. and Zimmern, W., Supra

<sup>37</sup> Curtis, L.A., Supra

<sup>38</sup> Hindelang, M. J., "Race and Involvement in Common Law Personal Crimes," American Sociological Review, 43, February 1978, pp. 93-109.

<sup>39</sup> Curtis, L.A., Supra

racism and economic marginality. This contraculture, mainly shared among male, youthful, poor, urban blacks, contains a set of values and accepted behaviors which are likely to produce more interpersonal violence and violent criminality than what Curtis describes as the dominant white middle class culture or the black culture. The key elements of the contraculture are excessive emphasis on: physical prowess and toughness; sexual prowess and exploitation; shrewdness and manipulativeness; thrill seeking; and change. Other factors, along with the values placed on the above mentioned behaviors which may exacerbate the tendency toward violence are: alcohol and drug use; weapons possession; lack of verbal skills in interpersonal relations; victim precipitation; and conflicts between the contraculture and the dominant culture. Other bases for black violence are also considered such as need for money and hostility toward whites.

The basic theme in Curtis' ideas is value orientation, which is used as an explanatory construct to account for the predominance of violent crimes among a population of black, urban, poor males. In order to test his ideas of a contraculture he suggests a national survey using a multi-instrument approach to study cultural orientations. Among the instruments would be those measuring values, characteristics of personality and tendencies toward violence. The scores on these measures would place each person in a space relative to the three major cultural orientations (dominant white middle class, black and contraculture). He proposes to test the three cultural orientations among individuals defined by race (black and white), sex (male and female), age (15-30 and 31-65) and socioeconomic class (lower, working and middle). The major hypothesis is that lower class, young, black males share an acceptance of violence to a degree not tolerated by other groups.

Curtis views the contraculture he describes as an adaptive response to forces such as racism and economic limitations. To test this he would compare contraculture orientation among young black males at the three socioeconomic levels and compare blacks and white males at each socioeconomic level.

Other research suggestions made by Curtis in his book follow:

- Comparison of black and white incarcerated offenders convicted of violent (homicide, rape and assault) offenses, robbery and property offenses on: value orientations; projective measures of violent acting-out



tendencies; violent behavior, before and during incarceration; clinically diagnosed psychopathology; guilt; and rejection by parents:

- Cross cultural study of violent subcultures and values in places such as Puerto Rico, Columbia, Haiti, Cyprus, Albania and Italy.
- Analysis of the value orientation survey mentioned previously by city, in order to estimate the size and intensity of the black contraculture and to aid in explaining different black violent crime rates in different cities.

It appears that the ideas of Friday and Hage,<sup>40</sup> discussed previously, concerning role relationships and normative socialization can be applied to the theory of black violence proposed by Curtis. A study of the role relationships of youths who accept and are part of the violent contraculture versus those in similar socioeconomic and geographic situations who do not accept or participate in contracultural norms and behaviors might be appropriate to the understanding of black criminality.

In addition to the suggestions given by Curtis, the readings imply other areas of needed research with regard to minority group crime. Among them are:

- investigate rates and types of crimes for minorities other than blacks such as Puerto Ricans, Mexican-Americans, American Indians, where they are and where they are not concentrated in high proportions;
- apply various econometric models of crime as rational choice behavior to specific minority groups in specific locations;
- study crime rates and types of crime committed by blacks and whites in similar socioeconomic conditions and, if possible, in similar areas of a city;
- study crime rates of blacks and whites in integrated and segregated neighborhoods (controlling for socioeconomic status and other crime-related variables); and

<sup>40</sup>Friday, P.D. and Hage, J., Supra

- intensively study black and other minority families and youth living in an urban, poor, minority area who do not get involved in the contraculture and who do not behave in a criminal manner.

It should be noted that for the third and fourth suggestions listed above longitudinal studies would be appropriate. There may be differences in crime rates and types for minorities and others in early stages of socioeconomic advance (or decline) than after several generations as well as newly integrated versus those who have been integrated for some time.

### 3.6 Personality Factors and Crime

Two studies reviewed<sup>41,42</sup> attempted to find: (1) personality differences among offenders with different offense histories and (2) differences among several types of incarcerated prisoners - chronically undercontrolled psychopaths, manipulatively undercontrolled psychopaths, chronically overcontrolled inmates and a random group of prisoners. In the first study, Eysenck, Rust and Eysenck found statistical differences between those with a history of primarily fraud offenses and those with other patterns of criminal behavior on measures of psychoticism and neuroticism. The fraud offenders were lower in these measures than the other offender groups. In the study of different types of prisoners Knott found that only a few of the personality measures statistically differentiate the various groups. Both studies also used several physiological measures.

Although study of personality differences between criminals and non-criminals and among variously defined criminal types (usually on the basis of criminal history) has been going on for many years, it appears that more relevant and sophisticated work is needed. Given the fact that social and economic factors greatly influence crime rates among groups and that other factors in the social environment are important in determining the probability of committing crimes, these factors nevertheless do not

<sup>41</sup>Eysenck, S.B., Rust, J. and Eysenck, H.J., "Personality and the Class Classification of Adult Offenders," British Journal of Criminology, 17, 2, April 1977, pp. 169-179.

<sup>42</sup>Knott, P.D., Psychopathy--Causes, Correlates and Rehabilitation. National Institute of Law Enforcement and Criminal Justice, 1972. 60 pages.

have uniform and unequivocal effects on individuals. Characteristics of individuals such as personality traits, coping styles, and cognitive and perceptual processes probably serve as intermediaries between the social-economic environment and behavior (including criminal behavior). Differences among individuals on relevant measures of attributes which may be subsumed under the "personality" rubric will be useful in predicting and understanding who engages in criminal behavior as well as the types of criminal behavior.

The first volume of the series of books by Yochelson and Samenow<sup>43</sup> describes in great detail the thinking and behavior of a group of individuals they call the "extreme criminal personality." These clinical descriptions were based on many years and thousands of hours of experience and interaction with patients at St. Elizabeth's Hospital in Washington, DC. They are not based on formal measurements. In general, the authors see in the extreme criminal personality persistent ways of thinking about themselves, their needs, and ways of obtaining what they desire that will inevitably involve criminal behavior. Their descriptions are similar to those who have talked about the psychopathic personality, but Yochelson and Samenow try to avoid much of the standard psychiatric-psychological terminology. Although later volumes in their series concentrate on treatment and change of the extreme criminal personality, the first volume, reviewed here, makes no attempt at etiological explanation for the development of this type of criminal. In fact, the authors try to deny various causal explanations. They consider the behavior as being established early in life but do not believe this a function of social environment, parental interaction with child, physiological characteristics, economic factors, etc.

Several research questions can be posed to test the Yochelson and Samenow formulation. Among them are:

- Are the characteristics of the extreme criminal personality present as a definite cluster of traits, and can reliable and valid methods, other than or in addition to clinical interviews be developed to measure these thinking-behavior patterns?

<sup>43</sup>Yochelson, S. and Samenow, S. E., Criminal Personality, Vol. 1, New York: Jason Aronson, 1976.

- Are there differences among prisoners with regard to the thinking-behavior patterns described as the criminal personality?
- If the answer to the previous question is affirmative, what proportion of known offender populations are extreme criminal personalities?
- Would those offenders classified as extreme criminal personalities also be diagnosed as psychopathic or sociopathic by such methods as described by Knott<sup>44</sup> and Hare<sup>45</sup>?
- If there are clearly defined groups of offenders who exhibit the characteristics of the extreme criminal personality what differences exist between them, other offenders and non-offenders which may have etiological significance, e.g., sociological, demographic, economic, psychological, developmental, physiological, genetic, experiential?
- At what age and under what conditions do the thinking-behavior patterns described by Yochelson and Samenow emerge?

### 3.7 Biological Factors and Crime

Several articles as well as papers presented at the first MITRE-NILECJ colloquium were reviewed. One of these articles, written by Shah and Roth,<sup>46</sup> is an extensive review of various classes of biological factors involved in crime and other behavior disorders. Among the many biological factors which have shown some direct or indirect (if not always consistent) relationships to criminal behavior and have been subject to empirical research are:

<sup>44</sup>Knott, P.D., Supra.

<sup>45</sup>Hare, R. D., Psychopathy and Crime. Paper presented to the Colloquium on the Correlates of Crime, National Institute of Law Enforcement and Criminal Justice and The MITRE Corporation, March 30-31, 1978.

<sup>46</sup>Shah, S. and Roth, L. H., "Biological and Psychophysiological Factors in Criminality," in Handbook of Criminology, Daniel Glaser (ed.), Chapter 4, pp. 101-173, Chicago: Rand McNally College Publishing Company, 1974.

- limbic system abnormalities
- EEG abnormalities and specific EEG patterns
- endocrine functions, especially those related to levels of gonadal hormones
- perinatal problems
- minimal brain dysfunction
- genetic influences
- chromosomal abnormalities (extra X or Y chromosome)
- physique--body type
- autonomic nervous system reactivity and conditionability
- nutritional deficits, and biochemical factors.

Brief statements concerning findings and possible research for each of these topics will follow. The research suggestions are based both on the readings and implications from the readings.

Limbic abnormalities (both produced experimentally and through accidents) have been shown to be related to a wide variety of behaviors in animals and man, including extreme aggression and violence. Certain structures and pathways within the limbic system are known to be involved in aggression and inhibition of aggression. Although a few cases of criminal violence can be shown to be directly related to limbic and other brain abnormalities such as tumors or damage to structures and pathways, this probably accounts for only a very small number of criminals. Research to develop methods to measure the responsiveness of aggressive and inhibitory brain systems to a variety of stimuli may provide more information regarding aggression than a few deviant cases. One of the research goals would be to relate variations in aggressive (including criminal) behavior to measures of the functioning of aggressive and reciprocal inhibitory neural systems.

Data on EEG abnormalities among violent or aggressive individuals as well as those diagnosed as psychopaths have been shown to be more frequent than among non-prisoners or non-violent prisoners. However, the findings have not been consistent nor have the findings concerning the relationships between seizures or

epileptic attacks and violent or impulsive behavior. The work of Monroe,<sup>47</sup> presented at the first MITRE-NILECJ colloquium attempts to use measures of neural activity including that measured by the EEG as well as neurological history, neurological deficiencies, psychological data, behavioral indicators, self reports, behavior in therapy, and psychiatric history to understand the bases of repetitive violent and impulsive behavior among a sample of recidivistic prisoners. Using all the data, Monroe was able to identify four types, one of which showed evidence that violent, impulsive behavior may be related to instability in central nervous system function.

The relationships between EEG measures of central nervous system activity and criminal behavior are complex. To understand what relationships exist and how EEG indicators (especially various types of seizure activity) are related to criminal behavior the following research efforts are suggested:

- normative studies of EEG activity under various stimulus conditions and with different criterion groups including aggressive criminals, aggressive non-criminals, people with other behavioral problems, normals, etc.;
- longitudinal studies starting in early childhood of EEG patterns and abnormalities as related to later behavioral (including criminal) patterns;
- studies of EEG patterns as related to other neurological, biochemical, experiential, health and behavioral (especially aggressive, impulsive, criminal behavior, response to stress and general level of activity) factors; and
- development of typologies based on the inter-relationships of EEG patterns to other factors as suggested above (and based on Monroe's work) and the relationship of these types to various behavioral (including criminal) patterns.

<sup>47</sup> Monroe, R. R., Neuropsychiatric Dimensions of Criminal Behavior. Paper presented to the Colloquium on the Correlates of Crime, National Institute of Law Enforcement and Criminal Justice and The MITRE Corporation, March 30-31, 1978.

Some evidence in the literature reviewed pointed to a relationship between endocrine functions, especially as related to gonadal hormones and criminality. Knott<sup>48</sup> found blood testosterone levels to be higher for prison inmates than non-incarcerated males and that the most consistently aggressive and violent prisoners (classified as chronically undercontrolled psychopaths) had higher levels than other prisoner groups. Scutt<sup>49</sup> as well as Shah and Roth<sup>50</sup> review literature some of which showed that criminal behavior of females is more likely to occur during premenstrual and menstrual periods. The effects of gonadal hormones on criminal behavior are not clear. Topics for research in this area could include:

- parametric studies designed to establish the strength, direction and interactive (statistical) relationships between level and type of sex hormones and criminal activity in both men and women;
- if such relationships are established, studies might be conducted to examine the processes that lead from high or low levels of sex hormones to criminal behavior - (neurological processes, thresholds for reactivity, sensitivity to certain social stimuli, stress tolerance, response of the social environment to certain behaviors, etc.); and
- how do social conditions including interpersonal relationships, economic situation, family responsibilities, and relationships to children interact with the menstrual cycle in terms of both feelings of distress and criminal behavior, especially violent acts toward family members?

<sup>48</sup>Knott, P.D., Supra.

<sup>49</sup>Scutt, J. A., "A Factor in Female Crime." Criminologist, (9, 34, November 1974, pp. 56-71.

<sup>50</sup>Shah, S. and Roth, L. H., Supra.

Shah and Roth<sup>51</sup> mention perinatal factors (pre-natal, birth and early post-natal periods) and minimal brain dysfunction (MBD) as possible factors in behavior problems, mental illness and later criminal behavior. Any influence of these factors on later criminality is most likely indirect. In order to research the effect perinatal problems and MBD have on criminal behavior, longitudinal studies are needed. The effects of perinatal problems on infant, childhood and adolescent development (intellectual, emotional, social and physical) would have to be explored as well as how these problems influenced parental responses to the child. With regard to MBD, a clear definition is needed and studies similar to those suggested for learning disabilities (pages 3-9, 3-10) would be relevant. The MBD syndrome may be synonymous with learning disabilities.

The relationships of genetic factors to criminal behavior have had a long and controversial history. Most of the literature reviewed here gives credence to a possible limited genetic influence in criminality. This was demonstrated by studies of: concordance of criminal records of monozygotic and dizygotic twins (greater concordance among monozygotic twins); adoption studies which generally show that adoptees of biological parents with criminal (and mental illness) histories are more likely to develop criminal behavior or mental illness than matched non-adopted controls; and adoptees whose biological and adopted fathers had criminal records were more likely to have criminal records than adoptees who had either biological or adoptive father with a criminal record or neither with a criminal record. This data provided evidence for an additive effect of heredity and environmental.<sup>52</sup> Dalgard and Kringlen<sup>53</sup> report a carefully done study of mono- and dizygotic twins which shows a much lower difference in concordance for criminality than most other studies. They employed multiple measures of zygosity and measures of similarities in upbringing and feelings of closeness to each other among the twin pairs. When subsamples of MZ and DZ .

<sup>51</sup>Ibid.

<sup>52</sup>Mednick, S. A., You Don't Need a Weatherman! Paper presented to the Colloquium on the Correlates of Crime, National Institute of Law Enforcement and Criminal Justice and The MITRE Corporation, March 30-31, 1978.

<sup>53</sup>Dalgard, O.S. and Kringlen, E., "A Norwegian Twin Study of Criminality Criminality." British Journal of Criminology, 16, 3 July 1976, pp. 213-232.

twins who felt close to each other and recall similar upbringing were compared there was almost no difference in concordance with regard to criminality. Thus, the data on genetic influence is not always consistent.

Any genetic effects on criminal behavior are probably mediated by neural, endocrine and biochemical systems which in turn partially determine how one reacts to the social and physical environment. Rosenthal<sup>54</sup> in a review of heredity and crime lists nine genetically influenced factors which may be related to crime--EEG abnormalities, intelligence, body type, psychosis, chromosomal abnormalities, hyperkinesis, alcoholism and responses to alcohol, sexual preferences and personality characteristics of drug addicts. Studies cited by Mednick<sup>55</sup> also suggest an interaction between genetic effects and social influences on criminality. Again, it should be stressed that most of the studies which found evidence for genetic influence found a relatively slight effect. Suggestions for future work in genetics and crime are:

- continue to investigate genetic contributions to crime through twin and adoption studies with different populations--most of the studies reviewed have been done in Europe, especially in Scandinavia;
- follow-up studies of adoptees and twins of those parents and siblings with criminal records who do and do not develop criminal records. This will allow the delineation of those factors which may encourage or inhibit possible genetic influences;
- estimate genetic influences on factors (such as those mentioned by Rosenthal) which may be implicated in crime--use of path analytic models;
- explore genetic influence on crime specificity; and
- study how social-environmental-experiential variables interact with genetic factors or genetically-influenced factors to affect individual criminality?

<sup>54</sup>Rosenthal, D., "Heredity and Criminality." Criminal Justice and Behavior, 2, 1 March 1975, pp. 3-21.

<sup>55</sup>Mednick, S. A., Supra.

The presence of an extra Y or X chromosome among males has been statistically related to those in mental hospitals and aggressive individuals in criminal justice or mental facilities. However, the effects are so minute as to be of little use in understanding criminality.

Another biological factor discussed by Shah and Roth<sup>56</sup> is physique especially as measured by the typology developed by Sheldon (ectomorph, mesomorph and endomorph). They cite studies which show relationships between body type and delinquency among males and females using the Sheldon system as well as relationships between body type and self-perceptions. The data cited provide evidence that this area may be worthwhile for further exploration. Potential research could include:

- normative studies on body type of various groups of criminals, e.g., violent offenders, property offenders, youthful criminals, first time offenders, recidivists, criminals of various racial groups, males and females;
- investigation of the relationships between body type and criminal history such as length of record and age at which criminal behavior started;
- exploration of the relationships of body type to other biological factors among both offenders and non-offenders; and
- case studies of selected offenders and non-offenders to ascertain how body type may have influenced behavior, self-perception, responses from others, situations in which the individual has been confronted, decisions made about them (especially "official" decisions), etc.

Psychophysiological correlates of crime, especially among those diagnosed as psychopaths, are receiving continuing attention. Studies of conditioning using painful or aversive stimuli and autonomic nervous system responses to strong stimuli have demonstrated differences between psychopaths and other criminal groups. Psychopaths show poorer conditioning to aversive stimuli than non-psychopaths, including conditioning in social situations. Studies among prisoners diagnosed as psychopaths show: higher sensory detection thresholds and pain tolerance; lower levels of cortical arousal; higher resting skin conductance, weaker

<sup>56</sup>Shah, S. and Roth, L.H., Supra.



skin conductance in response to intense or painful stimuli; longer (slower) skin conductance recovery rate to intense stimuli; smaller increases in electrodermal activity in anticipation of an aversive stimulus; and larger increases in heart rate while awaiting an aversive stimulus than non-psychopathic prisoners.<sup>57</sup> Mednick<sup>58</sup> goes beyond looking at differences between psychopathic versus non-psychopathic prisoners and provides data showing that electro-physiological measures of autonomic reactivity (skin conductance recovery rate) differ in young people who later have serious contacts with the law versus those who do not, with future criminals showing slower recovery time. Similar results were found using pulse rate to a mild stressor as a predictor of later delinquency. Possible genetic influences on autonomic reactivity was shown in a study in which it was found that children of fathers with criminal records had longer latency to peak responses, slower skin conductance, recovery and fewer responses to tones than children of non-criminal fathers. In another study, sons of fathers with criminal records who themselves were not criminal had the highest mean intelligence and fastest autonomic recovery rate while criminal sons of non-criminal fathers had the slowest autonomic recovery rate.<sup>59</sup>

The neurophysiological data on autonomic reactivity has strong implications for explanations of poorer conditioning to aversive stimuli among psychopaths as well as implications for socialization, learning and processing of information. Mednick<sup>60</sup> has proposed a mini-theory of how the speed of autonomic recovery affects fear conditioning with consequences for inhibition of aggressive responses and criminality. The present evidence as well as the potential importance of this area of inquiry in understanding the basic neurophysiological processes which may be involved in criminal (and other behaviors) suggest continued efforts. Among such efforts the following appear important in understanding the neurophysiological role in crime:

<sup>57</sup>Hare, R. D., Psychopathy and Crime. Paper presented to the Colloquium on the Correlates of Crime, National Institute of Law Enforcement and Criminal Justice and The MITRE Corporation, March 30-31, 1978.

<sup>58</sup>Mednick, S. A., *Supra*.

<sup>59</sup>*Ibid*.

<sup>60</sup>*Ibid*.

- continued experimental studies using various measures of autonomic response and varying stimuli under varying conditions with psychopathic offenders, other offenders (including those not in an institution) as well as various demographic subgroups of non-offenders in order to obtain accurate estimates of the parameters and further delineation of the differences among these various groups;
- continued exploration of the interaction of neuro-physiological variables such as various facets of autonomic reactivity and social variables, e.g., what social conditions mitigate the potential effects of slow autonomic responsiveness with regard to criminality and what conditions promote the hypothesized effects of slow autonomic reactivity on conditioning, learning and socialization;
- investigation of the effects of differences in autonomic reactivity among children within the same family on such variables as conformity, fearfulness, responsiveness to pain, anxiety, "getting into trouble" and other theoretically relevant behavior;
- further research into genetic contributions to variations in neurophysiological responsiveness with special emphasis on autonomic reactivity.

A final set of biological factors which may be related to criminal behavior concerns biochemical problems such as nutritional deficiencies and aggressive behavior as an allergic response. Hippchen<sup>61</sup> cites studies of vitamin and other nutritive deficiencies among hyperactive children, jail and prison inmates as well as several studies which claim excellent results of vitamin and other dietary treatment with various populations (children with behavior problems, delinquents, jail inmates, alcoholics and schizophrenics). Moyer<sup>62</sup> mentions several clinical studies of extremely allergic responses to food

<sup>61</sup>Hippchen, L. J., "Biochemical Approaches to Offender Rehabilitation." Offender Rehabilitation, 1(1), Fall 1976, pp. 115-123.

<sup>62</sup>Moyer, K. E., Physiological Determinants of Human Aggression. Paper presented to the Colloquium on the Correlates of Crime, National Institute of Law Enforcement and Criminal Justice and The MITRE Corporation, March 30-31, 1978.

and other substances which often include violent, acting-out behavior. Since some biochemical problems may be relatively easy to overcome through diet or elimination of allergens and if these factors play a role in certain types of criminal behavior, research should be pursued. Among suggested pursuits are:

- normative studies of biochemical and nutritional abnormalities and deficiencies among various groups such as incarcerated offenders, alcoholic offenders, drug addicts, juvenile offenders, probationers, high-risk individuals, not-official offenders and non-offenders from various socioeconomic strata;
- studies of the relationships between nutritional deficiencies and learning-behavior problems among children; and
- well-controlled studies of the effects of vitamin, other dietary and drug therapies on behavior, including future criminal behavior, among offender groups, e.g., uncontrolled violent offenders, sexually aggressive offenders and hyperactive juvenile offenders.

Some of the biological factors discussed in this section may aid in the understanding of only certain types of criminal behavior (violence) or certain types of criminals (psychopaths), while other factors may have more general effects. Biological factors must be considered not as solely determining criminality, but in interaction with, as modifying and being modified by, social, economic, environmental and learning factors to be useful in understanding and dealing with crime.

### 3.8 Comparative Studies of High and Low Crime Communities

A study by Clinard and Abbott<sup>63</sup> of two slum communities in an African city with different rates of crime suggests that similar studies could be conducted in the United States. Communities defined by cities, census tracts, neighborhoods, etc. with similar socioeconomic, land use and other demographic characteristics, which have been shown to be correlates of crime, with very different rates and types of crime would be subject to intensive

<sup>63</sup> Clinard, M. B. and Abbott, D. J., Crime in Developing Countries: A Comparative Perspective. Chapter 5, New York: John Wiley and Sons, 1973.

study. If such matched communities can be found, an intensive analysis is suggested to try to discover the reasons for crime rate differences. Factors which can be investigated are: nature and functions of the criminal justice system; relationships of the community to various service agencies (welfare, mental health); political and historical factors; family structure; degree and type of social integration; frequency of other forms of deviancy and disintegration (mental illness, illegitimacy, alcoholism, drug addiction, etc.); in and out migration; community values; nature of community leadership; relationships of the community to the political structure; school system; etc. If possible it may be very informative to compare communities with different crime rates (matched on crime-related socioeconomic and demographic characteristics) which are predominantly minority with each other, and those predominantly white with each other.

In sum, based on this limited review, broad-scope program areas which appear to require further investigation in light of the state-of-research and likely payoff are: economic correlates and processes (especially the integration of macro and micro approaches); biological factors; community and neighborhood factors (including the physical environment); intrafamily violence; and cultural and ethnic influences.

#### 4. COLLOQUIA

##### 4.1 First Colloquium: The Correlates of Crime and the Determinants of Criminal Behavior

The first NILECJ-MITRE colloquium was held on March 30-31, 1978. Suggestions from participants for areas of future research were contained in their written papers and presentations and also emerged from discussions, responses of presenters to specific inquiry by the colloquium chairman and workshops held for the purpose of generating research ideas.

The major themes of the papers and much of the discussion centered around physiological-biological correlates and developmental aspects of criminal behavior, with one paper focusing on a broad approach to assaultive behavior within the family. Two volumes<sup>63, 64</sup> provide an introduction, a brief summary of the presentations and the recommendations, an edited transcript of the proceedings, and a complete text of the invited papers. In this section we will briefly mention the many research ideas that were generated in the presentations, discussions, workshops and papers.

The topics of the presentations and the presenters were:

- Genetic and autonomic functions and crime - Sarnoff Mednick
- Psychopathy and crime - Robert Hare
- Physiological determinants of human aggression - Kenneth Moyer
- Episodic dyscontrol in criminals - Russell Monroe
- The developmental approach in criminology with clues from studies of drug use - Richard Blum
- Delinquent behavior, educational attainment and post high school experiences - Jerald Bachman
- Alcohol use and crime among veterans - Lee Robins
- Psychophysiological responses to crowding in prisons - David D'Atri

<sup>64</sup>Otten, L. (ed.), Supra.

<sup>65</sup>Otten, L. (ed.), Supra.

- Urban families and assault - Lorraine Perry (with Ernest Harburg and Joan Crowley)
- Role of pain and pleasure in the development of destructive behaviors - James Prescott

In addition there were several invited discussants including: David Barcik of the Maryland Department of Corrections; Richard Clayton; a visiting scholar at the National Institute on Drug Abuse; Monte Buchsbaum of the National Institute of Mental Health, Christopher Dunn, Center for the Study of Crime and Delinquency (NIMH) Albert Pawlowski, National Institute of Alcohol Abuse and Alcoholism; Louise Richards, National Institute on Drug Abuse; and Nathan Rosenberg, National Institute on Alcohol Abuse and Alcoholism.

Suggestions gleaned from the first colloquium ranged from the very general to the highly specific. Major "themes" derived from the many suggestions generally followed those in the presentations and papers (biological factors, developmental processes and factors involved in intrafamily assault). The workshops held on the second day however, produced some research recommendations that were not related to the topics of the papers and presentations.

#### 4.1.1 Methodological Considerations

Two overriding concerns among many of the participants were the needs for longitudinal and interdisciplinary research. Longitudinal research was considered important for a variety of reasons including:

- predicting later criminality, e.g., looking for reliable predictors in a birth cohort, in a school cohort or among first time offenders in order to be able to select those for intervention;
- delineating causal sequence, e.g., does parental punishment lead to school failure or vice versa; does school failure lead to delinquent behavior or vice versa?
- understanding developmental sequences - stages and epochs - and those variables which are antecedent to and correlated with specific "career" paths in delinquency and drug use; and
- delineation of those variables (familial, genetic, psychophysiological, developmental, cognitive, etc.) which relate to crime and other pathology as well as

the assessment of their individual and interactive influence.

Several participants mentioned the need for cross sectional studies also, and one recommended longitudinal studies across relatively short-term blocks of time as well as cross-sectional studies within those blocks.

Since many longitudinal studies are expensive, and by definition require substantial time for outcomes to appear, several "short cut" methods were suggested. One would involve using intermediary events such as early school behavior problems that are correlates of the final outcome (delinquency-crime). Early intervention programs could thus use these intermediary criteria as initial indicators of effectiveness without waiting 10-15 years for results in order to make tentative judgements about effectiveness. Another suggestion was to use existing cohort data and perform a longitudinal analysis in retrospect. This would be relatively inexpensive and would be a method of determining useful variables for future longitudinal studies.

Several participants called for meaningful interdisciplinary research combining the approaches, skills and knowledge of individuals from several disciplines working together in mutual sharing, interactive and cooperative efforts. The difficulty of true interdisciplinary work was mentioned. Often what is labelled interdisciplinary research consists of working and publishing separately on their component of the project without any real interaction, sharing or learning from each other. To promote interdisciplinary work one participant recommended training programs in order that scholars from different disciplines can actively learn from each other. Longitudinal studies dealing with a wide range of variables, processes and theoretical formulations lend themselves to the inputs from and interactions among individuals representing various disciplines.

#### 4.1.2 Biological Factors

Several of the papers and much of the discussion dealt with a wide range of biological factors directly or indirectly implicated in criminal behavior. They are listed below.

- Genetics - criminality in mono- and dizygotic twins; criminality in adoptees of criminal biological parents; genetic influences on physiological correlates of crime such as autonomic nervous system reactivity and central

nervous system responsiveness; and animal experimentation showing the possibility of breeding for aggressiveness.

- Autonomic Nervous System Reactivity - electrodermal and cardiovascular anticipatory and recovery responses to intense and/or aversive stimuli as they differ between psychopathic and non-psychopathic prisoners and youngsters who do and do not eventually acquire criminal records; and the interaction between autonomic reactivity and social environment (social class, parental history of crime).
- Central Nervous System - limbic abnormalities and other brain lesions; epileptoid brain patterns as a sign of neural instability; the development and reciprocal interaction between neural systems underlying aggression and affection; the effects of early motion and touching experiences on development of aggressive and affectional neural systems; and stimulus seeking (need for stimulation).
- Biochemical - effects of gonadal hormones including the menstrual cycle; hypoglycemia and aggression; and severe aggression as an allergic reaction.
- Blood Pressure as an indicator of stress and adjustment among prisoners.

Specific suggestions made for research in the biological area by participants are shown in Table 4-1. These are derived from the transcripts of the proceedings (presentations, discussions and workshop recommendations) and the texts of the papers.

In addition to these research suggestions several areas of needed knowledge can be derived from the ideas in the presentations, papers and discussions. Table 4-1 also presents research suggestions relating to biological factors and criminality not directly stated, but strongly implied from the nature of the topics.

Some of the ideas presented in Table 4-1 are currently being addressed through research by several of the colloquium participants as well as other investigators. A viewpoint taken by several of the speakers who dealt with biological factors concerned the need to study the interaction and mutual modification of biological and social factors as they influence criminal and other deviant behavior. One speaker mentioned

TABLE 4-1  
DIRECT AND IMPLIED TOPICS OF RESEARCH RELATING TO BIOLOGICAL FACTORS  
FROM THE FIRST NILECJ-MITRE COLLOQUIUM

Direct Suggestions	Implied Suggestions
<ul style="list-style-type: none"><li>• Biochemical aspects of criminal behavior, especially as related to psychopathy</li><li>• Laterality (left-right hemispheric brain differences) and its relationship to crime in general and psychopathy in particular</li><li>• Positive and negative (affectional and aggressive) neural systems and their relationships to the individual's interactions with the environment</li><li>• Physiology of sex-related aggression</li><li>• Aggression as an allergic reaction</li><li>• Aggression as a reaction to hypoglycemia</li><li>• Physiological markers which may be related to future criminal behavior as a method of testing the effects of treatment on prisoners - physiological profiles of criminals</li><li>• Sensory deprivation during early development as it affects later behavior including crime and aggression</li><li>• Hormonal systems profiles as related to sex-related and other aggression</li><li>• Autonomic recovery rates to strong stimuli related to parental reports of difficulty of controlling the child</li><li>• Psychophysiological anomalies predisposing one to heroin addiction and a criminal life style</li><li>• Functions of warning signals in reducing differences in autonomic recovery rate to aversive stimuli between psychopathic and non-psychopathic inmates</li><li>• Deep brain spike discharges as indicators of outbursts of violent behavior - techniques for recording them from surface EEG recordings</li></ul>	<ul style="list-style-type: none"><li>• Parameters of autonomic and central nervous system functions which differentiate psychopathic and non-psychopathic criminals as well as serious criminals from non-criminals</li><li>• Stimulus conditions and contexts in which autonomic and central nervous system functions differ between psychopathic and non-psychopathic criminals and between criminals and non-criminals (types of stimuli, levels of stimuli, types of response, social conditions, etc.)</li><li>• Autonomic and central nervous system differences between offenders and non-offenders as related to differences in the learning process</li><li>• Relationships between autonomic and central nervous system functions in criminals and/or psychopaths and in non-criminals</li><li>• Personality, criminal history and developmental-learning history correlates of consistent autonomic and central nervous system differences, e.g., electrodermal recovery from strong stimuli, level of cortical arousal</li><li>• Structures and pathways which make up the reciprocal aggressive and affectional neural systems</li><li>• Conditions under which biochemical factors such as hypoglycemia, allergens, high levels of testosterone, the menstrual cycle and others result in criminality</li><li>• Factors which determine whether or not genetic influences such as parental criminality will lead to criminality - interaction between genetic and environmental determinants</li></ul>

that social and experiential factors affect biological systems as well as the other way. Undertaking research relating to the role of biological variables in crime would provide information which would lead to a greater understanding of the degree to which these factors influence crime, the limitations on their explanatory value and the segment of the criminal population (or types of criminal behavior) for which biological determinants are relevant.

#### 4.1.3 Developmental Factors

Another major theme throughout the colloquium was the importance of developmental factors in criminal behavior. These developmental factors and processes ranged from prenatal through early adulthood. The study of development is closely related to the need for longitudinal studies and can also include biological factors. The idea of development is also pertinent to a third major theme of the colloquium (discussed later), family structure and processes involved in intrafamily violence.

Some of the major points to emerge from the papers and presentations concerning the developmental aspects of criminal behavior all listed below.

- Later criminality is related to earlier criminality, behavior problems, general deviancy in early life and may be related to serious disruption, or lack of, affectional interaction (especially with respect to motion and touch) with parents during infancy and childhood.
- High school drop-out, unemployment, heavy drinking and polydrug use in late adolescence and early adulthood may contribute to crime (self-reported or official arrests) but do not seem to be as important as earlier delinquency (self-reported) or childhood deviancy. Data show that drop-out from school, heavy drinking, etc. show a stronger relationship to criminal behavior among those with earlier indicators of delinquency or deviancy.
- Level of drug use, patterns of drug use and drug use as part of a criminal life style appear to be related to many aspects of the developmental process including; characteristics of the grandparents; characteristics of parents; early feeding behavior; parental values; child-rearing practices; early difficulties with the child; and cultural factors. There may be crucial

developmental periods as well as transition points which determine paths or careers related to drug use and criminality.

- Touching and movement experiences in infancy and early childhood seem to influence attitudes and reported behavior with regard to sexuality, violence, alcohol and drug use, perceptions of others and may influence the development of neurological systems underlying aggression and affection.

Analysis of the written transcript of the proceedings (including reports from the workshops) and the tests of the papers produced several research ideas in the general area of development. They are presented in Table 4-2.

Many types of developmental studies need to be longitudinal and prospective, especially when outcomes such as delinquency or criminality cannot be observed at least until preadolescence or early adolescence. However, valuable data and clues to developmental processes may be obtained by means of retrospective studies, cross-sectional studies as well as observational or experimental studies of behavior of children or entire families. Before engaging in a costly and time-consuming longitudinal study of the developmental process it would be prudent to explore existing developmental data bases as well as the literature in order to select variables and methods which would be most promising.

Developmental studies of the origins of criminal behavior would generally need to be interdisciplinary in nature. Inputs from biology, medicine, economics, psychology, child development, sociology, anthropology and several specialty areas within each of these major disciplines all have a role in understanding development.

The major purposes of studies in this area would be to discover patterns and processes which lead with a high probability to later criminal behavior and to explore the natural variations and interactions among key variables which influence later criminality. In addition, the search for significant developmental periods or transitional points which affect criminality more than other periods would be important. Another goal of developmental studies may be to try to understand how economic and social forces and the immediate environment interacts with developmental experiences to produce criminal behavior.



TABLE 4-2  
RESEARCH SUGGESTIONS CONCERNING DEVELOPMENTAL PROCESSES  
FROM THE FIRST NILECJ-MITRE COLLOQUIUM

- Stages and epochs in individual lives and key transition points which are important for distinguishing paths or careers leading to specific patterns of drug use and delinquency.
- Longitudinal studies of children in families who live in high stress areas including the following types of data: hereditary data; parental data; family interaction (attachment, etc.); cognitive functions including attentional behavior; motoric data including hyperactivity; neurological information; impulsivity; self-image; and maturational changes in all measures used including biochemical, psychophysiological and electroencephalographic.
- Methods of childbirth as related to later behavior.
- Episodic versus chronic functioning; precipitators that induce episodic problems into chronic ones.
- Stages of moral development (Piaget, Kohlberg) and drug delinquency - suppression and/or maintenance of moral development at a low level as a result of drug use.
- Head Start and similar types of programs as related to later truancy and delinquency.
- Unemployment and marriage in later adolescence or early adulthood as influencing aggression and drug use - study causal direction of the influence.
- Stress as related to interference with mother-child bonding that comes from breast feeding.
- Nurturant functions within the family and the relationships of disruptions of these functions to violent behavior.
- Premature infants as a possible group subject to abuse and neglect.
- Family roles and family pathology related to the differentiation of patterns of delinquent behavior.
- Parental unemployment as a possible criminogenic factor for children; parental unemployment related to early interaction patterns with the child.
- Parental response to differences in discipline problems among different children in the family; characteristics of families with parents who are capable of alternative strategies of discipline and who understand how to cope with different types of children.

#### 4.1.4 Intrafamily Violence

A third major theme of the first colloquium centered on intrafamily violence. The paper by Perry, Harburg and Crowley<sup>66</sup> and the presentation by Perry outlined a relatively detailed research program for study of intrafamily violence. Table 4-3 presents most of the ideas outlined in their paper as well as those stated in the presentation and discussions.

The research ideas concerning intrafamily violence deal with this phenomenon from multiple perspectives. Among these perspectives are: the family as a conflict management system; effects of the social context (high and low stress neighborhoods); family structure; family composition; coping styles; coping devices; interaction of these factors with neighborhood stress and race; sex roles; economic factors; and interaction between parents and children. This topic area seems to be relevant and important especially in light of its frequency, often serious nature (including homicide), its role in weakening the family and effects on children.

#### 4.1.5 Other Research Ideas

Research suggestions from the participants not easily classified under one of the three major themes came mainly from the three workshops as well as from discussions after the paper presentations. In the workshops, participants were asked to discuss and come up with research ideas for the Institute. The ideas generated included methodological suggestions and both general and specific suggestions concerning substantive issues. Table 4-4 presents some of these suggestions.

During the colloquium there was direct and strong encouragement for longitudinal and interdisciplinary studies by both the Acting Administrator of LEAA and the Acting Director of the Institute. There was some discussion among the participants as to whether or not they could provide the NILECJ with priorities in addition to substantive ideas. Some felt they could not. Others felt that if they did not suggest priorities these would be

<sup>66</sup> Perry, L., Harburg, E. and Crowley, J., "Urban Families and Assault: A Framework for Research Focused on Black Families." in Otten, L. (ed.) Colloquium on the Correlates of Crime and the Determinants of Criminal Behavior, Invited Papers, The National Institute of Law Enforcement and Criminal Justice and The MITRE Corp., M78-82.

TABLE 4-3

RESEARCH SUGGESTIONS RELATING TO INTRAFAMILY ASSAULTIVE BEHAVIOR  
FROM THE FIRST NILECJ-MITRE COLLOQUIUM

General Ideas

- What are the forces which constrain as well as those that precipitate crime?
- What are the characteristics of black and white families in high and low stress neighborhoods who do and do not engage in a high level of assaultive behavior?
- What are the rates of assaultive behavior of black and white families at the same level of neighborhood stress?
- How does stress of the neighborhood affect blood pressure, weight, stress-related disease, mental health, drug abuse and delinquency in black and white families?
- What are alternative responses to stressors in family situations as related to assaultive behavior?

Family Conflict Management

- What are the issues, varieties and levels of conflicts which facilitate or constrain assaultive behaviors?
- What type of family affective processes increase or decrease conflict?
- Are there differences between families in high and low stress neighborhoods or between black and white families in styles of conflict management?
- Does the greater suppression and accumulation of hostility lead to more serious assaultive behavior when the hostility is finally expressed?
- Are expressions of conflict which are directed toward problem-solving more likely to constrain violence than expressions of conflict directed toward domination or punishment?
- How do a variety of stressors interfere with nurturant and affectional aspects of family functioning (a major source of functional control of violence)?

TABLE 4-3

(cont)

Family Composition

- Is the presence or absence of assaultive patterns associated with various types of family structure? Is this relationship different within high and low stress neighborhoods?
- What processes constrain or facilitate assaultive behavior in various family structures? Are these processes different in families in low and high stress neighborhoods?
- What is the effect of the presence or absence of certain family members, e.g., grandmother, on constraining assaultive behavior?

Economic and Sex Roles in the Family

- Is assaultive behavior more likely to occur in families where the female has more stable income than her spouse than in families where the male is the primary provider? Is assaultive behavior less frequent in those families where economic resources are shared by the partners?
- Is assaultive behavior more likely to occur in families with fewer total resources that yield power than in families with more of these resources?
- Is assaultive behavior more frequent in families in which economic resources are low and unstable and mates perceive low friendship, love and respect for each other?
- Is assaultive behavior of males towards females more likely where degradation of the female accompanies male economic instability?
- Can the difference in rates of intrafamily assault between high and low stress areas and black and white families be largely accounted for by differences in rates of economic stability?
- How do various coping mechanisms mitigate the effects of financial instability with regard to violent behavior?
- What is the relationship of assaultive behavior in the family to the family life-career cycle?
- How does the quality of the sexual relationship contribute to assaultive behavior?

TABLE 4-3

(cont)

Child Rearing Practices

- Are disagreements between adults over raising children a precipitating factor in assaultive incidents?
- Is parental disagreement over child rearing more intense in low stress neighborhoods and among white families than in high stress neighborhoods and among black families, and thus more likely as a basis in low stress neighborhoods and among white families?
- Is there generational transmission of the use of physical force as a resolution of conflict--those whose own parents were assaultive or who themselves were assaulted?
- What are the processes involved where violence is not present in families despite the person's exposure to a high degree of violence in their family of origin? Conversely, what are the processes involved where violence occurs despite little or no violence in the family of origin?
- What is the relationship between the approval and use of physical punishment and the occurrence of child abuse?
- How are victims of child abuse "selected"?
- What is the role of children in assaultive acts between parents?

Coping Processes

- Are coping styles of black women, e.g., compartmentalization, related to assaults by their mates?
- What are the variations in coping styles between families and individuals in high and low stress neighborhoods?
- How do the interactions among coping styles of various family members relate to the occurrence of assaultive behavior?
- What is the role of values with regard to coping and violence?
- Is there a higher incidence of assaultive behavior in families in which open expression of anger and hostility directed to other family members is sanctioned than in families where this does not take place?
- Are individuals whose coping styles reflect denial or avoidance of feelings of anger more likely to be victims of assaultive behavior?

TABLE 4-3

(conc)

- Is the likelihood of assaultive behavior lower in families which have developed more effective methods of coping with general environmental stress?
- What is the relationship between the rate of intrafamily assault and the types of neighborhood support systems available?

Coping Devices

- What is the role of coping devices (external artifacts or social structures) as they relate to stress and assaultive behavior? Some of these devices may be shared play-time, family get-togethers, TV watching and church attendance.
- How is alcohol used as a coping device? Little is known about the possible inhibiting effects of alcohol on violence--as a constraint on violent confrontations.
- What is the role of weapons, social activities, smoking, humor, etc. in reducing or facilitating interpersonal conflict and resulting violence, especially in high stress neighborhoods?

TABLE 4-4

OTHER RESEARCH SUGGESTIONS FROM PARTICIPANTS  
IN THE FIRST NILECJ-MITRE COLLOQUIUM

- Study prevention of crime as a very high priority for research.
- Conduct research into secondary prevention since we probably don't know enough to make recommendations for primary prevention. (The statement from this participant implies that more "basic" research is needed to discover information to deal with primary prevention).
- Collect baseline data showing the distribution of certain characteristics and problems in order to make intelligent research decisions, e.g., use of epidemiological methods.
- Obtain knowledge of statistical interaction of various factors in accounting for variance in children's behavior problems, delinquency and adult crime--need to go beyond correlations and contributions of individual variables.
- Continue victimization studies by LEAA--develop estimates of risk of victimization.
- Develop priorities for research based on victimization data (prevalence and/or degree of citizen concern) as well as self-reported crime.
- Investigate why some victims of crime do not report and do not utilize what is available to them.
- Combine research on delinquency with that on learning deficiencies.
- Investigate white collar crime in more detail.
- Explore lives of identical twins one of whom is a serious recidivist criminal and the other not in order to detect environmental effects.
- Study the effects of neighborhoods on families--factors involved in stable neighborhoods.
- Study those community factors which sanction the value system of violence.
- Determine how opportunities to engage in violence are offered by presence of guns; density of gun ownership as related to frequency and types of violence.

TABLE 4-4

(conc)

- Pursue research on the effects of environmental controls or environmental structuring on crime opportunities; opportunities for theft and other kinds of criminal expression that are built into our environment; crime control programs which can be derived from examination of these environments.
- Develop a taxonomy of crime types--important to deal with groups similar in types of crimes when doing etiological studies.
- Investigate how different classifications of criminals spend their time.
- Examine the experience of fun as related to psychopathy, drug use and crime--why are activities that are fun for psychopaths and drug users not fun for others?
- Study the range of perceived options of those who commit crimes; examine the immediate quality of experience and volition in the developmental sequences leading to drug use and/or delinquent choices.
- Delineate what immunizes some youngsters from criminal careers given possible inheritable tendencies and learning from parent role models.

determined nevertheless but without the input and direction from the scientific community. In addition to the major themes of biological factors, developmental processes and patterns, intra-family assault, longitudinal and interdisciplinary studies, another "minor" theme was detected in several of the suggestions. This theme deals not with the question of why individuals engage in criminal behavior, but why they do not, especially people in certain circumstances (high stress neighborhoods) and with certain characteristics (parental criminality, slow autonomic recovery to intense stimuli, etc.). Why do rewards and gratifications for criminals not serve as such for most non-criminals? The study of why people do not engage in criminal activities is not merely the obverse of studying those who do but a valuable approach which may provide insights that are rare in most current kinds of criminological research.

#### 4.2 Second Colloquium: Stress and Crime

The second NILECJ-MITRE colloquium held on December 4-5, 1978 was organized around the topic of stress and crime. The format was similar to that of the first colloquium, with 10 presentations and discussion after 2-3 presentations. Unlike the first colloquium there were no separate workshops. The second 1/2 day of the 1-1/2 day meeting was devoted to general discussion among all participants. The topics and presenters are listed below.

- Social stress and sociopathy - Marvin Opler
- Stress, adaptation and coping - Morton Lieberman
- Life events and criminal behavior - John Petrich
- Stress and husband-wife assault in a sample of American families - Murray Straus
- Influence of economic stress on criminal aggression - M. Harvey Brenner
- Organic determinants of stress and violent behavior - John Lion
- Stress among prison inmates - Hans Toch
- Race, stress and family violence - Robert Staples
- Biochemistry of stress reactions in crime - Leonard Hippchen
- Crowding, stress and crime - Jonathan Freedman

Three discussants, Thomas Lalley of the Center for the Study of Crime and Delinquency of the National Institute of Mental Health, James Thompson of the Vera Institute and Lynn Curtis of the Department of Housing and Urban Development as well as the co-chairmen, Leslie Wilkins and Albert Reiss also contributed ideas for research.

Among the ways stress was defined or implied by the various speakers were:

- weighted number and magnitude of selected life events;
- disruption of role relationships and disruptive effects of events on day-to-day life;
- subjective demands on the person exceeding response capabilities; and
- exposure to negative social stimuli leading to internal tension.

The concept of stress was sometimes used as an intervening construct to integrate or explain other variables and also as the result of some events, states or conditions. Some presentations used stress as a key concept while for others stress was somewhat peripheral; that is, the variables, methods and findings could have stood alone without the necessity for using the stress concept.

#### 4.2.1 Differential Responses to Stress

A research theme sounded by several of the participants involved investigating differential responses to stress including criminal behavior. Stress was considered to be a stimulus to several kinds of adaptations or coping strategies including depression, criminality, violent criminality, alcoholism, suicide and socially positive adaptations. Responses to stress vary in content, with time (individuals do not use the same adaptations to stress at all times), by different types of stressors and as a function of individual and group characteristics. Research ideas and questions relevant to differential responses to stress follow.

- What are the coping strategies used by people who become criminals?
- How do subcultures influence the development of coping strategies?
- What kind of stressors are predictive of a criminal response?
- What kinds of populations, under what kinds of circumstances will respond with one kind of reaction pattern as against another (crime, cardiovascular disease, suicide, etc.)?

- What are the conditions under which stress leads to physical violence, the conditions under which it leads to hypertension, conditions under which it leads to depression?
- Can empirically based stress theory predict which individuals would react in different ways to intervention such as an employment program?
- What are the intervening factors, both on a macroscopic as well as on an individual level, that influence different types of response to stress?
- What are the effects of different states, nations and ethnic groups as well as age, sex, race and socioeconomic status on types of responses to stress brought about by degradation of economic status?
- Is there stability of individual coping strategies over time?

#### 4.2.2 Sociocultural and Ethnic Factors

Several research suggestions by Professors Marvin Opler and Robert Staples dealt with sociocultural and ethnic (minority) factors relating to stress and crime. Questions for research stated by them follow:

- What are the social and cultural influences on the development of sociopathic personalities, especially the more violent type?
- What are the contrasts between high and low crime-rate cultures?
- What are the social and cultural as well as historical factors which make New York City a dangerous crime area in contrast to another very large urban area such as Tokyo?
- What are the conditions under which various subcultural and ethnic groups function with regard to their needs for help in coping?
- What factors control violence among some blacks and encourage it among others when all are exposed to stresses related to status devaluation as a group?

- How do support systems affect the incidence of family violence among lower income blacks? Some of the factors to be explored include the role of the extended family, urban versus rural location and the consequences of primary over secondary relationships?
- What are the effects of social class on family violence among blacks? Does access to certain social values and resources tend to mitigate the need for violence as a form of conflict resolution?
- How are sex roles defined in the black community? Does the independent role ascribed to women lend itself to provoking assault by husbands?
- How is the parent-child relationship defined? Does the need to exercise parental authority encourage the use of excessive violence toward children?
- Does family violence increase as the rate of unemployment increases?
- What is the relationship, if any, between the types and status of occupations of family members and the incidence of family violence?

Professor Staples also expressed the need to obtain information on two types of family violence not always considered, husband abuse and violence by children against parents. The similarities in theoretical orientation and suggestions for research between the papers of Dr. Staples and Drs. Perry, Harburg and Crowley (presented in the first colloquium) should be noted. Both papers call for systematic research into the black family, its position in the social context (including socioeconomic class, social and physical surroundings), processes and mechanisms regarding conflict resolution, unique features, composition and structure, role of women and children, etc.

Other research suggestions concerning minorities included the possible effects of multiple minority statuses, e.g., black women, on stress and crime and the exploration of changes with respect to crime and violence on the part of women.

#### 4.2.3 Biological Factors

Two papers, by Professors Lion and Hippchen, focused on biological approaches to looking at the effects of stress on criminal behavior and other forms of pathology. Research ideas included



thorough literature searches of biochemical factors in delinquency, crime and other pathology and of the genetic basis of anti-social behavior. A LEAA sponsored, university-based, demonstration clinic for biological treatment studies and a national center for criminological research to explore the biochemical and related bases of crime, especially violence, were also suggested. Other suggestions revolved around biochemical factors, alcohol and crime and sex offenders. Research questions in these areas are listed in Table 4-5.

#### 4.2.4 Environmental Factors

Another topic area discussed at the colloquium concerned environmental factors related to crime. This topic was the focus of suggestions by Professor Freedman, but other participants also contributed. Here environmental factors were the immediate physical, psychological and social environment associated with places (buildings, streets, other public places, neighborhoods, etc.). The suggestions for research are listed in Table 4-6.

The psychological, social and physical context in which most people live and within which crime occurs has only recently been the subject of systematic research, especially with regard to building design. It appears that this approach would lend itself to being integrated with more individually-oriented and larger sociocultural approaches to stress and criminal behavior.

#### 4.2.5 Applied Research

Another class of research ideas brought up by several of the colloquium participants concerned applied research. Ideas were directed mainly toward research on change, treatment and amelioration of problems. Table 4-7 lists some of the applied research ideas.

#### 4.2.6 Stress in Prisons

Professor Hans Toch in his paper on a transactional approach to studying stress in prisons provides a large number of research ideas. They are listed in Table 4-8.

#### 4.2.7 Methodological Issues

In reviewing the transcript of the proceedings another major theme which seemed to emerge from the interaction among the participants was that of methodology. Among the topics discussed were: general approaches; levels of analysis; interpretation of causal direction; studying individuals and groups

TABLE 4-5

### BIOLOGICALLY ORIENTED RESEARCH SUGGESTIONS FROM THE SECOND NILECJ-MITRE COLLOQUIUM

#### Biochemical Factors

- How do internal stress factors that stem from food allergies, food toxicities, nutritional deficiencies, hormonal imbalances and environmental pollutants interfere with human development and lead to criminal and other forms of deviant behavior?
- How are allergies to foods and chemicals related to explosive forms of behavior?
- What are the biochemical factors involved in hyperactivity in children and violent behavior in youth and adults? What are the factors which interact with biochemical processes?
- What is the influence of vitamin B-3, B-6 and C deficiencies; copper, calcium, magnesium, manganese and zinc deficiencies; heavy metals in the environment such as lead, mercury and cadmium; and radiation from TV and fluorescent lighting on violence and behavior disorders?
- What is the relationships of levels of neuroregulators such as serotonin and tryptophan to behavior disorders and violence?
- What are the metabolic processes which are related to the regulation of blood glucose levels as they affect both hypo- and hyperglycemic reactions?

#### Alcohol and Crime

- How does alcohol lead to or play a role in crime and aggressive behavior and why is alcohol so ubiquitously implicated in crime?
- Is there such a thing as a latent criminal who is activated by alcohol?
- What is the relationship of alcoholic rage and brain dysfunction?
- Can alcohol and non-alcohol related crime be distinguished?
- Is disinhibition sufficient to explain alcohol's role in crime?
- Why are other drugs such as marijuana, which are also disinhibitory agents, not so highly linked with crime?

TABLE 4-5

(concl)

- What are the precise psychophysiological mechanisms which link alcohol and violence?
- What are the biochemical bases of addiction to alcohol and drugs such as cereberal allergens (refined sugar) and nutritional deficiencies, especially vitamins B-3, B-1 and C?

Sex Offenders

- What are the internal stress factors such as hormonal imbalance or nutritional deficiencies, which may be genetic and/or related to early childhood feeding practices, implicated in sex offenses?
- What are the endocrinological parameters of the sexually aggressive patient?
- What are the effects of progrestational compounds on compulsive sex offenders?

TABLE 4-6

RESEARCH SUGGESTIONS RELATING TO ENVIRONMENTAL FACTORS  
FROM THE SECOND NILECJ-MITRE COLLOQUIUM

- Situational factors which are likely to encourage or discourage criminal behavior
- Relationship between housing type and crime rate within the building as well as the crime rate and location of crime committed by residents
- Detailed analysis of where on streets, in schools and houses and in other kinds of environments crimes occur
- Influence of street design, overall design of cities and how housing design relates to the city and the streets
- Analysis of neighborhoods and families living under high and low density conditions with regard to the interactive effects of closeness of relationships and density to crime
- Responses to different levels of density as a function of individual characteristics such as life stage of the individual, family situation, sex, etc.
- Transportation factors as related to crime
- Neighborhood organizations, mood of the neighborhood and how the neighborhood is organized, as related to crime
- Mugging, armed robbery, rape, vandalism and shoplifting should be foci for research since they probably affect day-to-day living and attitude toward the environment more than other crimes in the city

TABLE 4-7

APPLIED RESEARCH SUGGESTIONS FROM THE SECOND  
NILECJ-MITRE COLLOQUIUM

- Reconstruction of marriages on a non-violent basis in cases of battered wives--how can the husband-wife relationship be altered?
- Intervention techniques with sociopathic personalities in a prison population
- Development of skills to help individuals cope with stress in a socialized and constructive manner
- Development of training models which could be used with delinquents, criminals and families to teach coping skills
- Amenability of coping strategies to intentional change efforts
- Use of the medical concept of triage in criminal justice--who is amenable to treatment and who is not?
- Evaluation of techniques of dealing with symptoms as well as research involved in looking at causal variables in crime

TABLE 4-8

RESEARCH SUGGESTIONS RELATED TO STRESS IN PRISONS FROM  
THE SECOND NILECJ-MITRE COLLOQUIUM

- Are there subenvironments within prisons which by design or a spontaneous basis act as stress-reducing enclaves?
- What is the contribution of prison architecture to stress, adaption, etc.?
- Can differential susceptibilities to stress of inmates be assessed using interviews, physiological indicators and personal history?
- What are the effects of experimental stress-reducing programs?
- Can stress be prevented and can inmates likely to be stressed be selected by prison staff?
- Can constructive anxiety among inmates be generated to promote learning and rehabilitation in various types of programs such as furloughs, halfway houses and parole programs?
- In a shared stress situation such as a riot what are the behaviors generated by stress and what are the correlates of differences in stress-induced behavior?
- Are there variations in prison environments which are correlated with differential stress-inducing properties among equivalent inmates?
- What is the relationship of stress patterns to stages in inmate careers, stages of prison adjustment and stages of prisonization?
- What are the coping strategies used by inmates who experience less stress in comparable situations?
- What is the relationship of an inmate's past history of being stressed or of succumbing to stressors to susceptibility to stress in prison? Are there inside-outside continuities and discontinuities?
- Can typologies of stressors, inmate vulnerabilities, stress-perceptions and stress reactions be developed using demographic, physiological, phenomenological and situational data?

in naturalistic settings and types of research designs. There were differences in emphasis among the participants concerning general approaches to studying crime and stress. Some emphasized the longitudinal cohort approach, others clinical-naturalistic studies of individuals, prisons, communities and cultures while one participant called for descriptive studies of environmental factors which encourage or discourage crime. The expression of these differences prompted some to call for using several methodological approaches to the same problem. There was insistence by some that the cohort longitudinal design was necessary to unravel cause and effect relationships and to allow the meaningful use of statistical models and tests.

The longitudinal design and the longitudinal cohort design were discussed. Among the comments concerning longitudinal and similar designs were those stated below.

- Longitudinal studies permit the development of causal models.
- Longitudinal studies are needed to determine the causal direction of the relationship between early experience of violence and assault by husbands against wives.
- In order to determine the causal direction of the relationship between stress and crime (does stress lead to crime as one reaction or does criminal behavior produce stress?) more highly refined longitudinal studies are needed.
- Given a set of general predictors for criminal behavior in a particular cohort group, adding types of stressors to which this group may be exposed may also allow prediction of the time when this behavior will occur.
- When using a longitudinal cohort, the social context (region, state, city, country) should be taken into consideration. One should simultaneously employ macro-level indicators of a region, state, etc. such as employment, mortality, crime and at the same time relate these indicators to what is happening to the cohort. Existing data bases such as the census can be used to provide macro level indicators for geographic areas and/or population subgroups of which the cohort is part.

Other comments included the need for alternative approaches such as clinical case studies and naturalistic studies of groups, institutions (prisons) and communities.

Another methodological area discussed during the colloquium was the level-of-analysis question. The major concerns here involved level of data aggregation which in turn involves the type of units sampled, types of data obtained as well as interpretation. The large differences in magnitude often found between correlations based on highly aggregated data (such as the relationships, over time, between unemployment rates and rates of many types of social ills) and the correlations between similar variables based on individuals as the unit of analysis, are a prominent concern in dealing with units of analysis and levels of aggregation. Some of the ideas stemming from the discussions follow:

- Study the relationships between highly aggregated data and its explanatory value and how this relates to disaggregated (individual level) data;
- Combine epidemiological and macroscopic approaches with more clinical approaches in studying responses of people to prison environments;
- The variables and classes of variables that may be causal factors are different at different levels of analysis, e.g., those variables which may be explanatory at the level of cities may be different than those operative using the individual as the unit of analysis; and
- In order to understand why there are clusters of behaviors which occur together such as stress, crime and other pathology, cross-national, cross-ethnic and cross-state types of comparisons are necessary.

The presentation by Professor Brenner concentrated on a multitude of studies showing the correlations of unemployment trends and trends of various social pathologies including rates of homicide, rates of imprisonment and arrest for various crimes, rates of suicide, rates of cardiovascular death, infant mortality, etc. for various countries, states and subpopulations. The relationships were very consistent. Measures of pathology used (including measures of crime such as arrests, imprisonment and offenses known to police) moved up and down (sometimes with a time lag) with unemployment rates over long periods of time and within all geographic divisions. Here Professor Brenner

used a longitudinal method (not a cohort), involving large and different geographic units of analysis and highly aggregated trend data on employment and pathology. In this matter he believed he found a plausible explanation of both the instigator and the consequences of stress. He believes that stress from the economic situation, e.g., unemployment, leads to various psychological and social stress which makes coping more difficult and leads to the increases in various indicators of pathology.

Although the consistency of the data over time, space and for different types of pathology is impressive, nevertheless the data are highly aggregated. The statistical relationships of these economic factors (and its consequent stresses) to criminal or other responses on the individual level are not determined by these data. Since the aggregated data produced extremely high correlations between trends in economic factors such as unemployment and trends in crime rates, imprisonment rates and rates of other pathologies, Brenner was able to estimate, by means of regression equations, the changes in social and fiscal costs which would be produced by changes in unemployment.

Most colloquium participants who addressed the level of analysis question believed that both macro and micro level approaches were needed, and that one should not be used to the exclusion of the other.

Many methodological suggestions were made during the meeting in addition to those concerning longitudinal designs and level of analysis. Some of these suggestions follow.

- Study schools, prisons and other institutional settings as "natural" laboratories.
- Study prisoners in vivo to discover why some are violent in prison but not on the outside and vice versa.
- Study actual lives of people in real social and cultural contexts, not simple, one factor types of research.
- Construction of robust models of reality cannot depend on studies which control for all factors except one since the ones we control may be more influential in explaining the phenomenon under consideration than the variable under study and the use of controls may heighten the effects of the variable being studied.

- Study analogues of stress related to crime in a variety of situations dealing with non-criminal populations and in situations such as schools and neighborhoods.
- Use a clinical case study approach using individual baseline methodology in the biochemical area because of the number of variables involved and the nature of the variables.
- Use of controlled experimental situations should not be totally discarded, e.g., use of a person-computer simulation game to study situations leading to violence in the family. If there are enough responses in the game it offers the possibility of finding out about the kinds of stresses that lead to one type of response versus another, as well as the kinds of circumstances, resources and available alternatives and how this leads to different types of responses, e.g., violence, depression.
- Move away from the idea of statistical significance to ideas based on decision-theory.
- Take advantage of natural experiments (quasi-experiments), e.g., a factory closing down and putting 500 people out of work. What happens to these people with regard to stress, crime and other problems?

It can be seen from the above list as well as from the previous suggestions that a wide variety of methods and approaches have been mentioned and that these various approaches may all have a place in investigating relationships of stress and crime, or the study of crime in general.

The expense, time and difficulty involved in collecting data on large samples or collecting sensitive individual history data prompted several individuals at the colloquium to strongly advise using existing data bases and other existing information sources when appropriate. One person suggested re-utilization of previous research data (secondary analysis), another the extensive use of publicly available data from the census, public opinion surveys and other public sources which may also include life-history information. Still another suggestion was to look at cross-cultural situations where there are "made-to-order" treatments of social problems which can be strategic opportunities to make comparisons. The National Victimization Survey conducted by LEAA and the Bureau of the Census was another source mentioned.

Specifically the suggestion was to utilize these data to investigate victimization experiences of people who have moved, who have changed environments, housing type, etc.

Some of the discussion during the second half day session concerned the ethics, politics and other problems of using human subjects in general and prisoners specifically. This was especially relevant in performing research on stress which may involve negative stimuli, intrusive and invasive procedures. There was some conflict among the participants about using prisoners and allowing them to volunteer for research, especially with respect to whether or not prisoners are really free to make such choices. The "rule" of not conducting any human research which may leave the individual "worse off" than before was mentioned by several speakers. Complete agreement was not forthcoming among the participants. A few of the suggestions concerning the use of human subjects follow.

- Allow prisoners to volunteer for invasive and intrusive studies.
- Allow prisoners to participate in research outside the prison as a condition of parole.--In studying violence the base rate of violence in the prison is too low to study the effects of drug therapy.
- Create institutional procedures to deal with human subjects issues.
- Establish a formal organization to provide leadership for and to deal with the bioethics of criminological research.
- Aid in overcoming current procedural barriers for researchers if LEAA wants work done on prisoners.
- Conduct research on assessing risks of participation in studies, e.g. to what extent does interviewing people about stress serve as a therapeutic process?
- Use animals for stress-inducing studies and humans for stress-reducing studies.

#### 4.2.8 Other Research Suggestions

Suggestions from the discussions and the papers that do not fit into the categories used in Sections 4.2.1 - 4.2.6 are presented here. Some of these suggestions are listed below.

- Examine assumptions that crime denotes stress or volunteering for medical attention denotes stress. This is related to the methodological problem of self-selection of individuals who come to the attention of the criminal justice system (many individuals who commit crimes do not) or who come to a clinic for treatment.
- Investigate the contribution of non-stress, and avoidance of stress to crime--this may be more important in understanding criminal behavior than stress.
- Study victims of crime and the stress on victims including the stresses that come from the way the criminal justice system treats the victim.
- Investigate how coping behavior is learned and under what conditions.--What is the socialization process with regard to coping?
- Study the group of people who have few meaningful community supports, relatively poor internal (psychological) resources and a reluctance to seek help for problems as a potential criminogenic group.
- Explore the role of immediate social support systems as a mechanism for coping.--What is the relationship of support systems to criminal behavior?

Research is probably needed to shed light on a controversy among several participants in terms of the meaning and measurement of stressful events. Professor Lieberman's method is in disagreement with that of Dr. Petrich and the method used to measure stress in Professor Straus' paper. The latter two used the Holmes and Rahe method of the total number multiplied by scaled magnitude of life events as a quantitative definition of stress while Lieberman considers life events stressful and having mental health consequences only if they disrupt day-to-day activities and important role relationships. Counting weighted number of events without a measure of their effects on role relationships and daily activities is not a meaningful way of



assessing stress according to Professor Lieberman. Research combining these two approaches may be helpful in improving the measurement and conceptualization of stress on the individual and group levels.

In the study presented by Professor Murray Straus he related the rates of husband-wife serious assaults to levels of stress measured by a modification of the Holmes-Rahe method. In addition he explored variables such as demographic characteristics of the husband, experience of the husband with violence in his family of orientation, husbands' values regarding marriage, etc., looking for possible factors which interact with stress in producing differential rates of assault. His approach suggests that research may need to go beyond measuring stress and relating it to crime and other forms of behavior to investigating those factors which may condition the response to stress. This approach may be of importance for a more complete understanding of how and under what conditions stress leads to criminal behavior.

#### 4.2.9 Conclusion

The second NILECJ-MITRE colloquium produced many and varied ideas with regard to future research as well as serious concern with methodology. The topics and research suggestions reinforced some of those put forth during the first colloquium. Different methodological approaches were advanced and different processes and variables were considered important in understanding stress, crime and their relationships, all of which would probably deserve some place in a research agenda unconstrained by resource availability. In speaking to these differences, Professor Harvey Brenner stated what may be considered a fitting overview of the entire colloquium:

...to the extent that there is truth value in the biochemical approach, in the genetic approach, in the organic approach, in the family socialization approach, in the social-environmental approach--to the extent there is truth represented in any formulation--it is logically impossible that they actually compete with one another. Since there is truth in all these, what we require is a kind of analysis of variance design which allows us to take into account all these things.

#### 5. SURVEY OF CRIMINAL JUSTICE RESEARCHERS

The research suggestions from the first questionnaire varied greatly in terms of content, specificity, clarity, rationale, etc. Some respondents made only one or two suggestions; others wrote suggestions to all the general topic areas included (psychological, sociological, biological, developmental, economic, demographic and political-legal). The suggestions ranged from specific hypotheses through general approaches to research ideas embedded in polemical statements. The research suggestions ranged from the extremely broad to the specific and well-thought out. A few respondents even mentioned areas (defined by the seven topics on the questionnaire) which should be excluded subjects of further research.

The questionnaire asked the respondents to state reasons for their research suggestions. The reasons, like the suggestions themselves, were highly varied. Many of the reasons for the research suggestions were applied or practical in nature, that is, the research would lead to policy or programs or improvements in same. Many respondents gave as their rationale the fact that something was known or believed and that empirical research was needed to confirm the general belief. On the other hand a few respondents thought that their suggested research should be carried out in order to disconfirm certain beliefs. Another category of reasons given by many respondents was to follow-up on previous research findings or to explicate other findings. Social policy, social justice and changing what was believed by the respondent to be incorrect emphasis or direction of criminal justice activities were also used to justify the suggested research. A small number of individuals said that the reason for their suggestions was that not enough is known or not much has been done, with no further rationale.

The 48 categories derived from the research suggestions on the first questionnaire varied widely in content as well as in level of abstraction. Although the respondents mainly represented the academic community generally identified with psychology and sociology, the range of ideas spanned many disciplines, theoretical approaches and methodologies. Practically all of the individual ideas gleaned from the first questionnaire can be subsumed in a direct manner into the categories which are listed in Table 5-1. Some of the categories were based on many research suggestions by several respondents while others represent only one or two suggestions and one respondent. However, even those few categories based on a small number of suggestions and only one or two respondents formed what the coders believed was a logical coherent way of organizing and separating ideas.

TABLE 5-1

RESEARCH TOPICS BASED ON THE CLASSIFICATION  
OF RESPONSES TO THE FIRST QUESTIONNAIRE

CODE NUMBER	TOPIC	CODE NUMBER	TOPIC
01	DEFINITION OF CRIME	27	RACE, MINORITY GROUP STATUS AND CRIME
02	CROSS-CULTURAL AND CROSS- NATIONAL FACTORS	28	RELATIONSHIP OF PERSONALITY TO CRIMINALITY--GENERAL
03	IMMIGRATION AND CRIME	29	SELF-ESTEEM, EGO DEVELOP- MENT AND CRIME
04	POLITICAL INFLUENCES ON CRIME	30	TRANSITIONAL DEVELOPMENTAL PERIODS AND CRIME
05	INFORMATION PROCESSING AND DECISION-MAKING BY CRIMINAL JUSTICE SYSTEM PERSONNEL	31	CHILDHOOD DYSFUNCTIONS AND CRIME
06	EFFECTS OF DECRIMINALIZATION	32	FAMILY DYSFUNCTIONS AND CRIME
07	DETERRENCE AND SANCTIONING	33	FAMILY STRUCTURE AND PRO- CESSES AND CRIME
08	DEMOGRAPHIC PROJECTIONS AND CRIME FORECASTING	34	PARENT-CHILD INTERACTION (DISCIPLINE, CHILD-REARING PRACTICES, ETC.)
09	CRIME DISPLACEMENT AND REGIONAL DISTRIBUTION OF CRIME	35	LEARNING, REINFORCEMENT AND CRIME
10	NEIGHBORHOOD CHARACTERISTICS, COMMUNITY FACTORS AND CRIME	36	LEARNING OF MORALS AND VALUES
11	OPPORTUNITIES AND CRIME	37	SUBCULTURE OF VIOLENCE
12	VICTIMIZATION	38	UNEMPLOYMENT, EMPLOYMENT OPPORTUNITIES AND CRIME
13	COSTS OF CRIME	39	ECONOMIC INEQUITY AND CRIME
14	SOCIAL CONTROL--WHAT INHIBITS CRIME?	40	ECONOMIC MODELS AND CRIME
15	PERSPECTIVE OF THE OFFENDER	41	SCHOOL, EDUCATION AND CRIME
16	CITIZEN PERCEPTIONS RE: CRIME, CRIMINALS, SANCTIONS, ETC.	42	STRESS AND CRIME
17	CHILD ABUSE	43	AUTONOMIC NERVOUS SYSTEM AND CRIME
18	VIOLENCE WITHIN THE FAMILY (OTHER THAN CHILD ABUSE)	44	CENTRAL NERVOUS SYSTEM AND CRIME
19	DRUG USE AND CRIME	45	GENETIC FACTORS AND CRIME
20	WHITE COLLAR AND CORPORATE CRIME	46	NUTRITIONAL AND BIOCHEMICAL FACTORS AND CRIME
21	CORRUPTION	47	SELF-REPORT METHODOLOGY
22	FEMALE CRIME	48	ALTERNATIVE CRITERION VARI- ABLES IN CRIMINAL JUSTICE
23	PSYCHOPATHIC OFFENDER		
24	CLASSIFICATION AND TYPOLOGIES OF OFFENDERS		
25	PREDICTION OF INDIVIDUAL CRIMINALITY		
26	AGE AND CRIME		

Some of the categories represent large-scale processes (cross-cultural and cross-national factors, deterrence and sanctioning, social control, learning and reinforcement, opportunities and crime), others represent somewhat more specific sets of variables (neighborhood characteristics, age, childhood dysfunctions, school, autonomic nervous system, stress) which may be considered correlates of crime, and others specific types of criminal behavior (child abuse, female crime, white collar and corporate crime). Some of the research categories concerned various aspects of crime and the criminal justice system which are not correlates or determinants of crime in a direct sense (victimization, information processing and decisionmaking, citizen perceptions, costs of crime). Most of the "traditional" concepts which have been used in seeking out the correlates and determinants of crime are represented, e.g., economic factors, opportunities, personality, family, biological, school, development processes, learning, age, race, etc. Several categories dealing with methodological approaches are also listed (classification of offenders, demographic projections, self-report methodology, alternative criterion variables). It appears as if the broad scope of the ideas obtained from the first questionnaire enabled the creation of categories which represented many types, approaches and levels of potential research which can be related to a wide variety of interests.

The second questionnaire asked the respondents to look at the 48 research topics (categories) derived from responses to the first questionnaire, select and rank order the 10 which they believed deserved highest priority for federal support. In addition to the 48 research topics several examples, taken directly or paraphrased from responses to the first questionnaire, were listed for each of the topics. The examples were those agreed upon by the three coders as representing that topic. Both specific and general examples were employed. For some of the research topics the examples included all ideas on which the topic was based while for others the examples presented were only a sample of those used to define that topic. Appendix B lists the 48 research topics and the examples for each as presented in the second questionnaire. The examples are important not only to aid in defining the research category, but as specific research topics in and of themselves.

In addition to rank ordering 10 of the 48 research topics the respondents believed deserved highest priority for research support, they were also asked to briefly state the reason for each choice. Several respondents organized their ranking and reasons in a hierarchical manner. That is, several research topics were subsumed under others and the rationale for some of

**CONTINUED**

**1 OF 2**

the lower ranked topics was to provide information about, or as necessary to study the higher ranked topics. Others used the same reason for several of their choices.

Forty of the 44 respondents listed 10 research topics in rank order, one listed only 8 topics while the remaining three listed more than 10. When 2 or more research topics were placed at the same rank all were given that rank order. The "extra" endorsements occurred for 10 different research topics and to a slight extent increased that topic's popularity (number of respondents selecting the topic among their choices) and its weighted popularity (number of respondents endorsing the topic at each rank multiplied by the weighted rank, rank 1 = 10, rank 10 = 1). The reasons given for including more than one research topic for a particular rank was that they were really the same topic or aspects of the same topic.

Table 5-2 presents the results of the ranking task for the 48 research topic categories. The topics are presented in order of the number of respondents who selected the topic for any one of their choices. In addition to the number and percent of respondents choosing the topic the position in the rank ordering (1-10) is also taken into account by assigning a "weight" to each rank, from 10 for a rank of 1 to 1 for a rank of 10. The number of respondents selecting a topic at each rank multiplied by the weight of the rank and summed over all ranks constituted the weighted score which is also presented in the table.

Of the 48 research topics presented only two received the endorsement (at any of the 10 ranks) by more than 50 percent of the 44 respondents, "White Collar and Corporate Crime" (54.5 percent) and "Social Control--What Inhibits Crime?" (52.3 percent). Five other research topics received "votes" from 30 percent or more of the respondents: "Deterrence and Sanctioning" (45.5 percent), "Neighborhood Characteristics, Community Factors and Crime" (43.2 percent), "Unemployment, Employment Opportunities and Crime" (34.1 percent), "Opportunities and Crime" (31.8 percent), and "Prediction of Individual Criminality" (31.8 percent). The lack of strong consensus in choosing high priority research areas is due to several possible reasons including the large number of categories (48), the varying backgrounds of the respondents, the specific examples presented for each category and real differences in interests and ideas among the respondents. The median number of votes at any rank received by the 48 topics was approximately 9 or 20.5 percent of the total number of respondents.

TABLE 5-2

RESULTS OF RANKING THE 48 RESEARCH TOPIC CATEGORIES  
ON THE SECOND QUESTIONNAIRE N=44

RESEARCH TOPIC	NUMBER OF RESPONDENTS SELECTING THIS TOPIC	PERCENT	WEIGHTED SCORE
WHITE COLLAR AND CORPORATE CRIME	24	54.5	126
SOCIAL CONTROL - WHAT INHIBITS CRIME	23	52.3	149
DETERRENCE AND SANCTIONING	20	45.5	137
NEIGHBORHOOD CHARACTERISTICS, COMMUNITY FACTORS AND CRIME	19	43.2	110
UNEMPLOYMENT, EMPLOYMENT OPPOR- TUNITIES AND CRIME	15*	34.1	76
OPPORTUNITIES AND CRIME	14	31.8	75
PREDICTION OF INDIVIDUAL CRIMINALITY	14	31.8	60
DEFINITION OF CRIME	13	29.5	110
ECONOMIC INEQUITY AND CRIME	13*	29.5	76
VIOLENCE WITHIN THE FAMILY (OTHER THAN CHILD ABUSE)	13*	29.5	59
CLASSIFICATION AND TYPOLOGIES OF OFFENDERS	12	27.2	83
INFORMATION PROCESSING AND DECISIONMAKING BY CRIMINAL JUSTICE PERSONNEL	12	27.2	72
PERSPECTIVE OF THE OFFENDER	12	27.2	68
RACE, MINORITY GROUP STATUS AND CRIME	12	27.2	67

TABLE 5-2

(cont)

RESEARCH TOPIC	NUMBER OF RESPONDENTS SELECTING THIS TOPIC	PERCENT	WEIGHTED SCORE
VICTIMIZATION	11	25.0	67
DEMOGRAPHIC PROJECTIONS AND CRIME FORECASTING	11	25.0	64
POLITICAL INFLUENCES ON CRIME	11	25.0	56
TRANSITIONAL DEVELOPMENTAL PERIODS AND CRIME	10	22.7	48
SCHOOL, EDUCATION AND CRIME	10	22.7	47
EFFECTS OF DECRIMINALIZATION	10	22.7	45
CITIZEN PERCEPTIONS RE: CRIME, CRIMINALS, SANCTIONS, ETC.	9	20.5	61
GENETIC FACTORS AND CRIME	9	20.5	59
AGE AND CRIME	9	20.5	43
AUTONOMIC NERVOUS SYSTEM AND CRIME	8*	18.2	60
LEARNING OF MORALS AND VALUES	8	18.2	48
DRUG USE AND CRIME	8	18.2	45
FAMILY STRUCTURE AND PROCESSES AND CRIME	8*	18.2	40
CHILDHOOD DYSFUNCTIONS AND CRIME	8*	18.2	37
CHILD ABUSE	8*	18.2	34
CROSS-CULTURAL AND CROSS-NATIONAL FACTORS	8	18.2	33

TABLE 5-2

(cont)

RESEARCH TOPIC	NUMBER OF RESPONDENTS SELECTING THIS TOPIC	PERCENT	WEIGHTED SCORE
PARENT-CHILD INTERACTION (DISCIPLINE, CHILD-REARING PRACTICES, ETC.)	7*	15.9	39
LEARNING, REINFORCEMENT AND AND CRIME	7	15.9	30
SUBCULTURE OF VIOLENCE	7	15.9	27
CENTRAL NERVOUS SYSTEM AND CRIME	6*	13.6	49
SELF-REPORT METHODOLOGY	6	13.6	32
COSTS OF CRIME	6	13.6	32
PSYCHOPATHIC OFFENDER	6	13.6	30
STRESS AND CRIME	5	11.4	32
ALTERNATIVE CRITERION VARIABLES IN CRIMINAL JUSTICE	5	11.4	20
RELATIONSHIP OF PERSONALITY TO CRIMINALITY - GENERAL	4	9.1	22
NUTRITIONAL AND BIOCHEMICAL FACTORS AND CRIME	4	9.1	22
FAMILY DYSFUNCTIONS AND CRIME	4*	9.1	17
ECONOMIC MODELS AND CRIME	4	9.1	15
FEMALE CRIME	3	6.8	16
SELF-ESTEEM, EGO DEVELOPMENT AND CRIME	3	6.8	16

TABLE 5-2

(conc)

RESEARCH TOPIC	NUMBER OF RESPONDENTS SELECTING THIS TOPIC	PERCENT	WEIGHTED SCORE
CORRUPTION	3	6.8	12
CRIME DISPLACEMENT AND REGIONAL DISTRIBUTION OF CRIME	2	4.5	6
IMMIGRATION AND CRIME	1	2.3	3

\* THIS TOPIC ALONG WITH ONE OR MORE OTHER TOPICS WAS PLACED AT THE SAME RANK BY RESPONDENTS SELECTING MORE THAN 10 TOPICS. IN THESE CASES EACH TOPIC WAS GIVEN THE RANK AT WHICH IT WAS PLACED.

To further indicate the diversity of responses, 24 of the 48 listed research topics received at least one vote for highest priority (first rank). However, only one topic, "Definition of Crime" received more than three first rank votes, a total of 8. This topic was endorsed at any rank, by a total of 13 (29.5 percent) respondents. Reasons stated for choosing this topic as number one priority for research support included the need for basic definitions and parameters before other investigations can take place and the influence of definitions on what is crime and who are considered criminals.

There are several research topics in Table 5-2 which show higher weighted scores than other topics with the same number of respondents endorsing the item. This shows that those who did endorse these topics, endorsed it at higher ranks. These research topics include: "Definition of Crime" (29.5 percent endorsement, weighted score 110); "Classification and Typologies of Offenders" (27.2 percent endorsement, weighted score 83); "Citizens Perceptions re: Crime, Criminals, Sanctions, etc." (20.5 percent endorsement, weighted score 61); "Autonomic Nervous System and Crime" (18.2 percent endorsement, weighted score 60); and "Central Nervous System and Crime" (13.6 percent endorsement, weighted score 49).

It is difficult to unambiguously differentiate the ten topics selected by the highest percent of respondents from all those endorsed by much fewer of the researchers responding. Among topics most highly endorsed were those dealing with large social and social-psychological processes (social control, deterrence and sanctioning, neighborhood and community factors, unemployment, opportunities, definitions of crime and economic inequity). Two of the top ten topics involved types of criminal activity (white collar and corporate crime, and violence within the family other than child abuse). The other topic was prediction of individual criminality. Among those topics receiving votes from less than the median number of respondents (8 or less) were: biological factors with the exception of genetic factors (9 endorsements); family processes and factors; learning; personality; stress and crime; specific types of crime and types of offenders (drug use, child abuse, psychopaths, female crime, corruption); and a few, what can be called, "specialty" topics (subculture of violence, costs of crime, self-report methodology, immigration and crime, alternative criterion variables, economic models and crime, crime displacement and regional distribution of crime).

The "middle" group of categories, selected by 20-27 percent of the 44 respondents, included a variety of research directions such



as: some major correlates and determinants (race and minority group status, political influences, school and education, age and genetic factors); criminal justice system activities (information processing and decisionmaking, decriminalization); different perspectives on crime (perspective of the offender, citizen perceptions of crime, criminals, sanctions, etc.); methods (classification and typologies of offenders, demographic projections and crime forecasting); as well as victimization and transitional development periods. In a very general manner we can say that the research topics most highly endorsed by the sample represented broad social factors and large-scale criminal justice system factors while the least highly endorsed were more likely to represent family, psychological and biological research areas as well as some specific types of criminal behavior.

It should be noted that some of the 48 research topics ranked by the sample of mainly academic criminal justice researchers may be somewhat of less interest to the Institute than some of the specific research suggestions subsumed under these categories. The research topics were a convenient shorthand to summarize and abstract the many, many ideas written by respondents to the first questionnaire. For a greater consensus on a limited number of broad research topic areas several more rounds of the survey would probably have to be conducted. However, we believe that the result of our survey both adds to and confirms the expert opinions derived from the literature review and the two colloquia and help to provide an array of ideas for an Institute research program.

## 6. SURVEY OF FEDERAL AGENCIES<sup>66</sup>

All 10 federal agencies surveyed had programs, evaluation and/or research associated with crime, criminal justice, criminal behavior or deviant behavior related to criminality. However, only the National Institute on Drug Abuse (NIDA) and the National Institute of Mental Health (NIMH) can be considered to have as a major focus basic research dealing with correlates and determinants of crime. Most of the agencies surveyed are not committed to "basic" research, or research directly related to the correlates and determinants of crime and criminal behavior. Most are service-delivery oriented with only a small part of their activities devoted to research. However, some of the agencies were supporting research which was judged of some relevance to basic knowledge of crime and criminal behavior. The results of such research should be taken into account by the NILECJ if it should decide to pursue similar content areas.

A wide range of topics, interests and methods were discovered among the agencies. Activities ranged from surveys and evaluation of specific programs to studies which tested hypotheses and gathered data for purposes of understanding fundamental processes and relationships. Some agencies engaged in evaluation of specific projects and policies as well as gathering of data and analysis to investigate fundamental issues. Several agencies supported basic research which was not necessarily focused on crime or criminal behavior but used: (1) crime as one of several outcomes (dependent variables) of interest; (2) criminal behavior as the basis for testing a particular hypothesis or effects of some variable; (3) criminal groups as comparisons with other groups of interest; or (4) criminality as an example of a larger category of behaviors (dysfunctional behavior).

Table 6-1 presents a list of some of the research of direct or indirect relevance to crime and criminal behavior supported by each of the agencies surveyed. This list was obtained from the interviews, agency documentation (including reports) and especially the selected project abstracts from the three information systems mentioned in Section 2.6. The reader is referred to the document by Otten<sup>67</sup> for a brief description of the activities of each agency

<sup>66</sup> Otten, L., Research Related to the Correlates and Determinants of Crime: Survey of Ten Federal Agencies. The MITRE Corporation MTR-7995, 1978.

<sup>67</sup> Ibid.

and abstracts of a sample of relevant projects supported by these agencies. Not all can be labelled "basic" research, but topics and data generated may be of use in aiding programs of basic research.

In addition to the substantive information obtained by the various research efforts sampled and listed in Table 6-1 many of the projects may be useful to the Institute with regard to methodology. For example, some of the research studies listed used longitudinal methods. A wide variety of other methods are involved in research projects funded by the agencies in question--clinical, social area analysis, macrostatistical approaches, use of test data, physiological and biochemical measures, various forms of statistical analyses, etc. Thus, the NILECJ can profit by the experiences of research which has been and is being supported by many other federal agencies in terms of both substantive findings and methods.

The agency survey<sup>68</sup> found very few interagency cooperative efforts, except for NIAAA and NIDA who have both been engaged in cooperative efforts with the NILECJ. Joint funding efforts between agencies are rare. For certain aspects of the NILECJ's basic research program, cooperation may be needed with other agencies who have amassed relevant research experience.

Other research, not covered in this section, funded by these or other federal agencies may also be relevant to the NILECJ program. If one assumes that criminal behavior is governed by similar laws, processes and determinants as other human behavior, a wide range of research may be useful, e.g., how individuals learn, social factors in behavior, neurophysiological processes. Thus, it may be important to be knowledgeable about research other than that directly or indirectly related to crime and other dysfunctional behavior in order to build upon existing knowledge.

<sup>68</sup>Ibid.

TABLE 6-1

SAMPLE OF RESEARCH SUPPORTED BY TEN FEDERAL AGENCIES

AGENCY	TOPICS OF RESEARCH
Administration on Aging	-Elderly as victims of fraud -Scope, character and incidence of fraud -Behavior of the con artist
Department of Housing and Urban Development	-Crime in public housing--incidence, type, fear, vulnerability, behavior change of those exposed to crime
Department of Labor	-Employment and crime -Employment and recidivism -Environmental factors in penetration into the criminal justice system and recidivism--support systems in the individual's life -Criminal laws, punishment, specific crime rates and overall crime rates related to the labor market and economic conditions
National Institute on Child Health and Human Development	-Developmental consequences of being born to a teenage mother (types of family patterns, mental health, child's health, school achievement, delinquency, sexual behavior, etc.) -Family structure (size and spacing of children), health and social development of children -Effects of social background, marital factors, parenting behavior mother's attitudes toward violence, child's health and personality and child's stressful experience as predictors of and etiological factors in preadolescent and adolescent violence
National Institute of Mental Health/Center for Studies of Crime and Delinquency	-Adolescent development and experiences and their relationship to delinquency, adult crime and other pathology (loneliness, self-esteem, attachment to normative values, exposure to deviance, sex role and gender identification, school and parental factors, etc.) -Physiological and genetic factors (chromosomal abnormalities, perinatal brain damage, biochemical factors in aggression, possible genetic influences) -Social structure, processes and change (social factors in changes in homicide rates in several countries, black homicide, community ties and social pathology, cross-cultural analysis of rape, etc.)

TABLE 6-1

(cont)

AGENCY	TOPICS OF RESEARCH
National Institute of Mental Health/ Center for Studies of Crime and Delinquency (continued)	<ul style="list-style-type: none"> <li>-Economic changes and social pathology</li> <li>-Violence in families</li> <li>-Experimental studies of aggression</li> <li>-Longitudinal studies of children and youth with regard to psychiatric problems, delinquency and crime</li> <li>-Female criminality (changes over time, prostitution, etc.)</li> <li>-Rape</li> <li>-Classification and typology of juvenile and adult offenders and those at high risk</li> </ul>
National Institute on Alcohol Abuse and Alcoholism	<ul style="list-style-type: none"> <li>-Typologies of alcoholics and alcohol abusers</li> <li>-Drinking patterns and criminal careers</li> <li>-Dimensions and determinants of adolescent problems drinking and delinquency</li> <li>-Longitudinal study of the development of social problems, especially drinking, in adolescence and young adults</li> <li>-Longitudinal study contrasting abusers and non-abusers of alcohol using the 500 non-delinquents originally studied by the Gluecks in 1940</li> <li>-Relationship of alcohol consumption to other social problems (including crime)</li> <li>-Family transmission of alcoholism and related disorders</li> <li>-Neuropathological, neurochemical and biochemical effects of chronic alcohol use</li> </ul>
National Institute on Drug Abuse	<ul style="list-style-type: none"> <li>-Family characteristics and patterns of drug abuse among adolescents</li> <li>-Economic factors, drug use and crime; economic behavior of opiate addicts</li> <li>-Characteristics and careers of female narcotic addicts</li> <li>-Relationships between parental drug use and children's drug use</li> <li>-Patterns of drug use, its consequences and antecedents through adolescence and young adulthood among blacks</li> <li>-Relationships of types and frequency of drug use to assaultive behavior among adolescents</li> <li>-Social factors (using census-based social area analysis) related to the prevalences of drug use in an urban population</li> </ul>

TABLE 6-1

(conc)

AGENCY	TOPICS OF RESEARCH
National Science Foundation	<ul style="list-style-type: none"> <li>-Effects of family functioning on psychosocial competence and dysfunction in adolescence</li> <li>-Effects of environmental overload, as a model for urban stress, on perceptual and social behavior</li> <li>-Development of maps providing data on urban land use, housing transportation, employment, poverty, health services, crime, segregation, urban renewal, etc.</li> <li>-Moral reasoning among delinquent and non-delinquent adolescents</li> </ul>
National Institute of Education Office of Education	<ul style="list-style-type: none"> <li>-Nature and extent of crime in American schools</li> <li>-Role of vocational education programs in favorable recidivism and employment rates in ten correctional institutions</li> </ul>
National Institute of Corrections	<ul style="list-style-type: none"> <li>-No basic research activities--program evaluation related to training programs and the improvement of correctional facilities</li> </ul>

## 7. RECOMMENDATIONS

From the sources of information used (i.e., literature review, themes and ideas from participants in the two colloquia, and the responses to the mail survey) and according to the criteria described in Chapter 2, nine broad-scope program areas for research were identified by MITRE for the NILECJ's consideration. In addition, specific research topics, hypotheses, questions, variables, etc. are included for each of the nine major program areas. These specific ideas help define the program area, identify some of its parameters and provide direction concerning particular research which may be undertaken. Comments on methodological approaches (especially those discussed during both colloquia) to these program areas will also be made.

### 7.1 Suggestions for Major Programmatic Research Areas

Nine major programmatic research areas selected by MITRE are listed in Table 7-1. They represent different levels of abstraction and are not necessarily mutually exclusive. The listing is not in any order of priority because, given our sources and methods, it does not seem appropriate to order these suggestions in terms of funding priority. Among some of the factors which the Institute may need to consider in determining priorities are:

- present funding activities and plans of the Institute and the Center;
- expressed interest of organizations and individuals in the research community to carry out long-term research programs in the suggested areas;
- budgetary constraints; and
- the overall direction and plans of LEAA and other similar agencies in dealing with crime and other social problems.

The word "processes" has been included along with the term "factors" for several program areas to imply that research should investigate the "why" and "how" as well as the "what" in relationship to crime and criminal behavior. We suggest that major programmatic research go beyond the identification of correlates to study the processes and reasons which may account for these correlations.

TABLE 7-1

SUGGESTED MAJOR RESEARCH PROGRAM AREAS

- Intrafamily Violence
- White Collar and Corporate Crime
- Definitions of Crime
- Social Control and Deterrence
- Economic Factors and Processes
- Developmental Factors and Processes
- Biological Factors and Processes
- Cultural-Ethnic Factors and Processes
- Neighborhood and Community Factors and Processes

The nine suggested program areas imply different ways of approaching research on crime. The first two suggestions focus on types of criminal behavior--research starts with exploration of the parameters of the dependent variable and goes on to seek the correlates and determinants. The next two suggestions represent broad social processes which structure what is considered to be criminal in our society and how the society attempts to prevent and punish what is considered criminal. Here the general approach is to identify the processes, what aspects of criminal behavior that are most influenced by these processes and how the processes operate. The last five suggested research programs deal with major groupings of the correlates of criminal behavior. Here research starts with identification and specification of the independent variables and would proceed to explore what types of criminal behavior are influenced by each set of correlates and how they are influenced. A final step would involve the construction of theoretical models to explain the relationships that have been established.

In our effort to draw up a meaningful agenda no one source of information (literature review, colloquia, mail survey) was considered essential for a topic to be included. However, since the mail survey clearly allowed for a much greater variety of ideas and a larger number of individuals to make judgements on these ideas than either a limited literature review or the two colloquia, special consideration was given to the results. Research areas which were among the most highly endorsed on the second questionnaire were included among the recommendations even though they were not subjects of the literature review and/or discussed at the colloquia. On the other hand, major themes derived from the literature review and the colloquia were used as the bases for the program area recommendations even when they failed to achieve high endorsement among respondents to the mail survey. A few of the nine suggested program areas were represented among all three sources. It should be noted that several of the program areas are combinations of more than one major topic or subsume some major topics which emerged from the literature review, colloquium themes and/or included in the second questionnaire of the mail survey.

The major sources of expert knowledge and opinion that supported the choice of each of the nine major programmatic research suggestions are listed below.

- Intrafamily Violence - Major theme of first colloquium; subject of a presentation during the second colloquium; included in the literature review; and among the top 10 choices on the second questionnaire.

- White Collar and Corporate Crime - Selected by the largest number of respondents to the second questionnaire and mentioned during one of the workshops during the first colloquium.
- Definitions of Crime - Most frequently ranked first as well as among the 10 highest ranked categories on the second questionnaire.
- Social Control and Deterrence - Combination of the second and third most highly endorsed categories on the second questionnaire ("Social Control - What Inhibits Crime?" and "Deterrence and Sanctioning"); minor theme emerging from the first colloquium.
- Economic Factors and Processes - Major topic of the literature review; major presentation and discussion topic during the second colloquium; two categories dealing with economic factors among the ten most highly endorsed by respondents to the second questionnaire.
- Developmental Factors and Processes - Major theme of the first colloquium; represented among many research categories on the second questionnaire.
- Biological Factors and Processes - Major theme of first and second colloquia; major topic of the literature review.
- Cultural-Ethnic Factors and Processes - Major topic of the literature review; subject of presentations at both colloquia; received more than the median number of endorsements on the second questionnaire.
- Neighborhood and Community Factors and Processes (including environmental factors) - Major theme of second colloquium; discussed at the first colloquium; included in the literature review; and fourth most highly endorsed topic on the second questionnaire.

Several topics reviewed in the literature, discussed and presented during the colloquia and suggested by respondents to the two questionnaires have not been selected. Included among these are research on prisons and the general topic of stress and crime which was the subject of the second colloquium. Research on prisons and stress in prisons were considered more "applied" than "basic" and generally of a scope too narrow for

the Center's purposes. On the other hand, the topic of stress and crime appeared too broad, and better use of the stress concept can be made within some of the program areas suggested, e.g., biological factors and processes, intrafamily violence and cultural and ethnic factors and processes. Stress can be seen as an intermediate concept which may aid in explaining the effects of external conditions and stimuli on individual and group responses (including criminal behavior). In this sense stress may be more fruitfully examined as part of those stimulus and/or response variables rather than as a subject of study in itself.

Other research ideas that have not been subsumed under the nine program areas may be found in Chapters 3 to 6 and in Appendix B (list of research ideas which were employed in developing the 48 research topic categories of the second questionnaire).

## 7.2 Specific Research Topics Within Each Program Area

Tables 7-2 to 7-10 present each of the nine suggested research program areas along with a list of specific sample research topics (obtained from the literature review, two colloquia, and first questionnaire). It should be noted that these examples are merely samples. They are neither exhaustive nor are they necessarily the most important specific research topics within the major program areas, but they are suggestive of how these broad program areas may be approached. Again, it should be noted that the broad program areas may overlap and that some of the specific research topics can logically be placed within more than one of them. No program category or subtopic then is completely separate from all other areas, but this probably as it should be given the complex set of interrelationships governing the correlates and determinants of criminal behavior.

## 7.3 A Methodological Note

Methodological issues concerned with studying crime and the various factors associated with crime were important themes of both colloquia (see Chapter 4) and several respondents to the mail survey brought up methodological ideas.

During both colloquia there were strong pleas for longitudinal research and especially longitudinal cohort designs. This was considered by some to be essential in order to unravel causal direction, make predictions and to allow the natural variation and interaction among many variables. Some colloquium participants called for the use of other designs such as: cross sectional studies; case studies using the individual as their



TABLE 7-2

## RESEARCH TOPICS--INTRAFAMILY VIOLENCE

Intrafamily Violence

- Relationships among child abuse, family violence, delinquency and crime
- Comparative studies of families that do and do not engage in assaultive behavior with regard to both precipitating and constraining forces
- Role of neighborhood context (high and low stress areas)
- Coping mechanisms and management of stress and conflict
- Types of coping strategies among family members
- Status devaluation, stress and family violence among minorities
- Definition and learning of parental roles regarding violence
- Crimes against elderly family members
- Incidence and seriousness of various forms of intrafamily violence
- Social support systems and family violence within various social class and ethnic groups
- Employment-unemployment and family violence
- Role expectations: husband-wife, parent-child
- Family structure and violence
- Role of alcohol, mental illness, physical illness
- Physical punishment of child and violence toward them
- Role of experiences of family members at work, school and in other relationships
- Longitudinal study of relationship between experience of violence as a child or adolescent and use of assault in family of procreation
- Conflicts over child rearing as an influence on husband-wife assault
- Role of coping devices--family get-togethers, TV, church attendance, humor, alcohol, etc.
- Mental illness and family violence
- Sex and socioeconomic status

NOTE: See Sections 3.2, 4.1.4, 4.2.2, Table 4-3 and Appendix B for other ideas.

TABLE 7-3

## RESEARCH TOPICS--WHITE COLLAR AND CORPORATE CRIME

White Collar and Corporate Crime

- Economic impact of white collar crime on society and especially on the poor
- Occupational influences on white collar and corporate crime
- Enforcement, sanction and sentencing differences between white collar/business/government crime versus traditional street crime. Do these differences tend to encourage the former
- Organized crime and its interconnections to legitimate business
- Relationship of crime as business to our system of government
- Number of deaths and injuries attributable to corporate actions compared with individual (street) actions
- Development of legal conceptual models to deal with corporate behavior on both a national and an international level
- Application of economic rational choice models to individual white collar and corporate crime
- Relationships of white collar and corporate crime to factors related to other types of crime

TABLE 7-4

RESEARCH TOPICS--DEFINITIONS OF CRIME

Definitions of Crime

- Variations in operational definitions of arrest, detention, prior record, career criminal as they affect police, prosecution and courts and reported rates of crime
- Historical study of laws which create new classes of behavior as crime and new groups of law breakers
- Criminogenic functions of the law--the extent to which laws define behaviors as criminal when such behaviors can be dealt with by other systems, e.g., public welfare, health, mental health
- Crime as a normative response to certain situations
- Reasons why society defines some dangerous behavior as criminal and not others
- Regional and community variations in enforcement, prosecution and punishment with regard to criminal behaviors
- Effects of decriminalization of certain crimes or changes in routine enforcement of certain laws
- Public and criminal justice system members' perceptions of behavior which should be prohibited or circumscribed by the law
- Political and social factors which effect what laws are enforced (what behavior is considered serious or dangerous or immoral) and what punishments are employed
- Differential perception of the same criminal behavior as a function of who commits the crime (social class, race, age, prior criminal behavior) by the public and members of the criminal justice system
- Effects of the definitions on those so defined

TABLE 7-5

RESEARCH TOPICS - SOCIAL CONTROL AND DETERRENCE

Social Control and Deterrence

- Economic and social costs of deterrence
- Effects of de-institutionalization and diversion on deterrence
- Two approaches to sentencing-punishment; determinant sentencing versus "protection of society," the latter involving incarceration only when necessary to restrain the individual from assault on others
- Impact of incapacitation policy on crime rates.
- Positive variables among those living in poverty that reduce the chances of criminality - deviant cases, i.e., low income ghetto with low crime rate, those living within violent and criminal sub-cultures who do not engage in crime
- Update of Hirschi's control theory of delinquency with contemporary data
- Role of anticipated anxiety regarding unpleasant internal or external consequences of behavior as an inhibiting factor
- Coping mechanisms to deal with stress and other instigations to violent or other criminal behavior
- Role of pleasure or affectional systems (neurological and behavioral) in restraining violent behavior
- Differences between serious drug users and psychopaths versus others in activities which are fun - why these differences
- Immunizing factors which "protect" some youngsters from engaging in crime given parental criminality

NOTE: See Section 4.1.5 and Appendix B for other ideas.

TABLE 7-6

RESEARCH TOPICS - ECONOMIC FACTORS AND PROCESSES

Economic Factors and Processes

- Application of econometric rational choice models to individuals using personal measures of opportunity costs, perceived risks, benefits, economic support, etc.
- Differences in the relationships between various economic factors and crime rates and types using different geographic units of analysis (regions, states, SMSA's, census tracts, police districts, etc.) and units of time
- What economic factors appear to be most consistently (across various geographic units and over time) related to crime rates and types of crime
- Relationship between inequality of the distribution of resources in society and the kinds and costs of crime
- Relative and absolute economic deprivation and crime
- Contribution to criminal behavior of economic deprivation per se versus the psychological debilitation resulting from unemployment which deprives the individual of a basis for identity
- Criminal careers of unemployed people and members of their family-cohort longitudinal study
- Relationship of criminal behavior to length of unemployment
- Relationships of long term unemployment to the degradation and dislocation of the individual, the family, the neighborhood and subsequent crime
- The employment-crime relationship with regard to both area-to-area relationships and individual employment to criminal behavior relationships
- Extent to which the current socioeconomic structure supports the Cloward-Ohlin model of differential opportunity structures in terms of economic opportunities for social mobility in both legitimate and illegitimate activities
- Effects of shifts toward greater economic equity on kinds and costs of crime
- Relative contribution of economic factors versus deterrence factors in crime rates

TABLE 7-6

(conc)

- Interaction of economic factors such as low income, inequity of economic resources, and relative deprivation with other factors such as cultural value systems, urban versus rural location, neighborhood social organization, race, age and density to influence rates and types of crime
- Effect of economic factors function on values, self-perception outlook on the world and the resulting behavior pattern
- Effects of stress generated by economic status degradation due to unemployment on different types of responses (crime, depression, alcoholism, physical illness, etc.)

NOTE: See Section 3.1 and Appendix B for other ideas.

TABLE 7-7

## RESEARCH TOPICS - DEVELOPMENTAL FACTORS AND PROCESSES

Developmental Factors and Processes

- Stages and epochs in individual lives and key transition periods which are related to distinguishing paths or syndromes with regard to drug use and delinquency
- Longitudinal studies of children in families who live in high stress areas
- Influences of the nurturant aspects within the family, and how disruptions in the nurturant functions affect later violence
- Effects of Head Start and similar types of programs in terms of the child's later truancy and delinquency
- Parental response and adequacy of their responses to differences in discipline problems among different children - characteristics of families with parents who are capable of alternative strategies of discipline and who understand how to cope with very different types of children
- Stages of moral development (Piaget, Kohlberg) related to drug delinquency. (Does drug use surpress moral development or does it maintain it at a lower level?)
- Influence of family role and pathology on differentiation of different types of delinquency
- Relationships between unemployment and marriage in late adolescence or early adulthood on aggressive behavior and drug use
- Effects of economic situation of the family on the parent-child interaction
- Effects of stimulus deprivation in early infancy and childhood (motion and touch) on attitudes and behavior which lead to deviance, including criminal and aggressive, behavior
- Comparative study of the occurrence of crime among persons who are developmentally disabled (i.e., mentally retarded, epileptics)

TABLE 7-7

(conc)

- Relationship between dyslexia and the early onset of delinquency
- Relationships between persistent enuresis, cruelty to animals, hyperkinesis, fire-setting and psychopathy
- Learning problems and organic disorders as related to aggressiveness and violence
- Career contingencies in commitment to persistent delinquency at "watershed" points between institutionally established stages of progression through childhood and adolescence. (There is evidence that responsiveness to random events, experiences and associations is at a maximum during periods of transition between stages)
- Transition from youth and school role to young adult work roles with regard to crime and antisocial behavior (Relationships between crime and this transition would be related to: aspirations; role models; education and employment training; changes in reference and peer groups; marriage or living partner arrangements; prior history of antisocial behavior and crime; degree to which responsibility is accepted; and development of own sense of rising expectations)
- Factors which differentiate criminals from noncriminals in terms of how parents respond toward the child during critical periods of both individual (i.e., puberty) and and family (family life cycle) transition
- Longitudinal research beginning in grade school which would likely reveal the direction of causation of the correlation between parental punitiveness (both verbal and physical) and children's criminal behavior
- Autonomic nervous system response rate as related to child rearing and punishment techniques to get at the nature-nurture question

NOTE: See Section 4.1.3, Table 4-2 and Appendix B for other ideas.

TABLE 7-8

RESEARCH TOPICS - BIOLOGICAL FACTORS AND PROCESSES

Biological Factors and Processes

Autonomic Nervous System (ANS)

- Role of ANS functioning to the development of normal socialized behavior
- Prevalence of the pattern of slow ANS reactions and slow recovery in persons not acquiring criminal records.
- Functioning of the ANS in a variety of reactive situations other than reactions to pain or other powerful stimuli
- Use of ANS factors for early detection of future delinquents

Central Nervous System

- Structure and function of reciprocal inhibitory and facilitating neural systems underlying aggression and pleasure
- Intensive study of cerebral functions of psychopaths including measures of laterality
- Role of stimulus-seeking in criminal behavior
- Early psychophysiological deprivation of motion and touch and the development of pain and pleasure systems
- Role of brain damage and minimal brain dysfunction
- Neurological patterns measured by specific EEG activities and other neurological signs that differentiate types of criminal and impulsive behavior
- Psychophysiology linking alcohol and violence

Nutritional, Biochemical and Hormonal Factors

- Hypoglycemia and aggression
- Aggressive behavior as an allergic response
- Nutritional deficiencies and delinquency
- Hormonal levles and crime including their role in aggressive sexual offenses

TABLE 7-8

(concl)

- Menstrual cycle and crime
- Role of certain vitamins in criminal and other dysfunctional behavior
- Early nutritional patterns and latter addictions (drugs and alcohol)

Relationships Between Biological and Other Factors in Crime

- Role of environmental and developmental factors among individuals with "negative" neurological signs such as slow ANS recovery, certain EEG patterns, etc.
- Body type, social factors and criminal behavior

Genetic Factors

- Extension of Scandanavian and other European studies of possible genetic influences on crime by means of mono- and dizygotic twin and adoption studies
- Psychophysiological factors involved in criminal behavior that are influenced by genetic factors
- Genetic effects on specific types of criminal behavior

NOTE: See Sections 3.7, 4.1.2, 4.2.3, and Appendix B for other ideas.

TABLE 7-9

## RESEARCH TOPICS - CULTURAL-ETHNIC FACTORS AND PROCESSES

Cultural-Ethnic Factors and Processes

- Comparison of low and high crime cultures
- Cultural factors as control mechanisms rather than causes of crime
- Structural and historical factors differentiating high and low crime ethnic groups
- Learning of morals and values
- Social change and disruption among various ethnic groups related to crime
- Influence of changing social conditions on individual psychodynamics
- The role of the family unit in various cultural groups
- Cultural differences in responses to stress--individual and group
- Effects of racism on the psycho-sexual development of black and other minority children
- Discipline patterns in black families
- Economic stability and crime among minority groups
- Separation of the effects of culture from socioeconomic status
- Role of the violent subculture among some urban, black, youth; subculture of violence among certain white and Hispanic groups and cross cultural studies of violent subcultures
- Social learning model applied to subcultures where criminal behavior is normative
- Relative deprivation among specific cultural-ethnic groups
- Specific cultural forms of criminal behavior
- Subcultural influences on learning of coping strategies
- Child rearing practices of homogeneous cultural groups related to crime rates and types

NOTE: See Sections 3.5, 4.1.4, 4.2.2, and Appendix B for other ideas.

TABLE 7-10

## RESEARCH TOPICS - COMMUNITY AND NEIGHBORHOOD FACTORS AND PROCESSES

Community and Neighborhood Factors and Processes

- Role of community support system in the occurrence and/or control of crime (churches, fraternal groups, etc.).
- Neighborhood social organization as a correlate versus determinant of crime reporting, police response and victimization rates.
- Comparison of communities with a low population turnover attributable to mobility with areas where there is unusually high mobility with regard to delinquency rates, crime rates and other indicators of social deviance.
- Land use patterns and cycles and crime patterns.
- Community and neighborhood factors differentiating those communities with different crime rates after controlling for socioeconomic conditions, racial-ethnic composition age distribution, etc.
- Characteristics of buildings, streets and other ecological factors related to crime.
- Social stress factors within neighborhoods and their relationships to crime.
- Detailed analysis of neighborhoods and families living under high and low density conditions with regard to interactive effects of closeness of relationships and density to crime.
- Factors in a situation which are likely to encourage or facilitate criminal behavior or discourage criminal behavior.
- Re-examination of the concept of defensible space

NOTE: See Sections 3.3, 3.8, 4.2.4, and Appendix B for other ideas.

own baseline; simulation studies and cross-sectional designs. Other issues concerned data analysis, especially the level of analysis (aggregated versus individual macro versus micro levels) and units of analysis (geographic and time units). There was a call from some of those who participated in the colloquia for naturalistic studies of: individuals in their communities; specific cultural groups; prisons; and everyday environments (streets, neighborhoods, buildings). Some concerns for measurement issues were raised including: need for alternative criterion variables to measure criminal justice activities and effects; variations among different jurisdictions in the meanings and measures of arrests, charges, etc.; need for physiological markers to measure changes in prisoners with respect to rehabilitation; and need to develop intermediate measures to predict later events in order to obtain early indicators in longitudinal studies. The importance as well as the difficulty of interdisciplinary research efforts were other methodological issues discussed at the first colloquium.

The methodology to be used in the Institute's research programs should be tailored to the particular research program, and to the specific questions to be answered. A broad scope of research activities for any of the nine program areas suggested would require a range of methods and techniques which should not, however be mutually exclusive. The major programmatic areas listed in Table 7-1 would be subject to a variety of methodologies with regard to research designs, levels of analysis, units of analysis, types of measures and statistical techniques and would lend themselves to interdisciplinary efforts.

The importance of longitudinal studies and longitudinal cohort designs was stressed by several experts. MITRE suggests that these be utilized, when appropriate, in conducting a program of research into most of the programmatic areas mentioned. However, this should not be the only method used (the costs and efforts needed to set up and follow through with a large scale longitudinal study may limit the resources for other types of studies). On the other hand, because of the importance of longitudinal studies in understanding causal direction, in prediction and in examining natural interactions among variables, the Institute may wish to employ prospective studies as well as retrospective studies (using existing data) in many of its individual research grants and interdisciplinary research center programs.

#### 7.4 Continuing the Input to the Institute

MITRE suggests that the NILECJ continue the process, started with this project, of obtaining input of ideas for basic research on

a periodic basis. This can be accomplished through a mail survey, convening of meetings of researchers to provide information on their work and to make suggestions for future work, and/or review of relevant literature. In addition to providing the Institute with research ideas, information from these sources may also be of interest to a wide research and practitioner community including funding agencies (government and private) and researchers not directly involved in crime and criminal justice work.

The mail survey as used in this study should be modified. Among the changes suggested are: to ask respondents to select dependent variables (e.g., types of crime), and independent variables to be investigated in relationship to the dependent variable; to ask respondents to specifically suggest the methodology to be employed; and to ask respondents to select studies which they believe need replication. These changes would make the survey more structured and direct. In addition, changes can be made in the sample receiving the questionnaire(s). The Institute may want to include practitioners, criminal justice administrators, applied researchers and program evaluators as well as academicians. The extended sample may provide a broader perspective and different types of research suggestions than were obtained from the present survey.

The two rounds used in the survey conducted by MITRE and the large number of research categories (49) may have contributed to the relatively low level of consensus (no one category was endorsed among their ten choices by more than 55% of the respondents to the second questionnaire). If the probability of higher levels of consensus is desired it may be necessary to increase the number of iterations of the survey (starting with a large list of possible research topics or a free response format) which would probably reduce the number of topics for final judgement.

A literature review oriented to basic research can be conducted on a periodic basis using the files of the National Criminal Justice Reference Service. Unlike the "wideband" approach taken in the present study in which a relatively large number of topics were selected and a few items reviewed for each topic, future searches may be much more intensive. This would follow a decision on one or a limited number of topics which the Institute may wish to explore for purposes of funding. The literature review may then help to guide the final choice of what is to be funded and aid the grantee to build the program around what has been done and what needs to be done. The review should also



examine work by other federal agencies, including work in progress.

Whatever the format of the mail survey, literature review and/or meetings of researchers, the important point is to continue a systematic, formalized process of input of ideas to the Institute from the outside. This will enable the research programs to reflect and build upon what has been done and what is known, what is being done and being learned, and what should be done and what questions asked to improve the current level of understanding of the correlates and determinants of crime and criminal behavior.

APPENDIX A  
FIRST QUESTIONNAIRE

SURVEY OF BASIC RESEARCH NEEDS RELEVANT TO  
THE CORRELATES OF CRIME AND THE DETERMINANTS  
OF CRIMINAL BEHAVIOR

QUESTIONNAIRE #1 INSTRUCTIONS

On the following pages you will find seven general research topic areas which may be relevant to basic research needed to further the understanding of crime and criminal behavior. There is a separate page for each of the seven general topics as well as three additional pages which allow you to define your own general topic areas if you wish. The seven general topic areas are:

- Psychological Factors
- Developmental Factors
- Biological Factors
- Sociological Factors
- Economic Factors
- Demographic Factors
- Political-Legal Factors.

For each listed topic area there are several examples or concepts, listed in parenthesis, which are included to aid in defining its scope. These examples and concepts are not necessarily meant to be representative, exhaustive or to suggest specific research topics, but have been listed only to help define the general topic area. There is overlap among the seven topic areas, and some of the examples and concepts may be subsumed under more than one general topic area, e.g., substance abuse, social class, deprivation. Please look over the seven research topic areas, if you would, and do the following:

1. Select the general research topic areas which, from your perspective, need continued and/or new research efforts to further knowledge and understanding of the correlates and determinants of crime and criminal behavior. Select as many or as few of the listed topic areas as you believe important. If you wish to define a general research topic area not listed, you may use the pages with a blank space under "GENERAL RESEARCH TOPIC AREA." If you choose to define your own general research topic area(s) please label them using terms comparable to the level of generality of the seven listed topic areas.
2. For each of the general research topic areas selected, please state, in the space provided, specific research topics, variables, hypotheses and/or relationships which you believe need investigation. Please be as specific as you can..

3. For each general research topic area selected, please state, in the space provided, the reasons why you believe the research topics, variables, hypotheses and/or relationships you have suggested need study. You are encouraged to state as many reasons as you think necessary to justify your choices and to state different reasons for each chosen topic area, if applicable. Please be as explicit as possible.
4. Please complete the page entitled, "CHARACTERISTICS OF RESPONDENTS."
5. Please make sure that your written responses are legible since the analyses of this questionnaire and subsequent questionnaires in this survey will be based on the research you have suggested and the reasons for your suggestions.
6. Please return the completed questionnaire in the enclosed envelope within 14 days of receipt, if possible.

The Mitre Corporation thanks you for your participation.

GENERAL RESEARCH TOPIC AREA

PSYCHOLOGICAL FACTORS

(Pathology; Cognitive determinants; Personality and motivational processes; Learning problems; Substance abuse, etc.)

If you have selected this topic area as needing continued and/or new research efforts to further the understanding of the correlates and determinants of crime and criminal behavior, please answer the following two questions.

1. What specific topics, variables, hypotheses and/or relationships do you believe need investigation? Please be as specific as possible.

2. What are your reasons for selecting the specific research topics, variables, hypotheses and/or relationships stated above? Please be as explicit as possible.

(Use other side of page if necessary)

GENERAL RESEARCH TOPIC AREA

DEVELOPMENTAL FACTORS

(Parent-child relationships; Characteristics of parents; Critical periods and transitions; Reinforcement history; Conditions which affect development; etc.)

If you have selected this topic area as needing continued and/or new research efforts to further the understanding of the correlates and determinants of crime and criminal behavior, please answer the following two questions.

1. What specific topics, variables, hypotheses and/or relationships do you believe need investigation? Please be as specific as possible.

2. What are your reasons for selecting the specific research topics, variables, hypotheses and/or relationships stated above? Please be as explicit as possible.

(Use other side of page if necessary)

GENERAL RESEARCH TOPIC AREA

BIOLOGICAL FACTORS

(Endocrine system; Autonomic nervous system response; Brain and other central nervous system abnormalities; Central nervous system basis for aggression; Genetic factors; etc.)

If you have selected this topic area as needing continued and/or new research efforts to further the understanding of the correlates and determinants of crime and criminal behavior, please answer the following two questions.

1. What specific topics, variables, hypotheses and/or relationships do you believe need investigation? Please be as specific as possible.

2. What are your reasons for selecting the specific research topics, variables, hypotheses and/or relationships stated above? Please be as explicit as possible.

(Use other side of page if necessary)

GENERAL RESEARCH TOPIC AREA

SOCIOLOGICAL FACTORS

(Subcultural influences; Status forces; Social class; Values; Peer group, religious, educational, family and neighborhood factors; etc.)

If you have selected this topic area as needing continued and/or new research efforts to further the understanding of the correlates and determinants of crime and criminal behavior, please answer the following two questions.

1. What specific topics, variables, hypotheses and/or relationships do you believe need investigation? Please be as specific as possible.

2. What are your reasons for selecting the specific research topics, variables, hypotheses and/or relationships stated above? Please be as explicit as possible.

(Use other side of page if necessary)

GENERAL RESEARCH TOPIC AREA

ECONOMIC FACTORS

(Economic cycles; Unemployment and underemployment; Rational models of criminal behavior; Social class; Effects of poverty; Relative deprivation; etc.)

If you have selected this topic area as needing continued and/or new research efforts to further the understanding of the correlates and determinants of crime and criminal behavior, please answer the following two questions.

1. What specific topics, variables, hypotheses and/or relationships do you believe need investigation? Please be as specific as possible.

2. What are your reasons for selecting the specific research topics, variables, hypotheses and/or relationships stated above? Please be as explicit as possible.

(Use other side of page if necessary)

GENERAL RESEARCH TOPIC AREA

DEMOGRAPHIC FACTORS

(Population density; Long term population trends; Age, sex, race and economic characteristics of various geographic areas; etc.)

If you have selected this topic area as needing continued and/or new research efforts to further the understanding of the correlates and determinants of crime and criminal behavior, please answer the following two questions.

1. What specific topics, variables, hypotheses and/or relationships do you believe need investigation? Please be as specific as possible.

2. What are your reasons for selecting the specific research topics, variables, hypotheses and/or relationships stated above? Please be as explicit as possible.

(Use other side of page if necessary)

GENERAL RESEARCH TOPIC AREA

POLITICAL-LEGAL FACTORS

(Social definitions of crime; Differential criminal justice enforcement and processing; Crime as a political response; Changes in the legal and social basis of crime; etc.)

If you have selected this topic area as needing continued and/or new research efforts to further the understanding of the correlates and determinants of crime and criminal behavior, please answer the following two questions.

1. What specific topics, variables, hypotheses and/or relationships do you believe need investigation? Please be as specific as possible.

2. What are your reasons for selecting the specific research topics, variables, hypotheses and/or relationships stated above? Please be as explicit as possible.

(Use other side of page if necessary)

GENERAL RESEARCH TOPIC AREA

If you have chosen to define a general research topic area not included in the previous seven as important for basic research into the correlates and determinants of crime and criminal behavior please label the topic area in the space above and answer the two following questions. The following two pages also provide space for general research topic areas not included in the seven, if you wish to define others.

1. What specific topics, variables, hypotheses and/or relationships do you believe need investigation? Please be specific as possible.

2. What are your reasons for selecting the specific research topics, variables, hypotheses and/or relationships stated above? Please be as explicit as possible.

(Use other side of page if necessary)

GENERAL RESEARCH TOPIC AREA

If you have chosen to define a general research topic area not included in the previous seven as important for basic research into the correlates and determinants of crime and criminal behavior please label the topic area in the space above and answer the two following questions.

1. What specific topics, variables, hypotheses and/or relationships do you believe need investigation? Please be specific as possible.

2. What are your reasons for selecting the specific research topics, variables, hypotheses and/or relationships stated above? Please be as explicit as possible.

(Use other side of page if necessary)



GENERAL RESEARCH TOPIC AREA

If you have chosen to define a general research topic area not included in the previous seven as important for basic research into the correlates and determinants of crime and criminal behavior please label the topic area in the space above and answer the two following questions.

1. What specific topics, variables, hypotheses and/or relationships do you believe need investigation? Please be specific as possible.

2. What are the reasons for selecting the specific research topics, variables, hypotheses and/or relationships stated above? Please be as explicit as possible.

(Use other side of page if necessary)

CHARACTERISTICS OF RESPONDENTS

In order to define the sample of individuals who participate in the survey we would like you to answer the following questions. Individual responses to this and subsequent questionnaires will not be identified by name nor shown to anyone other than MITRE staff associated with this project.

1. Present employer (check the most appropriate response)

☐ College, university or professional school  
☐ Government agency (check the appropriate level)  
    ☐ Federal  
    ☐ State  
    ☐ Regional, county, city  
☐ Other (please specify type of organization, e.g., consulting company, foundation) \_\_\_\_\_

2. With what discipline(s) do you identify yourself (e.g., psychiatry, psychology, criminology, sociology, law, economics, administration, planning)?  
\_\_\_\_\_

3. What is your current relationship to research activities related to correlates and determinants of crime and criminal behavior (check as many responses as appropriate)?

☐ Active in conducting research directly related to crime and/or criminal behavior  
☐ Active in conducting research indirectly related to crime and/or criminal behavior  
☐ Administering research activities directly or indirectly related to crime and/or criminal behavior  
☐ Teaching related to crime, law, criminology, deviance, etc.  
☐ Planning research activities, including developing government research programs, writing RFP's, monitoring research contracts and grants, etc.  
☐ Using results of research to plan, develop and/or implement programs and policies  
☐ No direct relationship to research activities dealing with crime and/or criminal behavior  
☐ Other (please specify) \_\_\_\_\_

APPENDIX B  
SECOND QUESTIONNAIRE

INSTRUCTIONS

Please read the list of research topics (page 2) and examples used to define and label them (page 3-20) which were directly taken from the responses to the first questionnaire. Topics vary in content (variables, types of crime, methods, phenomena) and in generality as determined by the nature of the responses. After reading the list of topics and the examples please do the following:

1. Select 10, but no more than 10 research topics which you believe deserve the highest priorities for research support.
2. Rank order your choices (up to 10) and list them in order of priority. Instead of writing the descriptive title of each selected topic please use the code number listed to the left of each topic on page 2 as well as on pages 3-20 in the numbered spaces on page 21.
3. Briefly state the reason(s) for your selections for each of the chosen topics in the spaces opposite your selections under "Reasons for Choosing This Topic" on page 21;
4. If there are research topics relevant to basic research you wish to include among your top priorities which are not represented by any of the 48 research topics listed please briefly label them and place them in the appropriate rank order in the numbered spaces on page 21;

We urge you to use the listed topics for your selections. If a particular research idea or topic which you wish to include among your top 10 choices is not specified by example in one or more of the listed topics please try to use that listed topic which comes closest to including your idea. The listed examples on pages 3-20 do not necessarily represent all the specific research possibilities within that topic. The examples may or may not represent what you believe are the most meaningful aspects of that general topic. You do not have to agree with any or all the listed examples under a research topic in order to select that topic if its general focus is among your highest priorities; and

5. Detach page 21 with your selections and reasons from the rest of this package, sign your name and date at the bottom of the page, and mail in the enclosed stamped envelope no later than February 15, 1979.

Again, MITRE and the National Institute thank you for your time, effort and ideas.

# RESEARCH TOPICS

These topics were derived from an analysis of the responses to the first survey questionnaire.

CODE #	TOPIC	CODE #	TOPIC
01	DEFINITION OF CRIME	27	RACE, MINORITY GROUP STATUS AND CRIME
02	CROSS-CULTURAL AND CROSS-NATIONAL FACTORS	28	RELATIONSHIP OF PERSONALITY TO CRIMINALITY--GENERAL
03	IMMIGRATION AND CRIME	29	SELF-ESTEEM, EGO DEVELOPMENT AND CRIME
04	POLITICAL INFLUENCES ON CRIME	30	TRANSITIONAL DEVELOPMENTAL PERIODS AND CRIME
05	INFORMATION PROCESSING AND DECISION-MAKING BY CRIMINAL JUSTICE SYSTEM PERSONNEL	31	CHILDHOOD DYSFUNCTIONS AND CRIME
06	EFFECTS OF DECRIMINALIZATION	32	FAMILY DYSFUNCTIONS AND CRIME
07	DETERRENCE AND SANCTIONING	33	FAMILY STRUCTURE AND PROCESSES AND CRIME
08	DEMOGRAPHIC PROJECTIONS AND CRIME FORECASTING	34	PARENT-CHILD INTERACTION (DISCIPLINE, CHILD-REARING PRACTICES, ETC.)
09	CRIME DISPLACEMENT AND REGIONAL DISTRIBUTION OF CRIME	35	LEARNING, REINFORCEMENT AND CRIME
10	NEIGHBORHOOD CHARACTERISTICS, COMMUNITY FACTORS AND CRIME	36	LEARNING OF MORALS AND VALUES
11	OPPORTUNITIES AND CRIME	37	SUBCULTURE OF VIOLENCE
12	VICTIMIZATION	38	UNEMPLOYMENT, EMPLOYMENT OPPORTUNITIES AND CRIME
13	COSTS OF CRIME	39	ECONOMIC INEQUITY AND CRIME
14	SOCIAL CONTROL--WHAT INHIBITS CRIME?	40	ECONOMIC MODELS AND CRIME
15	PERSPECTIVE OF THE OFFENDER	41	SCHOOL, EDUCATION AND CRIME
16	CITIZEN PERCEPTIONS RE: CRIME, CRIMINALS, SANCTIONS, ETC.	42	STRESS AND CRIME
17	CHILD ABUSE	43	AUTONOMIC NERVOUS SYSTEM AND CRIME
18	VIOLENCE WITHIN THE FAMILY (OTHER THAN CHILD ABUSE)	44	CENTRAL NERVOUS SYSTEM AND CRIME
19	DRUG USE AND CRIME	45	GENETIC FACTORS AND CRIME
20	WHITE COLLAR AND CORPORATE CRIME	46	NUTRITIONAL AND BIOCHEMICAL FACTORS AND CRIME
21	CORRUPTION	47	SELF-REPORT METHODOLOGY
22	FEMALE CRIME	48	ALTERNATIVE CRITERION VARIABLES IN CRIMINAL JUSTICE
23	PSYCHOPATHIC OFFENDER		
24	CLASSIFICATION AND TYPOLOGIES OF OFFENDERS		
25	PREDICTION OF INDIVIDUAL CRIMINALITY		
26	AGE AND CRIME		

# EXAMPLES FROM THE RESPONSES TO THE FIRST QUESTIONNAIRE USED TO DEVELOP AND LABEL THE RESEARCH TOPICS

CODE #	TOPIC
01	<p><u>DEFINITION OF CRIME</u></p> <ul style="list-style-type: none"> <li>Research on operational definitions of arrest, detention, prior record, career criminal as they affect police, prosecution and courts and affect reported rates of crime--development of cross jurisdictional standards</li> <li>Relationship between legal factors and crime</li> <li>Criminogenic functions of the law--the extent to which laws define behaviors as criminal which can be dealt with by other systems, e.g., public welfare, health, mental health</li> <li>Crime as a normative response to certain situations</li> </ul>
02	<p><u>CROSS-CULTURAL AND CROSS-NATIONAL FACTORS</u></p> <ul style="list-style-type: none"> <li>Comparison of low crime and high crime cultures</li> <li>Cultural factors as "control" mechanisms rather than causes of crime</li> <li>Cross-national consistencies in the responses of the criminal justice system</li> </ul>
03	<p><u>IMMIGRATION AND CRIME</u></p> <ul style="list-style-type: none"> <li>Why some, but not all groups have changed the pattern of ethnic-related crime with regard to new waves of immigration to urban areas?</li> <li>Cross-national migration and crime, e.g., illegal Mexican migration to the Southwest; increasing culture conflict due to immigration to the Netherlands</li> </ul>
04	<p><u>POLITICAL INFLUENCES ON CRIME</u></p> <ul style="list-style-type: none"> <li>Study of politically motivated terrorism</li> <li>How Uniform Crime Reports reflect political shifts</li> <li>Political influences on regional distribution of crime</li> <li>Factors leading to changes in criminal justice legislation</li> </ul>

CODE #

TOPIC

05 INFORMATION PROCESSING AND DECISION-MAKING BY CRIMINAL JUSTICE  
SYSTEM PERSONNEL

- Problem of information overload--too much information inappropriately used
- The effect of supplying decision-makers with more information about delinquents; the relationship between information and action
- A reexamination of the connection between decisions and information search strategies of decision-makers

06 EFFECTS OF DECRIMINALIZATION

- Effects of decriminalization of victimless crimes on: crimes against persons, crimes against property, crimes where profit is a clear motive and crimes where passion or emotion is the major motivation
- Before and after studies of prevalence of decriminalized activities and effects of changes in the law on both those who engage in the activity as well as those who enforce the laws
- Testing the use of medical treatment and public health education and the de-emphasis on law enforcement-criminal justice approach to psychoactive drug abuse on the reduction of property and other crime (e.g., prostitution) associated with drug use, and the proportion disabled by the drug

07 DETERRENCE AND SANCTIONING

- Who is deterred by what?
- What are the economic and social costs of deterrence?
- Possible negative effects of de-institutionalization and diversion on general deterrence via increased perception of minor sanctions for illegal behavior
- Comparison of two approaches to sentencing-punishment: determinate sentencing vs. "protection of society" (modified indeterminate sentencing and incarceration only when necessary to restrain the individual from physical assault on others)
- Impact of an incapacitation policy on crime rates
- Does parole or probation influence crime? Could a system of suspended sentences replace much of probation?

CODE #

TOPIC

08 DEMOGRAPHIC PROJECTIONS AND CRIME FORECASTING

- What crime-related age-group trends (by race, etc.) can we expect in subsequent years?
- To what extent are changing crime trends due to changing populations?
- Demographic projection models applied to crime forecasting, e.g., impact of declining youth population and lower fertility rates on juvenile delinquency
- Crime rates for census tracts should be compared against macro-level census data over time
- The popular belief that as the population ages the crime rates will decline deserves most careful observation. There is some reason to believe that the structurally deprived classes are sufficiently numerous to disappoint those who believe that crime will decline in a direct positive relationship with the decline in the youthful portion of the general population.
- Scenarios of probable future states of society-projections of 10-20 years with regard to the impact of technology on normal and abnormal behavior should be developed

09 CRIME DISPLACEMENT AND REGIONAL DISTRIBUTION OF CRIME

- Investigate the extent to which communities can "export" crime by invoking sterner measures than adjacent communities
- Investigate more thoroughly the regional distribution of crime and the reasons for it

10 NEIGHBORHOOD CHARACTERISTICS, COMMUNITY FACTORS AND CRIME

- The role of community support systems in the occurrence and/or control of crime (i.e., churches, fraternal groups, etc.)
- Neighborhood social organization as a correlate vs. determinant of: crime reporting, police response and victimization rates
- Relationships among certain social indicators (number of parks, schools, factories, boarded-up store windows and a variety of other observables) to arrest and commitment rates
- Comparison of communities with a low population turnover attributable to mobility with areas where there is unusually high mobility with regard to delinquency rates, crime rates and other indicators of social deviance

<u>CODE #</u>	<u>TOPIC</u>
10	<p>NEIGHBORHOOD CHARACTERISTICS, COMMUNITY FACTORS AND CRIME (Continued)</p> <ul style="list-style-type: none"> <li>Transformation of urban areas from low density single family dwellings through stages of high density multiple family dwellings, commercial and industrial encroachment, residential abandonment and ultimate renewal is marked by changes in neighborhood crime patterns</li> </ul>
11	<p><u>OPPORTUNITIES AND CRIME</u></p> <ul style="list-style-type: none"> <li>Examine opportunity structures for committing crime with regard to learning how to commit crime and structures for the disposal of stolen property</li> <li>Examine the influence of the availability of guns on the homicide/serious assault level; the effects of the gun itself apart from the personal motives of the actors</li> <li>Alternative markets for illegal activities and income supplementation through such markets particularly among those groups who don't participate in conventional or traditional street crime</li> <li>Informal organization of criminal behavior--helping networks and informal information sharing applied to criminal behavior</li> </ul>
12	<p><u>VICTIMIZATION</u></p> <ul style="list-style-type: none"> <li>Continued attitude surveys of victims and nonvictims to measure salience of social and psychological harms and opinions about responses of official and community service support programs</li> <li>Equity theory and the relationship between offenders and victims</li> <li>Life styles and their relationships to victimization rates</li> <li>The role of the victim in precipitating crimes</li> </ul>
13	<p><u>COSTS OF CRIME</u></p> <ul style="list-style-type: none"> <li>What are the kinds and costs of crime distributed by social class?</li> <li>What policies would differentially reduce these kinds of crimes and their costs given their unequal distribution across class lines?</li> <li>What are the social costs of various kinds of activities defined by statute as crimes</li> </ul>

<u>CODE #</u>	<u>TOPIC</u>
14	<p><u>SOCIAL CONTROL--WHAT INHIBITS CRIME?</u></p> <ul style="list-style-type: none"> <li>What are the positive variables among those living in poverty that reduce the chances for criminality?</li> <li>Study deviant cases, i.e., low income ghetto with low crime rate--isolate critical values, practices, etc.</li> <li>Need up-to-date data relevant to Hirschi's control theory</li> <li>Explore cultural differences as potential control factors rather than as causes of crime</li> <li>Need to research issues surrounding the inhibition or restraint of behavior in the face of anticipated anxiety regarding unpleasant internal or external consequences</li> </ul>
15	<p><u>PERSPECTIVE OF THE OFFENDER</u></p> <ul style="list-style-type: none"> <li>Psychological processes involved in defining a social situation as requiring a violent, assaultive response</li> <li>Personal, social and subcultural definitions of events and expectations based on these definitions may be the key to explaining at least a limited set of violent behaviors</li> <li>Decision-making with regard to engaging in criminal behavior--variations in moral, economic and social information related to offender choice to engage in criminal behavior; perceptions of risks as well as benefits; individual deterrence effects; and disruptions of information processing that affect the calculus of benefits and risks</li> </ul>
16	<p><u>CITIZEN PERCEPTIONS RE: CRIME, CRIMINALS, SANCTIONS, ETC.</u></p> <ul style="list-style-type: none"> <li>Citizen perceptions and opinions regarding crime and punishment, relationships of crime to existing sentence lengths and other criminal penalties</li> <li>Children's perspectives on crime--its meaning, relative seriousness of different forms of crime, appropriate punishment</li> <li>Perceptions of victims and potential witnesses with respect to their own moral obligations, the likely results of their reporting actual and suspicious situations (in terms of retaliation, arrest and convictions) and factors determining such perceptions</li> <li>Subjective probability perceptions of the public which may be more likely to be determinants of their behavior than the "real" probabilities of victimization</li> </ul>

<u>CODE #</u>	<u>TOPIC</u>
16	CITIZEN PERCEPTIONS RE: CRIME, CRIMINALS, SANCTIONS ETC. (Continued) <ul style="list-style-type: none"> <li>• Impact of punishment upon the punishers--What does the use of the death penalty do for ordinary citizens?</li> </ul>
17	<u>CHILD ABUSE</u> <ul style="list-style-type: none"> <li>• Study the victim of child abuse. Examine the child that has been selected for differential treatment by parents.</li> <li>• Apply learning theory to learning of parent roles with regard to how assaultive behavior comes to be defined as consistent with the parental role</li> <li>• Developmental factors related to the transition from the role of victim of child abuse to parental offender who abuses his/her child</li> <li>• Relationship between child abuse, family violence, delinquency and crime</li> </ul>
18	<u>VIOLENCE WITHIN THE FAMILY (OTHER THAN CHILD ABUSE)</u> <ul style="list-style-type: none"> <li>• Comparative studies of families that do and do not engage in assaultive behavior with regard to both precipitating and constraining forces</li> <li>• Relationships of family structures, process and management to assaultive behavior--family composition, sex role expectations and performance, family coping styles in the management of internal and external stress, child-rearing practices and dual socialization of minority children</li> <li>• Violence and nonviolence in the family as related to the neighborhood context</li> <li>• Crimes against elderly family members</li> </ul>
19	<u>DRUG USE AND CRIME</u> <ul style="list-style-type: none"> <li>• What is the relationship between drug use and crime? Does drug use cause criminal behavior or <u>vice versa</u>?</li> <li>• Conduct extensive life history interviews with samples of persons labeled "career" criminals with records of specific offenses such as robbery, burglary, assault, murder, etc. in order to check on the intersection of drug abuse and criminality</li> </ul>

<u>CODE #</u>	<u>TOPIC</u>
19	DRUG USE AND CRIME (Continued) <ul style="list-style-type: none"> <li>• Use of antecedent sociodemographic variables, attitudinal orientations, values, peer connections, peer normative behavior, opportunities to engage in drug use and crime, and psychological tests to study patterns of drug use, initiation into use of various drugs and how these patterns of initiation coincide with patterns of involvement with delinquent and criminal behavior</li> <li>• Under what conditions do alcohol and drugs precipitate or inhibit crimes?</li> <li>• Test the extent to which labeling by family, peers, community or self is important in diverting adolescents from normative to deviant behavior with drug users or addicts who come to public attention</li> </ul>
20	<u>WHITE COLLAR AND CORPORATE CRIME</u> <ul style="list-style-type: none"> <li>• Economic analysis of white collar crime--its impact on society, on the poor</li> <li>• Organization of white collar criminal activity--commercial, political</li> <li>• Occupational influences on white collar and corporate crime</li> <li>• What enforcement, sanction and sentencing differences between white collar/business/government crime vs. traditional street crime tend to encourage the former?</li> <li>• Organized crime and the interconnections to legitimate business</li> <li>• Is crime as business inevitably tied to our system of government?</li> <li>• The relative amount of deaths and injury attributable to corporate actions compared with individual (street) actions must be ascertained</li> <li>• Development of legal conceptual models to deal with corporate behavior on both the national and international level</li> </ul>
21	<u>CORRUPTION</u> <ul style="list-style-type: none"> <li>• What is the true prevalence of corrupt public officials in any given community?</li> <li>• How much does bribery cost the public yearly?</li> </ul>

<u>CODE #</u>	<u>TOPIC</u>
21	CORRUPTION (Continued) <ul style="list-style-type: none"> <li>• Does corruption contribute to loss of services or increased costs of public services?</li> <li>• Does public corruption influence the assistance by citizens in deterring crime or reporting crime?</li> <li>• Police corruption and complicity in the heroin and cocaine markets</li> </ul>
22	<u>FEMALE CRIME</u> <ul style="list-style-type: none"> <li>• Differences in life style between males and females related to differences in crime rates</li> <li>• Changes in female involvement in crime</li> <li>• Increase in female crime and control theory--update of Hirschi's data</li> </ul>
23	<u>PSYCHOPATHIC OFFENDER</u> <ul style="list-style-type: none"> <li>• A long-term study on the so-called "burned-out" psychopath concept including an investigation of the conditions and individual difference variables associated with the subsequent reduction in severity of antisocial behavior</li> <li>• Cognitive structure of the psychopathic criminal</li> <li>• The incidence of psychopathy in various age, race and socio-economic groups and among males and females</li> <li>• The legal implications of being diagnosed as a psychopath</li> <li>• Conditions under which psychopathic criminals fail to learn or to engage in appropriate behavior, and conversely the conditions under which they do learn to engage in such behavior</li> </ul>
24	<u>CLASSIFICATION AND TYPOLOGIES OF OFFENDERS</u> <ul style="list-style-type: none"> <li>• Development of psychophysiological measurement in both diagnostic and treatment areas to discover if unique profiles characterize different criminal groups</li> <li>• Refinement of typologies of offenders by means of a cross-classification study involving Kohlberg's moral development, Hunt's conceptual level, Quay's behavior categories, Warren's I-Level and Megargee's computer-based typology</li> <li>• Development of reliable, valid inventories for the identification of various types of criminals</li> </ul>

<u>CODE #</u>	<u>TOPIC</u>
25	<u>PREDICTION OF INDIVIDUAL CRIMINALITY</u> <ul style="list-style-type: none"> <li>• Measure the "centrality of legal norms" in the individual's cognitive structure and relate this and the severity of sanctions to recidivism probability using the concept of cognitive dissonance</li> <li>• Study predelinquency as a concept re: precursors to delinquent careers</li> <li>• Use a cohort which has detailed perinatal data to see whether or not this contributes to criminal behavior in adulthood</li> <li>• Conduct research on early detection of psychopaths</li> <li>• Develop methods for the early detection of individuals with high likelihood of evidencing recidivistic criminal behavior: review world longitudinal research; establish new longitudinal project aimed at testing the reliability of the predictive characteristics noted in the review; and if a set of reliable predictors can be developed these can be used on a general population or a population of first offenders to select the later recidivists</li> <li>• Longitudinal studies to establish a series of probability values associated with intermediate signs, symptoms or behavior patterns which are predictors of later serious events at several age levels. For example, behaviors at age 5 leads to the probability, x, of school problems at age 7, which in turn would then lead to a probability, y, of minor delinquencies at age 10 which would in turn lead to the probability, z, of more serious delinquency at age 14</li> <li>• Replication of the Wolfgang Cohort Study at different sites and with different types of youngsters, i.e., Hispanics</li> </ul>
26	<u>AGE AND CRIME</u> <ul style="list-style-type: none"> <li>• The precise relationship of age to crime</li> <li>• At what ages do the assumptions of the criminal court hold, i.e., accountability for one's behavior, free will (having behavioral alternatives), ability to define right and wrong for oneself?</li> <li>• Why is crime age-specific?</li> <li>• Why is it that males at age 16 commit a highly disproportionate number of offenses?</li> </ul>



<u>CODE #</u>	<u>TOPIC</u>
27	<u>RACE, MINORITY GROUP STATUS AND CRIME</u> <ul style="list-style-type: none"> <li>• The effects of racism on the psycho-sexual development of the black or other minority child</li> <li>• Social conflict and crime (race, ethnic, class conflict)</li> <li>• Role models for the black child motivating them to achieve or underachieve</li> <li>• The discipline patterns in the black family and their relationship to crime statistics</li> <li>• Further understanding of the correlation between the relative deprivation of blacks and their disproportionate representation in criminal statistics</li> <li>• Need to sort out the effects of race/ethnicity from socio-economic status in explaining criminality. Most of the important variables involve subcultural influences, status forces, values, religion, family, etc.</li> <li>• What attributes of ethnicity are crime-related?</li> <li>• Relationship of economic stability and crime among minority groups</li> </ul>
28	<u>RELATIONSHIP OF PERSONALITY TO CRIMINALITY--GENERAL</u> <ul style="list-style-type: none"> <li>• What are the personality factors or syndromes associated with violence chronicity or offense chronicity generally?</li> <li>• What personality traits are characteristic of those who become criminal as contrasted with those who do not?--there is confusion between correlations and predisposition or causal factors</li> <li>• What is the precise mechanism operating in the relation of personality type (e.g., psychopathic deviate) to crime--or is this a tautology?</li> </ul>
29	<u>SELF-ESTEEM, EGO DEVELOPMENT AND CRIME</u> <ul style="list-style-type: none"> <li>• Differences in self-esteem between male and female delinquents</li> <li>• Differences in self-esteem for those at various stages in criminal justice processing</li> <li>• Self-esteem among those with different types of offenses</li> <li>• How the release process from incarceration impacts on self-esteem</li> </ul>

<u>CODE #</u>	<u>TOPIC</u>
29	<u>SELF-ESTEEM, EGO DEVELOPMENT AND CRIME (Continued)</u> <ul style="list-style-type: none"> <li>• Differences in ego-skills between those heavily involved in delinquent activities and those who are not--relationships of different ego-skills to survival in different environments</li> <li>• Relationship between growth along an ego development scale and the reduction or elimination of delinquency</li> </ul>
30	<u>TRANSITIONAL DEVELOPMENTAL PERIODS AND CRIME</u> <ul style="list-style-type: none"> <li>• Career contingencies in commitment to persistent delinquency--these occur principally at "watershed" points between institutionally established stages of progression through childhood and adolescence. There is evidence that responsiveness to random events, experiences and associations is at a maximum during periods of transition between stages</li> <li>• Role transition from youth and school role to young adult work roles with regard to crime and antisocial behavior. Relationships between crime and this transition would be related to: aspirations, role models, education and employment training, changes in reference and peer groups, marriage or living partner arrangements, prior history of antisocial behavior and crime, degree to which responsibility is accepted and development of own sense of rising expectations</li> <li>• Develop a list of factors which differentiate criminals from noncriminals in terms of how parents responded toward the child during critical periods of both individual (i.e., puberty) and family (family life cycle) transition</li> </ul>
31	<u>CHILDHOOD DYSFUNCTIONS AND CRIME</u> <ul style="list-style-type: none"> <li>• Comparative study of the occurrence of crime among persons who are developmentally disabled (i.e., mentally retarded, epileptics)</li> <li>• Relationship between dyslexia and the early onset of delinquency</li> <li>• Establish the significance, if any, of the relationships between persistent enuresis, cruelty to animals, hyperkinesis, fire-setting and psychopathy</li> <li>• Learning problems and organic disorders as related to aggressiveness and violence</li> </ul>

<u>CODE #</u>	<u>TOPIC</u>
32	<u>FAMILY DYSFUNCTIONS AND CRIME</u> <ul style="list-style-type: none"> <li>• Studies to determine whether or not children who grow up in homes which are consistently and chronically dependent on some kind of welfare service (AFDC, public relief, services to mentally ill or mentally retarded parents) are disproportionately delinquent</li> <li>• Studies of noncriminal maladaptive behavior of families with histories of mental disorders</li> <li>• Why is it that a large percentage of delinquents have at least one sibling or parent who has a serious delinquent or criminal record? We don't know if this is explainable on the basis of constitutional predisposition or family disorganization or both</li> </ul>
33	<u>FAMILY STRUCTURE AND PROCESSES AND CRIME</u> <ul style="list-style-type: none"> <li>• Family structure across cultures within our society in relation to criminal behavior--different rates of delinquency among black, chicano and oriental families may be associated with different patterns of family life</li> <li>• Effects of presence of extended family members and their role in supervision</li> <li>• Sex role orientations and behaviors of parents</li> <li>• Need to explore intactness of family (broken home, single parent home, reconstituted family, etc.) and family cohesion-warmth</li> <li>• Relationship between large families, poverty and crime. Need to look at intervening variables--SES, welfare-ghetto syndrome</li> <li>• The contribution of family mobility and culture shock to general maladjustment and delinquent tendencies</li> <li>• Male and female economic role expectations and performance, and the impact of role incongruence on assaultive behavior and other crime</li> </ul>
34	<u>PARENT-CHILD INTERACTION (DISCIPLINE, CHILD-REARING PRACTICES, ETC.)</u> <ul style="list-style-type: none"> <li>• Study interpersonal relationships within family units. Different parental reactions to siblings take place and these differences cause conflict</li> </ul>

<u>CODE #</u>	<u>TOPIC</u>
34	<u>PARENT-CHILD INTERACTION (DISCIPLINE, CHILD-REARING PRACTICES ETC.) (Continued)</u> <ul style="list-style-type: none"> <li>• Study parent-child <u>transactions</u> instead of parent behavior typologies which assume passive children</li> <li>• Conduct longitudinal research beginning in grade school which would likely reveal the direction of causation of the correlation between parental punitiveness (both verbal and physical) and children's criminal behavior</li> <li>• Relate autonomic nervous system response rate with information on child rearing and punishment techniques to get at the nature-nurture question</li> </ul>
35	<u>LEARNING, REINFORCEMENT AND CRIME</u> <ul style="list-style-type: none"> <li>• Reinforcement history, including familial, peer and community factors would point toward potential etiological factors for those age groups that contribute greatest to crime rates</li> <li>• How does subsequent reinforcement modify earlier learning?</li> <li>• Is learning potential equal or nearly equal across and throughout developmental stages?</li> <li>• How is a person socialized into a criminal way of life?</li> <li>• How does one learn techniques for becoming a successful criminal?</li> </ul>
36	<u>LEARNING OF MORALS AND VALUES</u> <ul style="list-style-type: none"> <li>• Relationship between the nature and quality of parenting and basic moral outlook--ethnic and racial comparisons; comparisons based on age and marital status of mother</li> <li>• Research to investigate how to replace the social institutions of family, church and school as socializing agents for the young</li> <li>• How do parents and schools instruct children in values where religion is of no significance?</li> <li>• How do attitudes of parents toward crime, police, moral values, religion get transmitted to the offspring? What critical incidents are involved and how do family members respond to them?</li> <li>• What kinds of "shady" behaviors do parents actually engage in (i.e., tax dodge, stealing from the office, etc.) and how is this related to behavior and attitudes of their offspring?</li> </ul>

<u>CODE #</u>	<u>TOPIC</u>
36	LEARNING OF MORALS AND VALUES (Continued) <ul style="list-style-type: none"> <li>• Study moral outlook and crime in a developmental context</li> </ul>
37	<u>SUBCULTURE OF VIOLENCE</u> <ul style="list-style-type: none"> <li>• Psychological processes involved in adoption of subcultural norms</li> <li>• Social learning model applied to subcultures where violent, unlawful behavior may be normative (rural as well as urban subcultures)</li> <li>• Is there such a phenomenon as the subculture of violence? If there is, what are its characteristics and the extent of its influence?</li> <li>• Are there varying subcultures of violence, and if so what are the differences among them</li> </ul>
38	<u>UNEMPLOYMENT, EMPLOYMENT OPPORTUNITIES AND CRIME</u> <ul style="list-style-type: none"> <li>• Need to unravel the contribution to criminal behavior of economic deprivation per se vs. the psychological debilitation resulting from unemployment which deprives an individual of a basis for identity</li> <li>• Need cohort information about the criminal careers of unemployed persons and members of their families--relate criminal behavior and its cost to length of unemployment</li> <li>• Study the relationships of long term unemployment to the degradation and dislocation of the individual, the family and the neighborhood and subsequent crime</li> <li>• Study employment-crime relationship with regard to both area-to-area crime rate relationships and individual employment to criminal behavior relationships</li> <li>• What are the specific connections between the institutional experiences of employment and schooling that create in the person responses that are reflected in law violations, across classes? Research should identify the particular points at which the social context creates pressures, and how these pressures are responded to in ways that generate criminal behavior</li> <li>• Are youths who are able to obtain jobs less likely to engage in crime?</li> </ul>

<u>CODE #</u>	<u>TOPIC</u>
38	UNEMPLOYMENT, EMPLOYMENT OPPORTUNITIES AND CRIME (Continued) <ul style="list-style-type: none"> <li>• The extent to which the current socioeconomic structure supports a Cloward-Ohlin model of differential opportunity structures in terms of economic opportunities for social mobility in both legitimate and illegitimate activities</li> <li>• Are there measures that tend to expand economic opportunities for youth who have no previous record of crime that will reduce their likelihood of becoming criminal?</li> </ul>
39	<u>ECONOMIC INEQUITY AND CRIME</u> <ul style="list-style-type: none"> <li>• What is the relationship between inequality of the distribution of resources in society and the kinds and costs of crime?</li> <li>• What are the effects of different-sized shifts toward greater economic equity on kinds and costs of crime?</li> <li>• What is the government and corporate role in maintaining inequities regarding the distribution of income and assets?</li> </ul>
40	<u>ECONOMIC MODELS AND CRIME</u> <ul style="list-style-type: none"> <li>• Better tests of rational models of crime with a variety of forms of crime</li> <li>• What is the relative contribution of economic factors vs. deterrence factors in crime rates, given that evidence for each is mainly correlative?</li> </ul>
41	<u>SCHOOL, EDUCATION AND CRIME</u> <ul style="list-style-type: none"> <li>• Relationship of academic retardation and delinquent behavior</li> <li>• Longitudinal research is needed to distinguish causal patterns in the relationship between school performance (grades, grade failure) and delinquent and criminal behavior</li> <li>• Relationship of the school to delinquency fostering and prevention--what school programs and policies offset this relationship?</li> <li>• What are the specific connections between the institutional experience of schooling that create in the person responses that are reflected in law violations, across classes? At what point does the school experience become especially critical or painful, what is the nature of this discomfort, and by what processes does it become translated into law violations?</li> </ul>

<u>CODE #</u>	<u>TOPIC</u>
42	<p><u>STRESS AND CRIME</u></p> <ul style="list-style-type: none"> <li>• Differential perceptions of, and responses to stress, leading to behavior which may be labeled crime--cognitive and perceptual factors, affective factors and learning factors</li> <li>• Modes of handling psychological stress and the effects of such modes on the perpetuation or reduction of assaultive crimes</li> <li>• Biological factors related to stress and reactions to stress</li> </ul>
43	<p><u>AUTONOMIC NERVOUS SYSTEM AND CRIME</u></p> <ul style="list-style-type: none"> <li>• Is normal autonomic nervous system (ANS) functioning critical to the development of normal socialized behavior? If so, will early ANS abnormalities result in a predisposition to failure to learn normal socialized behavior?</li> <li>• If ANS factors are involved in normal socialization, then how do environmental factors decide which ANS-vulnerable child will become antisocial and which will not?</li> <li>• How prevalent is the pattern of low and slow GSR reactions and slow autonomic recovery of so called psychopaths in persons not acquiring criminal records?</li> <li>• The functioning of the ANS should be determined in a variety of reactive situations other than simply reactions to pain</li> <li>• Poor conditionability and delinquency should be given further research support</li> <li>• Can ANS factors be used for early detection of future delinquents? Do the ANS factors suggest modes of primary prevention which may be studied?</li> </ul>
44	<p><u>CENTRAL NERVOUS SYSTEM AND CRIME</u></p> <ul style="list-style-type: none"> <li>• Study of differences in brain chemistry between various delinquent groups and nondelinquents. Also look at male-female differences that might help explain differences in crime rates</li> <li>• Examination of the basal ganglia and limbic structures in criminals</li> <li>• Careful neurological evaluation for "soft" signs or history of central nervous system "insult" in a group of recidivists whose demographic history suggests hereditary predisposition to criminality as well as extreme social deprivation</li> </ul>

<u>CODE #</u>	<u>TOPIC</u>
44	<p><u>CENTRAL NERVOUS SYSTEM AND CRIME (Continued)</u></p> <ul style="list-style-type: none"> <li>• Intensive study of cerebral functions of psychopaths involving electrocortical and neurophysiological measures with an emphasis on laterality</li> <li>• Brain damage: extent of serious brain dysfunction among correctional populations; are inmates more brain damaged than comparable individuals in the community?; prevalence of minimal brain damage that may have serious behavioral and personality consequences among inmates; did prisoners become brain-damaged because of their delinquent approach to life or did they get into trouble because of lowered inhibitions as a result of brain damage?</li> </ul>
45	<p><u>GENETIC FACTORS AND CRIME</u></p> <ul style="list-style-type: none"> <li>• Genetic factors in relation to psychiatric illness: Is criminality found in the families of patients with major psychotic illnesses? Is criminality found in the families of patients with alcoholism? Is there a common biological factor?</li> <li>• Cross-adoptive studies of individuals whose biological family has a history of criminality but whose adoptive parents do not</li> </ul>
46	<p><u>NUTRITIONAL AND BIOCHEMICAL FACTORS AND CRIME</u></p> <ul style="list-style-type: none"> <li>• Basic research on the role of hypoglycemia in aggressive behavior</li> <li>• Basic research on the use of anti-androgenic compounds on sex-related aggression</li> <li>• Aggressive behavior as an allergic response</li> <li>• Nutritional deficiencies during the developmental period. Interactions of nutritional problems, learning disabilities and delinquency should be studied</li> <li>• Relationship between nutrition and crime</li> </ul>
47	<p><u>SELF-REPORT METHODOLOGY</u></p> <ul style="list-style-type: none"> <li>• Are self-reports of delinquent activities and official arrests measuring the same behavior? If not, what behaviors are measured by one and not the other?</li> <li>• More information is needed about reliability and validity of adult self-reports and known offender self-reports of illegal activities</li> </ul>

CODE #

TOPIC

48

ALTERNATIVE CRITERION VARIABLES IN CRIMINAL JUSTICE RESEARCH

- Research on the values assigned to other dependent variables (other than crime and criminal behavior) such as processing rates, community values, processing costs, perceptions of safety and security, trust in the legal system, etc. by relevant audiences such as community residents, local politicians, court personnel

B-20

RESEARCH TOPIC SELECTIONS

Please select 10, but no more, of the research topics listed on page 2 and described by examples on pages 3 to 20 which you believe deserve the highest priorities for research support. Rank order your selections, 1 = highest priority, and list by code number of the topic (see page 2). Please briefly state your reasons for selecting each topic. Please sign your name, below.

PRIORITY RANKING	TOPIC CODE	REASONS FOR CHOOSING THIS TOPIC
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

NAME \_\_\_\_\_ DATE \_\_\_\_\_

B-21

APPENDIX C  
LIST OF RESPONDENTS TO THE FIRST AND/OR  
SECOND QUESTIONNAIRE

Jerald Bachman  
David Barcik  
Alfred Blumstein  
Lawrence Bennett  
Lee Brown  
Monte Buchsbaum  
Stephens Clark  
Richard Clayton  
John Conrad  
Phillip Cook  
Christopher Dunn  
Troy Duster  
Edith Flynn  
Gilbert Geis  
J.J. Gibbs  
Daniel Glaser  
Don Gottfredson  
Ernest Harburg  
Robert Hare  
Travis Hirschi  
LaMar Howard  
Ronald Huff  
James Inciardi  
Carl Jesness  
Malcolm Klein  
Douglas Knight

Solomon Kobrin  
Cora Marrett  
Joan McCord  
Sarnoff Mednick  
Robert Meier  
John Monahan  
Russell Monroe  
Kenneth Moyer  
Roger Parks  
Lorraine Perry  
James Prescott  
Louise Richards  
Nathan Rosenberg  
Stanton Samenow  
James Short  
Larry Solomon (for Allen Breed)  
Robert L. Smith (for Allen Breed)  
Robert Staples  
Terrance Thornberry  
Hans Toch  
Harold Votey  
Irvin Waller  
Marguerite Warren  
Gordon Whitaker  
Leslie Wilkins  
Marvin Wolfgang

**END**