



**Patterns of Violent Crime:
A Longitudinal Investigation**



129890
068621

**State of California
Department of the Youth Authority
Research Division**

March 1991



STATE OF CALIFORNIA

**PETE WILSON,
GOVERNOR**



YOUTH AND ADULT CORRECTIONAL AGENCY

**JOE G. SANDOVAL,
Secretary**

DEPARTMENT OF THE YOUTH AUTHORITY

**Elaine Duxbury, Chief
Research Division**

Principal Author:

**Rudy Haapanen
Research Program Specialist II**

Co-Authors:

**Kathy Houston-Hencken
Mary Duncan**

**B. T. Collins,
Director**

**Francisco J. Alarcon,
Chief Deputy Director**

**Clyde McDowell, Deputy Director
Institutions and Camps Branch**

**George McKinney, Deputy Director
Parole Services Branch**

**Wilbur A. Beckwith, Deputy Director
Prevention and Community Corrections Branch**

**Barbara Allman, Deputy Director
Administrative Services Branch**

Patterns of Violent Crime: A Longitudinal Investigation

Rudy Haapanen, Ph.D.
Kathy Houston-Hencken, M.A.
Mary Duncan, M.S.W.

State of California
Department of the Youth Authority
Research Division

March 1991

This research was supported by grant number 86-IJ-CX-0036 from the National Institute of Justice, U.S. Department of Justice. Findings, conclusions, and opinions presented in this paper are those of the authors, and not necessarily those of the U.S. Department of Justice.

Table of Contents

Summary.....	iii
Chapter 1: Introduction	1
Chapter 2: Patterns of Offending.....	11
Chapter 3: Ethnic Differences in Violence Patterns.....	15
Chapter 4: Prevalence and Stability of Violent Arrest Patterns	21
Chapter 5: Discussion.....	31
References	33
Appendix: Sample Characteristics	35

List of Tables

Table 1: Factor Loadings for Offense Factors During Entire Follow-up Period	12
Table 2: Order of Factors Identified During Four-year Age Blocks	13
Table 3: Factor Loadings for Offense Factors During Four-year Age Blocks	14
Table 4: Violent-offense Factor loadings for White Offenders ($n = 798$).....	16
Table 5: Violent-offense Factor loadings for Black Offenders ($n = 451$).....	17
Table 6: Violent-offense Factor loadings for Hispanic Offenders ($n = 255$).....	18
Table 7: Distributions of Levels on Violence Patterns ($N = 1,525$)	22
Table 8: Percentage of Assaultiveness Levels by General Violence Level.....	23
Table 9: Percentage of Sex Offense Levels by General Violence Level	24
Table 10: Percentage of Assaultiveness Levels by Sex Offense Level	25
Table 11: Percentage of Assaultiveness Levels by Ethnicity	26
Table 12: Percent of Sex Offense Levels by Ethnicity.....	27
Table 13: Percent of General Violence Levels by Ethnicity.....	28
Table 14: Percentage of Assaultiveness Levels Ages 22-25 by Assaultiveness Level Ages 18-21	29
Table 15: Percentage of Sex Offense Level Ages 22-25 by Sex Offense Level Ages 18-21	30
Table 16: Percentage of General Violence Levels Ages 22-25 by General Violence Level Ages 18-21	30

Summary

This study was undertaken to explore the usefulness of violent arrest histories as a basis for classifying adult offenders. The present data, consisting of up to twenty years of arrest information on individuals identified as serious juvenile offenders, provided a unique opportunity to explore the extent to which certain kinds of crimes tend to occur together in overall criminal careers and the extent to which these overall patterns are discernable over shorter (four-year) periods. The goal of this study was to explore whether identifiable patterns of violent and nonviolent offenses could be found in the overall criminal careers of these offenders. These patterns could suggest a meaningful taxonomy of violent offenders based on the types of crimes they commit.

This research was *exploratory*. It sought to add to basic knowledge about crime in general and violent crime in particular, and while the findings may be of interest to policy makers and criminal justice practitioners, the report is aimed primarily at students of crime. That is to say, there are no "answers" to the problem of violent crime included here and no policy recommendations that flow naturally from the findings. The intent was only to increase the understanding of violent criminal behavior committed by offenders who began their criminal careers early in life.

The extent to which offenses tended to occur together within criminal careers was investigated through the use of exploratory factor analysis. This analytic method identifies tendencies for certain characteristics (in this case, being arrested for various crimes) to "go together." Conceptually, this approach treats an individual's offense career as a series of choices indicating preferences for one type of crime over another. The factor analysis explores the extent to which preferences for certain types of

crime go along with preferences for certain *other* types of crimes.

Twenty-two categories of offenses were used:

Violent offenses

- Homicide
- Aggravated Assault
- Rape
- Misdemeanor Assault
- Armed robbery
- Strongarm robbery
- Other person offenses

Violence-related offenses

- Weapons offenses
- Sex offenses
- Pimping/prostitution

Property offenses

- Burglary
- Receiving stolen property
- Grand theft
- Forgery
- Grand theft auto
- Other theft
- Other auto theft

Drug/alcohol offenses

- Liquor violations
- Drug use
- Drug sales

Miscellaneous offenses

- Arson
- Other offenses

Sample and data

Analyses focused on adult (after age 18) criminal record data gathered on offenders who were included in a recently-completed study of adult criminal career patterns (Haapanen, 1990). Most of the 1,532 offenders in the sample were involved in earlier research studies undertaken at various California Youth Authority (CYA) institutions during the 1960s and early 1970s and appeared reasonably representative of the CYA institutional population of that period. In addition, two small non-CYA samples were also included, one composed of former adult prison inmates and the other composed of adult probationers. These two subsamples had been included in the earlier study to provide a basis for arguing that observed patterns were not peculiar to offenders with prior

CYA incarcerations. Since the present study was exploratory, these cases were retained in the sample and not analyzed separately.

The focus of the study was on patterns of *adult* violent offenses (occurring after age 18). The amount of *adult follow-up* ranged from 5 to 20 years, with an average of 14.5 years. Most of the sample (87%) had at least ten years of follow-up data. Arrest data were obtained from California Criminal Identification and Investigation (CI&I) "rap sheets" and from prison and probation reports. Every charge, count, and "cleared" crime noted on the rap sheet or written report was coded. The 1,532 offenders in the sample averaged 18.45 arrest charges each (28,265 total). Arrest charges for violent offenses ranged from zero to 33, with a mean of 3.00. Most of the sample (72%) had at least one adult arrest for a violent crime, 57% had two or more arrests for violent offenses, and 43% had three or more such arrests.

Analyses

The first part of the analysis focused on what offenses seemed to go together (among violent offenses alone and among all offenses together) over the entire follow-up period. Counts of arrest charges over the follow-up period were factor analyzed to explore the extent to which various kinds of offenses coexisted within overall criminal careers. The intent was to derive a relatively small number of offense groupings that could be used to characterize criminal careers.

In order to investigate whether similar patterns would emerge, factor analyses were also performed separately for shorter time periods (four-year blocks) and for each major ethnic group (white, black, and Hispanic). Analyses of four-year periods were aimed at understanding the relationship between patterns observable over these shorter follow-up periods and those observable over much longer periods. They addressed issues of specialization as well as the overall differentiation of offenders based on

different observation "windows" within their careers. Analyses by ethnicity were used to explore the extent to which patterns of violent offending differed for these subpopulations of offenders.

The final phase of the analysis involved the development and assessment of simple typologies based on specific types and combinations of offenses. Offenders were classified as low, medium, or high-violence in the areas of assaultiveness, robbery, and sexual offenses, and for combinations of assault and robbery offenses. These groupings were compared to assess the amount of overlap, and the predictiveness of these "violent orientations" was explored through comparing offenders' classifications based on data for the various four-year periods.

Results

Factor analysis results suggested that while violent criminality and nonviolent criminality are related, violence is not simply a byproduct of general offending. Analyses using arrest data for the whole sample and the entire follow-up period produced five major factors. Of the five, one included no violent offenses at all (thereby distinguishing violent offenders from nonviolent offenders), and the other four pointed to three separate violent orientations: assaultiveness, sexual aggression, and economic gain (robbery). One additional factor combined assault and robbery, suggesting a more generalized tendency toward violent behavior for some offenders.

Similar results were found when only those arrests occurring during four-year blocks of time were considered. Over the four four-year periods between age 18 and age 33, violent offenses tended to fall into these major groupings.

Separate analyses for each ethnic group produced essentially the same factors, with some variations across groups. For each ethnic group, both an assaultiveness dimension and a sex offense factor were found. *Assaultiveness* and drinking (i.e., liquor violations) were linked for all three

ethnic groups, but most clearly for blacks and whites. *General Violence*, which linked assault, robbery, and other serious offenses, was observed for minorities only. A separate *Robbery* factor, suggesting instrumentally motivated violence, was found only for whites and Hispanics in the sample.

The cross-classifications among the patterns suggested that these orientations (or these groups) were neither highly related nor mutually exclusive. Offenders exhibiting certain patterns of violence were only slightly more likely than other offenders to exhibit other patterns of violence. Conversely, these offenders were no *less* likely than others to also exhibit other patterns. These patterns of violent behavior, then, do not suggest violence "specializations."

Analyses designed to assess the usefulness of these typological distinctions for classifying offenders and predicting *future* criminal behavior patterns showed very limited success. The greatest stability across four-year periods was found for *Assault/liquor*, suggesting that patterns of assaultiveness (especially if accompanied by liquor violations) were more stable than other patterns of violence. For both *Sex Offenses* and *General Violence*, offenders with these patterns during ages 18-21 were over twice as likely to exhibit the same pattern in the next period as were other offenders;

however, the actual number of cases with the same pattern in both periods was very small. These analyses, then, suggest only limited predictive usefulness for these classifications based on patterns of adult arrests. While the probability of exhibiting a particular pattern was higher for offenders who exhibited that pattern in an earlier period, the overall probability of repeating a pattern was still very low.

Discussion

In general, these results suggest that the violent offenders in this sample were, to a limited extent at least, "different" from nonviolent offenders and that certain combinations of violent crimes seem to "go together." Violence, however, does not appear to be a stable characteristic of certain violent offenders' careers. The finding that types of violent behaviors are related (e.g., sex offenses, aggressive crimes, etc.) suggests possible directions for research into the root causes of various kinds of violence (rather than of violence in general). For now, the basis of differences between offenders who resort to types of violence and those who do not, however, is open to speculation. It is not possible, for example, to sort out the relative contributions of situational and predisposing factors using the present kind of data.

Chapter 1: Introduction

There is a great deal of interest among both policy makers and criminologists in the feasibility of identifying criminals whose propensity to commit violent crimes of various kinds would single them out as particularly dangerous offenders. Not only are violent offenses considered more serious than property offenses, but past research has shown that violent offenders also tend to commit a variety of other crimes as well, often at relatively high rates (Petersilia, Greenwood & Lavin, 1978; Petersilia, 1980; Peterson, Braiker & Polich, 1980; Chaiken & Chaiken, 1982, 1984; Farrington, 1982; Haapanen & Jesness, 1982). Chaiken and Chaiken (1982, 1984), for example, surveyed adult prison inmates in three states to obtain self-reports of crimes committed during the three-year period prior to entering prison. They searched for combinations of offenses that could characterize the offense behaviors of these adult prisoners. While eleven different combinations of five types of offenses were found, the Chaikens drew particular attention to offenders who admitted to having committed assault, robbery, and drug sales offenses over this three-year period, characterizing them as "violent predators." These offenders not only committed serious violent offenses but also committed a wide *variety* of offenses and committed crimes at very high rates relative to other offenders. *High-rate* criminal behavior and *violent* criminal behavior seem to go together, making violent offenders a particularly salient subject of study.

However, it is unclear from this prior research how *violent criminality* and *general criminality* (being a high-rate offender) are related. That is, the question remains as to whether high-rate criminality comes with being a violent offender or whether violence comes with being a high-rate

criminal. On the one hand, violent offending may indicate something *special* about offenders—for example, a relatively high disregard for the suffering of others—that would lead us to expect that they would also commit a greater number and variety of other criminal acts as well. On the other hand, it may be simply that the law of averages makes high-rate offenders more likely to commit violent crimes. If violence is merely another kind of crime, more-or-less randomly distributed among other offenses, the more active offenders would be more likely to commit violent crimes. Violence, in this case, would not be particularly important in differentiating offenders from one another. The important distinction would be between high-rate and low-rate offenders.

Most people, however, do consider violent offenders "different" in some basic way from offenders who do not resort to violence in the conduct of their criminal affairs. Further, violent offenders also seem to be different *from one another* to a greater degree than property offenders are to other property offenders. Different kinds of *violent* behaviors seem to suggest different motivational patterns more than do different kinds of property crimes. The individual who engages in Saturday-night barroom brawls, for example, would seem to be more different from an armed robber than a car thief is from a burglar. These motivational differences imply a greater likelihood of *specialization* and/or *stability* in offense patterns among violent offenders than among property offenders.

Motivation is often situationally determined, and it is also easy to imagine how the probability of violence may be increased simply by the kinds of situational factors associated with certain lifestyles (e.g., gang membership) or certain careers (e.g.,

drug dealing in certain areas of Los Angeles). Other things being equal, the longer an offender remains in "high-violence" situations, the more likely he would be to show a pattern of arrests for violent crimes regardless of his personal tendencies toward violence. Personal violence propensities and situational factors also interact, such that offenders who are more prone to violence would be more likely to get involved in criminal activities or situations in which violence plays a role or for which violence helps to achieve the offender's objective.

This study did not (because it could not) attempt to sort out the relative contributions of situational and predisposing factors in the etiology of violence. Rather it sought to establish whether certain offenders gravitate toward violent behavior and, if so, what patterns of violence they exhibit, if any.

Research on Violence Patterns

Some attempts have been made to identify "types" of violent offenders, either on the basis of criminal behavior patterns or in terms of psychosocial characteristics. This extensive body of literature has been reviewed from various angles in recent anthologies (Wolfgang & Weiner, 1982; Weiner & Wolfgang, 1989). In general, attempts to empirically differentiate among violent offenders on the basis of criminal behavior have not met with much success (Weiner, 1989). Conversely, there have been a great number of attempts to isolate and describe different motivational patterns associated with violent behavior (e.g., "types" of robbers), but these have not been linked empirically to combinations of offenses in criminal careers or to long-term patterns of criminal behavior (Megargee, 1982). Research has, however, found participation in violent crimes to differ by ethnicity (Hindelang, 1978; Hindelang, Hirschi, and Weiss, 1979; Cohen, 1986; Haapanen, 1990). Efforts to explain these ethnic differences have focused on the importance of socio-cultural

influences in the etiology and differentiation of violent behavior (Wolfgang and Ferracuti, 1987; Luckenbill and Doyle, 1989; Curtis, 1989).

To date, the most detailed studies of criminal behavior patterns among adults have been cross-sectional surveys of prison and jail inmates, undertaken by researchers at the Rand Corporation (Chaiken & Chaiken, 1982, 1984; Petersilia et al., 1978; Peterson et al., 1980). From these surveys, a great deal has been learned about the histories, personal characteristics, and offense patterns of serious offenders (during the periods immediately prior to entering prison). However, because the samples were not followed up to ascertain their criminal behavior after leaving prison, the stability of these patterns and therefore their usefulness for describing overall criminal orientations (i.e., violent/nonviolent, types of violence) was not assessed.

Longitudinal studies have investigated stability in violent behavior and attempted to differentiate among offenders in terms of particular combinations of officially-recorded crimes (Farrington, 1982; Weiner, 1989). Stability has been addressed in terms of criminal *specialization*; that is, researchers have sought to determine whether offenders tend to commit the same, or similar, crimes over time (Brennan, Mednick, & John, 1989; Piper, 1985; Smith & Smith, 1984; Tracy, Wolfgang, & Figlio, 1984; Wolfgang, Figlio, & Sellin, 1972). Usually, the focus has been on the probability that an offender's next crime, if any, was the same (or of the same type) as the previous one. These studies, in general, found that offenders with arrests for violent crimes were more likely than nonviolent offenders to be arrested for another violent crime. However, the next offense of these violent offenders was still more likely to be a nonviolent crime than another violent crime. Among violent offenses, Bursik (1980) found a tendency for juveniles to repeat crimes of particular types: personal injury (e.g., homicide, rape, assault),

personal property (e.g., robbery), impersonal property (e.g., burglary), and "other" offenses. The tendency to repeat personal injury crimes was noted only for nonwhites, however.

In summarizing this literature, Weiner (1989) notes:

In general, the various studies of violence specialization indicate some violence focus amid extensive diversification. What specialization exists is limited mainly to a violence cluster (personal injury offenses) or robbery. Some research has shown that mixtures of violent and property crimes occur, manifesting themselves as distinct criminal varieties. Specialization appears to increase with age, emerging most clearly in adulthood (pg. 93).

These studies suggest that violent criminal behavior may, indeed, indicate violent tendencies (which some offenders have and others do not have), leading to a greater likelihood of continued violence. They also suggest that some offenders may be inclined toward certain types of violent behavior.

Again, however, it must be noted that personal propensities toward violence and situational factors probably interact in complex ways to produce violent behavior. In reviewing the body of literature on motivational bases of violence, Megargee (1982) notes the wide diversity of theories, perspectives, and typological frameworks offered for explaining the etiology of violent behavior and the differences among violent offenders. Within this diversity, Megargee points to certain areas of agreement; in particular, he notes that

Different observers with different perspectives studying different offenses have consistently reported finding certain modal groups of offenders. These include:

- (1) Normal, adequately socialized people exposed to extremely provocative or frustrating situations or circumstances. In some instances, their violent tendencies are exacerbated by inhibition-lowering drugs, notably alcohol.
- (2) A group committed to a violent lifestyle with supporting attitudes and values. This includes both normal people who learn that violence is expected in certain circumstances by being reared in a subculture that

rewards violent behavior, and psychopaths who fail to develop adequate inhibitions against violent behavior because of disturbed developmental patterns.

- (3) Individuals whose inhibitions against violence are impaired by functional or organic pathology.
- (4) Overcontrolled offenders whose violence paradoxically stems from excessive, inflexible inhibitions against the expression of normal aggressive behavior.
- (5) A group characterized by high instigation to aggression or anger for a variety of reasons, including, but not limited to, frustration, revenge, jealousy, and oppression.
- (6) Instrumentally motivated offenders who engage in violence as a necessary means to achieve certain goals and fulfill needs other than injuring the victim. (pg. 123)

For all but groups (3) and (4), situational factors play a critical role.

Prior California Youth Authority Research

Further evidence for basic differences between violent and nonviolent offenders comes from long-term follow-up studies of young offenders (Haapanen & Jesness, 1982; Haapanen, 1990). Both studies investigated patterns of adult criminality for serious juvenile offenders who had been committed to California Youth Authority (CYA) institutions. The first study investigated the usefulness of attitudinal, background, and psychological data collected during earlier studies at the CYA for predicting subsequent arrests over a 10-15 year period. The focus was on arrest incidents and subsequent criminal justice responses. For each arrest, the most serious charge and most serious disposition were coded. A rough typology was also developed to indicate the seriousness to which each offender's criminal behavior rose. Offenders were classified in terms of their most serious arrest charge after leaving the Youth Authority¹:

¹ Since the intent was to predict future criminality from CYA data, pre-CYA arrests were not considered in defining the "types." Further, juvenile arrest data in California are not routinely maintained in central files, making their usefulness problematic.

- minor offenses only,
- felony property,
- violent economic (robbery, kidnapping), or
- violent aggressive (homicide, rape, assault).

These loosely-defined "types," were based only on the most serious arrest charge for each offender during the entire follow-up period.² No attempt was made to investigate other possible typological distinctions (based, for example, on specific combinations of offenses) or to assess the stability of these violent orientations over time.

In comparing these groups, it was found that the members of each group tended also to commit offenses of the less serious kinds, once again pointing to an association between violence and overall, general criminality. However, the violent offenders were not necessarily more criminal, overall, than their nonviolent counterparts; while they were more varied in their criminal behavior, their total number of arrests over the follow-up period did not differ substantially from those of property offenders. Further, the groups were somewhat distinguishable in terms of the data collected at the time of their CYA commitments. Differences were found for a number of attitudinal, psychological, and background variables, suggesting that the violent offenders in this sample were different from nonviolent offenders and that offenders committing "economic-type" violent crimes differed from those also committed "aggressive-type" violent crimes.

The high incidence of serious offenders in this sample, along with the fact that it was based on a prospective longitudinal design, made it attractive for the second major study, which investigated the development and change in offense careers over time (Haapanen, 1990). This study focused primarily on issues related to the evaluation of potential *selective incapacitation* policies, which

² Follow-up data were coded in terms of the most serious charge for each arrest incident; consequently, a good deal of information on other crimes committed by these offenders was not available.

would attempt to reduce crime in society by keeping certain (high-rate) offenders locked up, or *incapacitated*, longer than others. Critical to this argument is the assumption that criminal behavior, including violent behavior, is relatively stable—that criminal "careers" are characterized by more-or-less constant rates of criminality from the time an offender begins committing crimes until the day he (or she) stops altogether.

The research sought to evaluate this assumption of stability in criminal behavior patterns through investigating such issues as differences in the rates of criminality by age and ethnicity, the stability of individual crime commission rates over time and the stability of related patterns of employment, drug use, and personal relationships. The official record information used in the earlier study was updated to include the intervening years and was coded to include *all* counts and charges for *all* arrests. Additional information gathered from prison or probation files was used to help understand the characteristics associated with criminality. In most of these analyses, violent offenses were analyzed separately.

Among the main findings of the study were the following observations concerning changes in arrest rates over time.

- (1) Arrest rates for individual offenders were found not to be particularly stable across four-year blocks of time or from pre- to post-incarceration (adult prison or jail). Arrests rates for violent offenses were slightly more stable over time than arrest rates for all offenses combined.
- (2) At the aggregate level, arrest rates clearly differed by ethnicity and declined with age, both for all arrests and for only violent arrests. The decline in arrest rates by age was not as marked when only violent arrests were considered, however.

Together, these two findings were argued to suggest that the propensity toward criminal

behavior (that is, the rate of criminal activity) is not simply a stable characteristic of individual offenders. If it were, individual criminality should not have changed as much as it did over time and should not have changed as a function of age. Further, aggregate level differences in criminal behavior by age and ethnicity seemed to suggest the importance of broader social, cultural and environmental influences on criminality.³

Smaller declines by age and greater overall stability for violent offense rates further reinforced the notion that there are differences between violent offending, in general, and property offending. The nature of those differences, however, was not explored. For the most part, the study either combined all violent offenses together or looked at individual violent offenses. Groupings of offenses, suggesting criminal orientations toward *types* of violent or non-violent crimes, for example, were not investigated.

Nevertheless, the data base used in that study contained detailed arrest histories, including all counts and charges, for a large number of serious adult offenders. Such a data base would allow for studying whether these offenders tended to commit various combinations of violent and/or nonviolent offenses over the course of their criminal careers. These combinations, in turn, may point to "types" of violent offenders.

³ Other possible interpretations of these differences, such as physiological aging and biological differences between ethnic groups, were not offered because they appeared less able to account for these differences. For example, arrest rates showed declines starting at age twenty—long before physiological aging would have much effect on an offender's ability to commit crimes.

The Present Study

This study sought to explore whether identifiable patterns of violent and nonviolent offenses could be found in the overall criminal careers of the offenders in the CYA sample. The goal was to assess whether a meaningful taxonomy of violent offenders could be developed on the basis of combinations of violent and nonviolent crimes committed over the course of many years. Analyses focused on adult (after age 18) criminal record data gathered on the over 1,500 offenders included in the study discussed above.

The extent to which violent offenses tended to occur together within criminal careers was investigated through the use of exploratory factor analysis, a common data-reduction technique. Factor analysis is often used to identify groupings of variables (for example, survey items) that seem to have a common dimension. That commonality is evidenced by a tendency for certain values (e.g., responses) for those variables to "go together." As an example, socio-economic status, which is most clearly associated with income levels, may also be indicated by a person's level of education and type of occupation. If questions regarding income, occupation, and education were included on a questionnaire and these items were factor analyzed, those three items (and possibly others) would likely be included in a single factor. A researcher interested in reducing the number of variables in later analyses may decide to combine them into a single variable (hence, data reduction). For the present study, the interest was not in data reduction, but rather in the ability of factor analysis to identify these commonalities among variables.

Conceptually, this approach treats an individual's offense career as a series of choices indicating preferences for one type of crime over another. The factor analysis explores the extent to which preferences for certain types of crime (as indicated by the number of arrest charges for those types of offenses) go along with preferences for certain *other* types of crimes. If offenders, as a

group, chose offenses more-or-less at random, showing no particular tendency to gravitate toward certain combinations, no factor structure would emerge. If, however, offenders who "chose" certain crimes tended also to choose certain others, those offenses would score high ("load") on a single factor. The interpretation of the factor would depend on which offenses were included. If, for example, offenders who committed, say, assaults tended also to commit rape more than other kinds of offenses, these two offenses would form the basis of a single factor. Such a combination might be interpreted as pointing to an "aggressiveness" orientation for some violent offenders that includes both simple aggression and sexual aggression. Put simply, the "factors" are based on tendencies for certain kinds of offenses to occur together in offense careers.

Twenty-two categories of offenses were used (sample statistics can be found in the Appendix):

Violent offenses

Homicide
Aggravated Assault
Rape
Misdemeanor Assault
Armed robbery
Strongarm robbery
Other person offenses

Violence-related offenses

Weapons offenses
Sex offenses
Pimping/prostitution

Property offenses

Burglary
Receiving stolen property
Grand theft
Forgery
Grand theft auto
Other theft
Other auto theft

Drug/alcohol offenses

Liquor violations
Drug use
Drug sales

Miscellaneous offenses

Arson
Other offenses

It should be pointed out that the use of official record information has been argued to pose certain problems for understanding violent behavior.

Violent crimes are relatively rare in most populations, including offender populations, and arrests are even less common. Official data therefore provide, at best, an incomplete picture of the volume and types of violent behavior at both the individual and the aggregate levels. Moreover, the uncertain relationship between what an offender actually does and what he is charged with, along with an uncertain distribution of arrests among offenses and offenders, reduces the confidence that can be placed in the use of official records to measure criminal behavior. For these reasons, some researchers have suggested that official data are inadequate for studying criminal behavior patterns and have strongly recommended using only *self-report* data—by themselves or in conjunction with official data—for this purpose (Blumstein & Cohen, 1979; Peterson et al., 1980; Blumstein, Cohen & Visher, 1986).

These limitations of official data, however, do not rule out the possibility that useful and enlightening information on criminal behavior can be gained from studies using official data without self-reports. Official data have the advantage of being relatively easy and less expensive to obtain, making it feasible to do longitudinal research covering several decades. Interview or survey studies, in order to avoid the problem of long-term recall, would require a number of measurements, a laborious and expensive undertaking. Moreover, self-report studies must rely for the most part on voluntary participation by incarcerated offenders, whose representativeness may be very questionable. While a few active and persistent offenders may be found in prisons and jails, those who are not incarcerated may be disinclined to be contacted and interviewed about their activities. Official data, in contrast, are equally available for the most active and dangerous criminals and for the less serious offenders.

Finally, while self-report data have definite advantages over official data for studying short-

term (two-to-three year) patterns of criminal behavior⁴, these short-term patterns may not be very indicative of longer-term (i.e., overall career) patterns. Self-report studies of offenders tend to sample only incarcerated offenders and to focus on those crimes committed during the period immediately prior to incarceration. At these times, offenders are often engaged in uncharacteristically serious and high-rate criminal behavior (Chaiken & Chaiken 1984; Haapanen, 1990). The short-term patterns or combinations of offenses may not reveal much about longer-term criminal orientations.

Official data, if they cover much longer periods, may sample offenses well enough to provide a *better* picture of the more stable offense patterns than most self-report studies are able to provide. At the very least, exploratory investigations of criminal career patterns based upon longitudinal, official data may provide important clues concerning the nature and development of violent behavior and provide a baseline of findings against which future studies using self-report data could be compared.

Method

Sample and Data

The data used in this study came from the recently-completed study of adult criminal career patterns described above (Haapanen, 1990). Most of the 1,532 offenders in the sample were involved in major studies undertaken at various CYA institutions during the 1960s and early 1970s

⁴ Certain researchers, for example, sought to determine whether official record data could be used to identify offenders who were classified in particular ways based upon self-reported criminal behavior (Dunford and Elliott, 1984; Chaiken and Chaiken, 1984). In both cases, offenders with particular patterns of *self-reported* offenses could not be identified on the basis of their official records. Thus, these researchers argued that official record data were not very useful for identifying the types of offenders of greatest interest to criminal justice agencies.

(Jesness, 1965, 1969, 1971a, 1971b, 1975; Jesness, DeRisi, McCormick, & Wedge, 1972) and appeared reasonably representative of the CYA institutional population of that period. In addition to these 1,259 CYA cases, two non-CYA samples were also included:

- (a) 176 former adult prison inmates who were sentenced to prison for robbery or burglary and who had no known history of state-level juvenile commitments, and
- (b) 97 adult probationers who were sentenced to jail and/or probation for either robbery or burglary and who had, to that point, no prior juvenile or adult state-level commitments.

These two subsamples were included in the earlier study to provide a basis for arguing that observed patterns were not peculiar to offenders with prior CYA incarcerations. Since the present study was exploratory, these cases were retained in the sample and not analyzed separately.

The focus of the study was on patterns of *adult* violent offenses (occurring after age 18). The data were collected at different times for different parts of the sample, but were complete through at least 1984. Arrest information was arranged by calendar year on the data file. The time period covered by the data for each offender extended from the first day of the calendar year during which the offender was "mostly" 18 years old⁵ to the last day of the last full year of follow-up data. The amount of follow-up ranged from 5 to 20 years, with an average of 14.5 years. Most of the sample (87%) had at least ten years of follow-up data.

Arrest data were obtained primarily from California Criminal Identification and Investigation (CI&I) "rap sheets."⁶ Additional data on crimes came from prison and probation reports. Every charge, count, and "cleared" crime noted on the rap

⁵ An offender who turned 18 in January to June was considered 18 years old the whole year. Offenders turning 18 in July to December were not considered 18 until the following calendar year.

⁶ In California, all adult arrests are reported to CI&I. Juvenile arrests may or may not be (and generally are not). Analysis was limited to adult arrests in order to ensure comparable data quality across individuals.

sheet or written report was coded. Separate entries were made for each type of crime and each date. Multiple counts and multiple charges were coded as having all occurred on the same date unless information on actual dates was available. In a few instances, offenders were known to have committed crimes for which they were not arrested (e.g., a burglar may have been known to be responsible for a number of earlier burglaries). These were coded as well, under the assumption that these indicators of overall criminality were probably no less valid than other officially-recorded offense data. Thus, the data do not indicate either the actual number of crimes each offender committed or the number of crimes for which each individual was arrested. They do, however, provide the best measure of criminal behavior available from official sources.

The 1,532 offenders in the sample averaged 18.45 arrest charges each over the follow-up period (28,265 total). Arrest charges for violent offenses ranged from zero to 33, with a mean of 3.00. Most of the sample (72%) had at least one adult arrest for a violent crime, 57% had two or more arrests for violent offenses, and 43% had three or more such arrests.

Incarceration/supervision information also came primarily from rap sheets. For each offender, all time periods during the follow-up were coded as time "free," time under probation supervision, time in jail, time in prison, time under parole supervision, etc. Only the jail time proved to be difficult to determine, since release dates generally were not available. Consequently, each jail term was coded as its sentence length unless the actual time served could be verified by the reports. In the present study, these data were used to establish minimum "at risk" times during particular periods for classifying offenders. On average, the sample members spent 11.2 years of the follow-up period (75.6%) "on the street" (not incarcerated).

Additional sample characteristics are presented in the Appendix.

Analysis

The first part of the analysis focused on what offenses seemed to go together (among violent offenses alone and among all offenses together) over the entire follow-up period. Counts of arrest charges over the follow-up period were factor analyzed to explore the extent to which various kinds of offenses coexisted within overall criminal careers. The intent was to derive a relatively small number of offense groupings that could be used to characterize criminal careers. The factors were extracted using principal components and were rotated using varimax rotation to obtain orthogonal (i.e., uncorrelated) factors. In order to reduce the statistical problems associated with analyzing non-normally distributed variables and to reduce the effect of extreme cases on measures of association, these analyses were performed for log-transformed⁷ variables and dichotomized variables.

In order to investigate whether similar patterns would emerge, factor analyses were also performed separately for shorter time periods and for each major ethnic group (white, black, and Hispanic). To investigate shorter-term patterns, arrest charges that occurred during four-year blocks of time were analyzed. These four-year periods were defined by age, and covered the first sixteen years of adult follow-up (ages 18-21, 22-25, 26-29, and 30-33).⁸ The analyses were identical to those performed for the total follow-up period. The results for the four separate factor analyses were compared to assess whether similar factors emerged and whether these factors corresponded to those found for the entire follow-up period. These analyses were aimed at understanding the relationship between patterns

⁷ The natural logarithms of the offense counts were used in the analyses to reduce the effects of skewness on the correlations.

⁸ After age 33, the number of cases with follow-up data and the number of offenses both dropped off sharply. Thus, while some cases had follow-up information through age 37, the data for ages 34-37 were only analyzed when the focus was on the total adult follow-up period.

observable over the shorter follow-up periods and those observable over much longer periods. They addressed issues of specialization as well as the overall differentiation of offenders based on different observation "windows" within their careers. Analyses by ethnicity were used to explore the extent to which patterns of violent offending differed for these subpopulations of offenders.

The final phase of the analysis involved the development and assessment of simple typologies based on specific types and combinations of

offenses. Offenders were classified as low, medium, or high-violence in the areas of assaultiveness, robbery, and sexual offenses, and for combinations of assault and robbery offenses. Offenders could score high on any or all of these dimensions. These groupings were compared to assess the amount of overlap, and the stability of these "violent orientations" was explored through comparing offenders' classifications based on data for the various four-year periods.

Chapter 2: Patterns of Offending

For offenses occurring during the entire adult follow-up period, the factor analysis identified seven factors for both the dichotomized variables and the log-transformed counts. After varimax rotation, slightly different factors emerged, but the first five factors were very similar. The factor loadings greater than .30 for the analysis involving logged variables are shown in Table 1. The factors have been named to indicate the types of offenses included. The first (*Property*) and fourth (*Drug Use*) factors include no violent offenses. The latter included burglary and receiving stolen property (which loaded higher on the *Property* factor), but revolved mainly around drug use and drug sales. The remaining factors each included one or more violent offenses. These factors suggest a distinction between three types of violence: assaultiveness (*Assault*), economic violence (*Robbery*), and sexual violence (*Sex Offenses*). The fourth violence factor combined these three, and will be referred to as the *General Violence* factor; however, it might also have been called a "predatory violence" factor, since it has some similarity to the type suggested by Chaiken and Chaiken (1982, 1984). Note that while the *General Violence* factor did not include rape, misdemeanor assault, or strongarm robbery, the factor loadings for these offenses were not trivial.

The inclusion of nonviolent offenses in these "violence" factors suggests a broader character to these offense orientations. The *Assault* factor, for example, also included liquor violations and drug use. The inclusion of these offenses supports previous research, which suggested that assaultiveness, as a somewhat independent trait, has been found to go along with "getting high" on drugs and/or alcohol (Hartstone & Hansen, 1984; Tinklenberg, Murphy, Murphy, & Pfefferbaum, 1981). This assault/liquor combination also gives some credence to the first of Megargee's six modal types of violent offenders (see page 2). The

inclusion of homicide and grand theft auto in the *Robbery* factor also seems reasonable in light of the risk of harm inherent in armed encounters and the attractiveness of stolen cars as getaway vehicles. The fact that pimping/prostitution loaded on both the *Sex Offenses* factor and on a separate factor, called "Pimping," along with strongarm robbery, indicates the dual nature of that offense (as a sex offense and an economically oriented crime against persons).

Separate Four-year Age Blocks

Factor analysis based on known offenses covering nearly a twenty-year period is very useful for understanding broad patterns in criminal behavior; however, the study of shorter-term patterns is perhaps even more interesting, since it could shed light on how criminal behavior patterns may change over time and on the stability of patterns observable at particular ages. Long-term (total career) factors may indicate tendencies that are only observable over that entire twenty-year period. Stronger tendencies may be exhibited over shorter periods, and these tendencies may point to strategies aimed at reducing the amount of future criminal behavior for these offenders.

Eight factors were extracted for all periods except the 30-33 age block, for which only seven emerged. The general nature of these factors⁹ and the order in which they were extracted in the four age blocks are shown in Table 2. There was considerable similarity across age blocks with respect to the first four factors. With a couple of exceptions, the same four factors were chosen first, although not necessarily in the same order. For all four age blocks, the first factor involved *Property* offenses, and for all but the last block, the next

⁹ The factors were named on the basis of the highest loading offense and the combination of offenses included. Factors with the same name may not include exactly the same variables in different age blocks.

Table 1
Factor Loadings For Offense Factors
During Entire Follow-up Period

Offense	Factor					
	Property Offenses	Assault/Liquor	General Violence	Drug Use	Sex Offenses	Robbery Pimping
Homicide						.629
Aggravated assault		.512	.483			
Rape			(.267)		.638	(-.249)
Misdemeanor assault		.615	(.212)			
Armed robbery			.503			.370
Strongarm robbery			(.209)			.366
Other person offenses			.685			.357
Weapons offenses			.576			
Sex offenses					.795	
Pimping/prostitution					.458	.428
Burglary	.541			.364		
Receiving stolen property	.522			.442		
Grand theft	.521					
Forgery	.478					
Grand theft auto	.558					.376
Other theft	.450					
Other auto theft	.604					
Liquor violations		.712				
Drug use		.345		.604		
Drug sales				.735		
Arson						
Other offenses	.341	.621				-.743

factor revolved around assaultiveness (*Assault/Liquor*). The third and fourth factors generally involved *Sex Offenses* and assault/robbery combinations (*General Violence*). For the 18-21 period, the *Sex Offenses* factor, which was among the first four in the other age periods, was extracted sixth, after *Auto Theft* and *Drug Use*. The remaining four (or three) factors tended to be one-property-offense factors, although a few included violent offenses at relatively low loading levels (shown in the table as combination factors).

These findings are remarkably similar to those found for the entire follow-up period, and suggest that, beyond general property offending, the most clearly identifiable offense patterns over the short term (as well as over the long term) seem to involve propensities toward violent behavior: assaultiveness, sexual aggression, and general, serious violence.

These three violent orientations, along with the property factor, were then compared across age blocks to assess their similarities and differences. Table 3 shows which offenses loaded at the .30 level (or greater) for each of the four factors. From this table, it is apparent that there were remarkable similarities in the make-up of these factors both across age blocks (Table 2) and with the factors found for the entire follow-up period (Table 1).

There were, however, also some interesting changes over time. In general, it appears from Table 3 that during their twenties, these offenders showed considerable consistency in their patterns of offending, branching out somewhat after age 30 (i.e., committing a broader range of offenses). The *Property* factor, for example, came to exclude such property offenses as forgery and, later, grand theft, and to include drug use (starting in the second

Table 2
Order of Factors Identified During Four-year Age Blocks

Factor	Age Block			
	18-21	22-25	26-29	30-33
Property	1	1	1	1
Assault/Liquor	2	2	2	4 ^a
Sex Offenses	6	3	3	3
General Violence (Assault/Robbery)	3	4	7	2
Auto theft	4	5	5	
Drug use/sales	5	6		6
Arson	8	8	8	
Drugs/robbery/sex	7			
Theft/robbery		7	4	7
Homicide			6	
Forgery			7	5

^a For this age block, liquor offenses were not included in the *Assault* factor.

block) and, for the fourth block, auto theft and strongarm robbery. For the *Assault/liquor* factor, the same four variables loaded (over .30) in each of the first three age blocks; as in the earlier findings involving the total follow-up period, assault offenses were combined with liquor violations and other offenses in this factor. Starting at age 30, however, assaultiveness appeared as part of a broader orientation that also included grand theft, other theft, and arson as well.

The *Sex Offenses* factor was defined by the inclusion of rape and other sex offenses.¹⁰ This factor was found for all four age blocks. For the last three age blocks, the factor also included other person offenses (primarily kidnapping and extortion). Thus, a tendency among some offenders to gravitate toward sex offenses also appears to have spanned the twenties and early thirties.

The factor called *General Violence* was identified by including aggravated assault and armed robbery, and, to a lesser extent, homicide.

¹⁰ Due to the very small numbers involved, arrests for pimping/prostitution were not counted separately in the four-year analyses. These arrests were included in the category of *other sex offenses*, which also included child molesting, statutory rape, perversions, indecent exposure, etc.

This complete combination of offenses was not found for each age block, however. Homicide was not included during the 18-21 block. For the 26-29 age block, the factor that included homicide, weapons, and both aggravated assault and armed robbery showed loadings for the latter offenses at a level slightly below the threshold for inclusion (.26). Thus, while this pattern of generalized, serious violent behavior spanned all of the age periods considered, the specific combination of assault and robbery was not clearly found for all periods. Moreover, the various age blocks differed, somewhat, in the kinds of *other* offenses that were included with them. Weapons offenses were included in all four of the age blocks, while homicide was included only in three, and other person offenses were included in only two blocks.

One violence orientation did *not* emerge as a common pattern in these analyses: robbery, independent of the more generalized violence pattern. It may be that this kind of narrow pattern of committing robbery is identifiable (using official records) only over longer periods and/or in the context of analyzing larger numbers of arrests. It would appear that, for the total sample, robbery by itself was not a common pattern.

Table 3
Variables Loading On Offense Factors
During Four-year Age Blocks

Offense	Factor			
	Property	Assault/ Liquor	Sex Offenses	General Violence
Homicide				2 ^a 3 4
Aggravated assault		1 2 3 4	3 -	1 2 *b4
Rape			1 2 3 4	
Misdemeanor assault		1 2 3 4		
Armed robbery				1 2 *b4
Strongarm robbery	4			
Other person offenses			2 3 4	1 - - 4
Weapons offenses				1 2 3 4
Sex offenses ^c			1 2 3 4	
Burglary	1 2 3 4			
Rec. stolen property	1 2 3 4			
Grand theft	1 2 3 -	4		
Forgery	1 2 - -			
Grand theft auto				
Other theft	1 2 3 4	4		
Other auto theft	4			
Liquor violations		1 2 3 -		
Drug use	2 3 4			
Drug sales				
Arson			4	
Other offenses	1 2 3 4	1 2 3 4		

^a Numbers indicate whether the offense loaded above .30 on this factor (after rotation) for this age block:

- 1 = 18-21
- 2 = 22-25
- 3 = 26-29
- 4 = 30-33

^b These variables loaded *close* to .30 on this factor (each was at .26).

^c Due to the small numbers, pimping/prostitution arrests were included in this category.

Overall, these results reinforce the earlier findings for the total follow-up period and point to the existence of three major violence orientations among the offenders in this sample: assaultiveness, sex offending, and generalized serious violence. These orientations emerged for the full follow-up period and for each of the four four-year periods spanning these offenders' twenties and early thirties. Such consistency suggests that there are,

indeed, groups of offenders who tend to gravitate toward particular forms of violent behavior. If violence were merely a byproduct of a general life of crime, one would expect violent crimes to be more closely related to property crimes (robbery, for example, being related to burglary, grand theft, and other serious criminal methods of pursuing economic gain).

Chapter 3: Ethnic Differences in Violence Patterns

Factor analysis results based on the entire sample may be heavily influenced by ethnic differences in patterns of criminal behavior. If, for example, white, black and Hispanic offenders each specialized in only one type of violent crime pattern, a combined factor analysis may identify each ethnic pattern as a distinctive pattern for the entire sample. The results at this level would suggest that all ethnic groups would exhibit all patterns of violent crimes. Only by analyzing each group separately could the ethnic differences be identified.

Results for a combined sample may also mask certain ethnic differences. For example, if one ethnic group is smaller than the others, that group's behavior patterns may account for less of the overall variance in behavior for the sample. These patterns, which would be important for understanding the behavior of that segment of the offender population, may not be "discovered" by the factor analysis. In the present case, since Hispanics constituted only about 17% of the sample, it was possible that the factor analysis for the whole sample would not be able to identify factors that help understand patterns of offending among Hispanics.

Further, the identification of ethnic (or other group) differences in violent offending may be an important step in the search for a better understanding both of the causes of violence and of the factors that influence its expression. If important group differences are undetected and/or ignored, research on causes may focus only on the role of individual characteristics (e.g., psychological, emotional factors) and overlook equally important social or environmental factors that may explain group differences in observed violent behavior.

To explore the extent of possible ethnic differences/similarities in patterns of violent arrests, factor analyses of arrest charges covering the entire follow-up period were repeated for each major ethnic group: whites, blacks, and Hispanics.¹¹ Eight factors were extracted (at the minimum eigenvalue of 1.0) for blacks and Hispanics, and seven were extracted for whites. For each ethnic group, most factors included at least one violent offense. Since the focus of this study was on violent offenses, only those factors that included at least one violent offense will be discussed.

Two of the factors found for the entire sample were found for all three ethnic groups. While there were some differences in make-up of these factors across ethnic groups, both a *Sex Offenses* factor and an *Assault* factor (combining misdemeanor and felony assault) emerged for all three. Other factors similar to those found for the combined sample were found for two of the three groups. *General Violence* (combining felony assault and armed robbery) was found for blacks and Hispanics, but not for whites. A separate *Robbery* factor, combining armed and strongarm robbery (but not assault), was found for whites and Hispanics, but was not found for blacks. Even for the factors that did include the same major violent offenses, moreover, there were differences across ethnic groups in terms of the other offenses that were included.

White Offenders

Of the seven offense factors extracted for white offenders, only four included violent offenses (three of the first four factors contained none). The four "violence" factors are shown in Table 4. Three

¹¹ The 28 cases who did not fall into one of these three categories were excluded from these analyses.

Table 4
Violent-offense Factor Loadings For White Offenders (n = 798)

Offense	Factor			
	Assault/ Liquor (2) ^a	Sex Offenses(5)	Robbery (6)	Homicide/ Robbery (7)
Homicide				.751
Aggravated assault	.576			
Rape		.775		
Misdemeanor assault	.655			
Armed robbery			.427	.479
Strongarm robbery			.515	
Other person offenses		.319	.663	
Weapons offenses				
Sex offenses		.610		
Pimping/prostitution			-.374	.348
Burglary				
Receiving stolen property				
Grand theft				
Forgery				
Grand theft auto				
Other theft				
Other auto theft				
Liquor violations	.711			
Drug use	.399			
Drug sales				
Arson		.362	-.327	
Other offenses	.598			

^a The number in parenthesis indicates the order of the factor among all those extracted.

violence factors were similar to those found for the total sample, distinguishing between assaultive crimes, sex offenses, and violence for economic gain (robbery). The last factor defies easy interpretation, combining homicide, armed robbery, and pimping/prostitution.

As with the entire sample, assaultiveness among whites was associated with alcohol and drug use extensive enough to result in arrests for these offenses. The *Sex Offenses* factor was also similar to that found for the total sample. Loading on this factor were forcible rape, other sex offenses, and other person offenses (kidnapping, primarily). Also included here, however, was arson. While this combination may suggest interesting psychoanalytic interpretations of sexual deviation, the actual number of arsonists in the sample was very small. Of the 111 white offenders with a rape or sex

offense arrest, four (3.6%) also had an arrest for arson, compared to 1.7% of other white offenders. These four offenders hardly constitute a solid basis for asserting or studying a relationship between adult sex offending and fire-setting.

The third violence factor for whites combined only robbery (felony and misdemeanor) and other person offenses, suggesting that some white offenders confined their criminal activities primarily to taking things directly from other people by force. This pattern emerged for the total sample when the entire follow-up period was analyzed but not when for the four-year periods. The fact that it emerged here as the sixth factor (out of seven total) suggests that this orientation may be confined to a relatively small group of these offenders, which may help to explain why it was missing from the four-year results. The negative

Table 5
Violent-offense Factor Loadings For Black Offenders (n = 451)

Offense	Factor				
	Sex Offenses (2) ^a	General Violence (3)	Homicide/ Assault (4)	Assault/ Liquor (5)	Assault/ Drugs (6)
Homicide			.658		
Aggravated assault		.373	.504	.332	
Rape	.416	.492			
Misdemeanor assault				.411	.436
Armed robbery		.655			
Strongarm robbery	.406		.346		
Other person offenses		.700			
Weapons offenses			.630		
Sex offenses	.811				
Pimping/prostitution	.644				
Burglary					.452
Receiving stolen property					
Grand theft					
Forgery					
Grand theft auto					
Other theft					
Other auto theft				-.315	
Liquor violations				.774	
Drug use					.375
Drug sales					.789
Arson					
Other offenses				.361	

^a The number in parenthesis indicates the order of the factor among all those extracted.

loadings for arson and for pimping/prostitution indicate that these "robbers" tended *not* to be arrested for those crimes.

Black Offenders

Factor loadings for the five factors containing violent offenses for black offenders are shown in Table 5. The factor structure for black offenders differed considerably from that of whites, with the main difference being that all most of the major violent offenses (exceptions being armed robbery and homicide) loaded on two or more factors. Further, violent offenses were included in five of the first six factors extracted. Blacks, in other words, showed a more elaborate array of violent offense patterns than did whites, and these patterns accounted for more of the overall variance in arrests.

The first violence factor for blacks centered on *Sex Offenses*. Unlike the *Sex Offenses* factor for whites, however, this factor included strongarm robbery and pimping/prostitution in addition to rape and other sex offenses. Rape did not load as highly on this factor for blacks as for whites.

The second factor extracted for blacks (*General Violence*) included a variety of violent offenses (assault, rape, robbery, and other person offenses). The inclusion of rape in this factor is consistent with current conceptualizations that hold rape oftentimes to be as much a crime of aggression and power as it is a sexually-motivated crime (Groth, 1979; Megargee, 1982). This combination of rape and other types of violent crimes was found only for this ethnic group, however.

Table 6
Violent-offense Factor Loadings For Hispanic Offenders (n = 255)

Offense	Factor				
	General Violence (3) ^a	Sex Offenses (4)	Assault/Misc. (6)	Homicide/Misc. (7)	Robbery/Arson (8)
Homicide				.852	
Aggravated assault	.626		.343		
Rape		.771			
Misdemeanor assault			.699		
Armed robbery	.481				.484
Strongarm robbery					.327
Other person offenses	.703	(.286)			
Weapons offenses	.516			.387	
Sex offenses		.825			
Pimping/prostitution			.573		
Burglary				.317	
Receiving stolen property				.373	
Grand theft					
Forgery					
Grand theft auto					
Other theft			.357		
Other auto theft					
Liquor violations					
Drug use					
Drug sales					
Arson					.764
Other offenses	.311		.357		

^a The number in parenthesis indicates the order of the factor among all those extracted.

The next factor, shown in the table as *Homicide/Assault*, includes homicide, weapons offenses, and strongarm robbery, in addition to aggravated assault. This orientation would appear to lie between the kind of instrumental, general violence of the previous factor and the even more expressive violence suggested by the next factor: *Assault/liquor*. This latter "assaultiveness" factor is similar to the one found for whites, combining drinking with assaultive behavior. The final violence factor for blacks revolved primarily around drug sales, but included misdemeanor assaults.

Hispanic Offenders

The first two arrest patterns identified for Hispanics included combinations of property offenses. Of the violent offense factors (Table 6) *General Violence* was extracted first (third overall). This combination of aggravated assault, armed

robbery, and other person offenses also included weapons offenses. Of the remaining four factors, three were similar to those found for whites in that they focused on only one type of violent crime. Again, however, there were differences in the types of *other* offenses that were included.

The *Sex Offenses* factor for Hispanics included only rape and sex offenses, although the loading for other person offenses was just below the .30 threshold for inclusion (for whites, it was just *above* the inclusion threshold). In contrast, the factor that included the assault offenses also included a variety of other offenses (pimping/prostitution, theft, other offenses); this variety made interpretation of this factor in terms of *assaultiveness* seem questionable. Similarly, the robbery offenses loaded on a factor for which the highest factor loading was for arson. Given the nature of the data

used for these analyses (i.e., official arrest data), it is prudent to avoid taking these individual loadings too seriously. While they tend to confirm the existence of somewhat distinct patterns of violent behavior, the meaningfulness of the results in terms of definite clusters of offenses is unclear.

Summary. In general, the results of these exploratory factor analyses for individual ethnic groups tend to support and to extend the results for the entire sample. The emergence of an *Assault* factor and a *Sex Offenses* factor suggest that these two dimensions of violent criminal behavior may be

characteristic of offender populations in general. Their expression, however, appears to have differed somewhat by ethnicity. Other factors, such as *General Violence*, emerged only for the nonwhite offenders. This finding is consistent with Bursik's (1980) results, which pointed to personal injury specialization among nonwhites only. Overall, the results of the separate analyses by ethnic group suggest that in this sample of serious offenders, patterns of violent behavior (assaultiveness, sex offending, and economic gain) differed both in their expression and in their relative importance among ethnic groups.

Chapter 4: Prevalence and Stability Of Violent Arrest Patterns

The factor analysis results have all pointed to the existence of several major "violence" orientations. These results indicated that particular combinations of offenses tended to occur together within the offense careers of these offenders. While there was some variation in these "groupings" across ethnic groups and time periods, three primary orientations emerged: assaultiveness (usually including an alcohol-use dimension), sex offending, and generalized violence (including, at a minimum, both assault and robbery). These analyses, however, do not indicate how prevalent these groupings were nor how stable these orientations may be. To be useful for classifying offenders, the offense groupings should be able to identify groups of offenders that differ from one another and yet are not so small that they would be impossible to identify with any accuracy.

Further, classifications based upon this kind of knowledge of offense patterns should have implications for future behavior if they are to have relevance for setting policy regarding individual offenders. In this regard, it is important to understand something about how stable these patterns are over time. If offenders tend to stay with certain patterns over a long period of time (say, eight years), the patterns may suggest underlying *individual orientations* toward certain kinds of violent behavior or continued involvement in social environments conducive to violence. Instability (different offenders involved in these various types of offenses at different times), on the other hand, may suggest that certain offenses simply "go together" and that offenders move between patterns for various reasons. In this sense, the term "violent orientation" would not seem appropriate, since it suggests a more stable motivational pattern.

To better understand the factor analysis results in terms of their usefulness for identifying

meaningful, stable patterns of violent behavior over time, offenders were classified in terms of simplified "classifications" of assaultiveness, generalized violence (assault and robbery), and sex offending.¹² Since it was critical that offenders be classified in terms of the defining offense (to avoid having offenders classified along a dimension of violence when they had no violent arrests), each "classification" involved, first, simply whether the offender had arrests for those violent offenses that "defined" the types. For those offenders who met these criteria, further distinctions were made in terms of *levels of participation*, with level defined in terms of the number of these violent arrests. No "weighting" of different types of offenses was used, since no empirical basis for determining the appropriate weights was available.

Classifications of Violence

The *General Violence* classification involved, first, identifying those offenders with at least one arrest for felony assault *and* one for armed robbery. For these offenders, a count was made of all arrests for the three offenses that loaded (above .30) on the *General Violence* factor: aggravated assault, armed robbery, and other person offenses. All other offenders received a "zero" level on this variable.

For *Assault*, the main criterion was that the offender have at least one arrest for an assault offense. Assaultiveness, then, could be established simply by a count of all arrests for aggravated assault and misdemeanor assault; offenders without assault arrests scored zero. In order to incorporate the alcohol-use dimension, a separate variable was created that equalled the total assault arrest count only for those offenders who also had one or more arrests for liquor violations. All other offenders

¹² Only those offenders with at least twelve months of time at risk (i.e., on the street) were included.

Table 7
Distributions of Levels on Violence Patterns
(N = 1,525)

Number of Arrests	Pattern			
	Assault	Assault/ Liquor	Sex Offenses	General Violence
0	690 (45.2%)	1,129 (74.0%)	1,257 (82.4%)	1,265 (83.0%)
1	319 (20.9%)	132 (8.7%)	140 (9.2%)	—
2	180 (11.8%)	93 (6.1%)	53 (3.5%)	48 (3.1%)
3	133 (8.7%)	56 (3.7%)	32 (2.1%)	51 (3.3%)
4	79 (5.2%)	48 (3.1%)	15 (1.0%)	42 (2.8%)
5	41 (2.7%)	23 (1.5%)	10 (0.7%)	38 (2.5%)
6	40 (2.6%)	22 (1.4%)	8 (0.5%)	23 (1.5%)
7 or more	43 (2.8%)	22 (1.4%)	10 (0.7%)	58 (3.8%)

were given a zero level on this latter variable even if they had assault arrests.

For *Sex Offenses*, all arrests for rape, other sex offenses, and pimping/prostitution were counted. Offenders without arrests for one of these offenses received a zero.

Table 7 shows the distribution of levels on these variables. Note that while over half the sample had at least one arrest for assault, only (26.0%) had both an arrest for assault and an arrest for a liquor violation. Thus, the *Assault/Liquor* pattern describes only about one-fourth of the sample. Less than half of these offenders with assaults and liquor violations (11.2% of the sample) had more than two arrests for assault in the adult follow-up period.

The other two patterns also include only a small percentage of the sample. Only 17.6% of the sample had any sex offense arrests; of these offenders, over half (9.2%) were arrested only once for a sex offense. Similarly, only 17.0% of the sample had arrests for both aggravated (felony) assault and armed robbery. Of these offenders, however, almost half (7.8%) had over four arrests for these two offenses plus other person offenses.

Classifications in these three areas of *Assaultiveness*, *Sex Offending*, and *General Violence* were established by dividing the portion of the

sample with non-zero levels on each of the violence patterns roughly in half, resulting in three levels for each variable. These collapsed variables became the "classifications" for *Sex Offending* and *General Violence*. For *Assaultiveness*, a five-category variable, which combined levels of assault with whether or not the offender had any arrests for liquor violations, was constructed (see below).

For *Sex Offending*, the levels were established as follows:

- (1) no arrests for rape, pimping/prostitution, or other sex offenses;
- (2) one arrest for any of these offenses; and,
- (3) two or more arrests for these offenses.

For *General Violence*, the following levels were used:

- (1) no arrests for both felony (aggravated) assault and armed robbery;
- (2) arrests for both felony assault and armed robbery and a total of two or three arrests for these offenses plus "other person offenses" (kidnapping, extortion); and,
- (3) same as (2), but four or more arrests for these three violent offenses.

The *Assaultiveness* classification was established somewhat differently in order to capture both assaultiveness and the combination of assaultiveness and arrests for alcohol-related offenses. The result was a five-category variable, defined as follows:

Table 8
Percentage of Assaultiveness Levels
By General Violence Level

<u>Assaultiveness Level</u>	<u>General Violence Level</u>			<u>Total</u>
	<u>No Felony Assault and Robbery Arrests</u>	<u>2 - 4 Arrests</u>	<u>5+ Arrests</u>	
3+ Assaults/ No Liquor	102 (8.1%)	16 (11.3%)	47 (39.5%)	165 (10.8%)
1 - 2 Assaults/ No Liquor	185 (14.6%)	61 (43.3%)	28 (23.5%)	274 (18.0%)
No Assault Arrests	690 (54.5%)	—	—	690 (45.2%)
1 - 2 Assaults/ 1+ Liquor	170 (13.4%)	46 (32.2%)	9 (7.6%)	225 (14.8%)
3+ Assaults/ 1+ Liquor	118 (9.3%)	18 (12.8%)	35 (29.4%)	171 (11.2%)
Total	1,265 (100%) ^a	141 (100%)	119 (100%)	1,525 (100%)

^a Percentages may not add to 100% due to rounding.

- (1) three or more arrests for assault, but no arrests for liquor violations;
- (2) one or two arrests for assault, but no arrests for liquor violations;
- (3) no arrests for assault;
- (4) one or two arrests for assault and at least one arrest for a liquor violation; and
- (5) three or more arrests for assault and at least one arrest for a liquor violation.

Relationships Among the Types

The relationships of these classifications to one another were assessed by simple cross-tabulations, the results of which are shown in Tables 8, 9, and 10. Table 8 shows the relationship between *General Violence* and *Assaultiveness*. The two classifications are related, of course, due to the overlap in the definitions of these two patterns. Note, however, that offenders who had arrests for both aggravated assault and armed robbery were not as likely to have liquor arrests along with their arrests for assault. For example, among those offenders with four or more arrests for assault/robbery/other person offenses, 63.0% had

no liquor violations (39.5% plus 23.5%). Among the offenders who did not have both an arrest for felony assault and an arrest for armed robbery (the "No Felony Assault and Robbery Arrests" category), equal numbers had assaults with liquor violations and assaults without liquor violations (287 with liquor violations and 288 without). Thus, while there was considerable, built-in overlap between levels of these two dimensions of violence, there was also some indication that they point to somewhat distinct patterns of violent behavior.

Table 9 shows only a slight relationship between levels of *General Violence* and levels of *Sex Offenses*. While the Chi-square statistic is significant for this comparison, the figures suggest little overlap between these dimensions. Of the 460 offenders that had assault/robbery arrests or sex offense arrests, only 68 (14.8%) had arrests for all three offenses. The relationship between the two dimensions springs from the fact that offenders scoring high on the *General Violence* dimension

Table 9
 Percentages of Sex Offense Levels
 By General Violence Level

<u>Sex Offense Level</u>	<u>General Violence Level</u>			<u>Total</u>
	<u>No Felony Assault and Robbery Arrests</u>	<u>2 - 4 Arrests</u>	<u>5+ Arrests</u>	
No Sex Offense Arrests	1,065 (84.2%)	115 (81.6%)	77 (64.7%)	1,257 (82.4%)
1 Sex Offense Arrest	106 (8.4%)	13 (9.2%)	21 (17.6%)	140 (9.2%)
2+ Sex Offense Arrests	94 (7.4%)	13 (9.2%)	21 (17.6%)	128 (8.4%)
Total	1,265 (100%) ^a	141 (100%)	119 (100%)	1,525 (100%)

^a Percentages may not add to 100% due to rounding.

Chi-square: 20.1 (4 df.), $p < .01$

were almost twice as likely to have one or more sex offense arrests than those scoring low or medium on this dimension. However, among the offenders at each level of *General Violence* who had at least one sex offense charge, there was virtually no difference in the proportion who had two or more sex offense charges.

Turning to Table 10, the comparison of levels on the *Assaultiveness* classification and the *Sex Offense* classification also showed only a slight tendency for offenders with sex offense arrests to also have arrests for assault. Further, among those sex offenders with assault arrests, there appears to have been no greater-than-expected tendency to also have arrests for liquor violations. Thus, these two dimensions appear to describe patterns that are fairly independent, with overlap only slightly greater than would be expected, based on the marginal distributions. The overlap was great enough, however, to result in a statistically significant Chi-square.

Together, these comparisons suggest that these three simply-defined patterns of violent behavior

do describe somewhat independent traits. While offenders identified with each pattern tended to be slightly more likely to exhibit other patterns as well, the relationships were not strong. The vast majority of offenders with arrest patterns in the areas of assaultiveness, sex offending, or generalized violence did not exhibit the other patterns of violent offending. These classifications are not, in other words, simply different ways of describing the arrest histories of the same group of offenders.

Still, there *was* overlap among these patterns (more, in fact, than would be expected by chance), suggesting that these offenders did not *specialize* in particular types of violent offending. Offenders exhibiting a pattern of generalized violence, for example, were no *less* likely than others to be arrested for a sex offense, as would be expected if they had specialized in the assault/robbery/other person offenses combination. Thus, while these patterns suggest somewhat independent dimensions of violent criminality, they are not mutually exclusive. Whatever bases there are for these

Table 10
 Percentage of Assaultiveness Levels
 By Sex Offense Level

<u>Assaultiveness Level</u>	<u>Sex Offense Level</u>			<u>Total</u>
	<u>No Sex Offense Arrests</u>	<u>1 Arrest</u>	<u>2+ Arrests</u>	
3+ Assaults/ No Liquor	119 (9.5%)	22 (15.7%)	24 (18.8%)	165 (10.8%)
1 - 2 Assaults/ No Liquor	220 (17.5%)	27 (19.3%)	27 (21.1%)	274 (18.0%)
No Assault Arrests	598 (47.6%)	52 (37.1%)	40 (31.3%)	690 (45.2%)
1 - 2 Assaults/ 1+ Liquor	191 (15.2%)	18 (12.9%)	16 (12.5%)	225 (14.8%)
3+ Assaults/ 1+ Liquor	129 (10.3%)	21 (15.0%)	21 (16.4%)	171 (11.2%)
Total	1,257 (100%) ^a	140 (100%)	128 (100%)	1,525 (100%)

^a Percentages may not add to 100% due to rounding.

Chi-square: 29.6 (8 df.), $p < .01$

patterns, whether social or individual, may simply be additive, so that having arrests that fit more than one pattern may not indicate anything special about offenders other than that they have been influenced by more than one set of etiological factors.

Prevalence of Patterns by Ethnicity

Based on earlier findings with these offenders, differences in the distributions of offenders in relation to the three patterns of violent arrests by ethnic group would be expected. On the one hand, earlier analyses of these data (Haapanen, 1990) determined that ethnic groups differed with respect to the proportions arrested for various types of crimes. In general, minorities were more likely to have arrests for violent offenses over the follow-up period than were whites. Those findings, along with the results of the separate factor analyses by ethnic group, suggest that the three patterns of

violent arrests would be distributed somewhat differently by ethnic group. A greater proportion of minority members of the sample would be expected to have arrests for the combinations of offenses included in each classification.

Assault/liquor. Table 11 shows the distribution of the *Assaultiveness* levels by ethnicity. The 46.8% of the white offenders who had assault arrests were nearly evenly divided between those who had arrests for liquor violations and those who did not. Among the black offenders, there was a greater proportion with assault arrests (62.3%), but those with assault arrests were less likely to have a liquor violation as well. Only 32% of the black offenders with assault arrests also had arrests for liquor violations. For Hispanics, the opposite was found. Of those offenders with assault arrests (66.5% of all Hispanics in the sample), 63.3% also had alcohol-related arrests.

Table 11
Percentage of Assaultiveness Levels
By Ethnicity

<u>Assaultiveness Level</u>	<u>Ethnicity</u>				<u>Total</u>
	<u>White</u>	<u>Black</u>	<u>Hispanic</u>	<u>Other</u>	
3+ Assaults/ No Liquor	52 (6.6%)	91 (20.2%)	22 (8.7%)	--	165 (10.8%)
1 - 2 Assaults/ No Liquor	129 (16.3%)	100 (22.2%)	40 (15.7%)	5 (17.9%)	274 (18.0%)
No Assault Arrests	421 (53.2%)	170 (37.7%)	85 (33.5%)	14 (50.0%)	690 (45.2%)
1 - 2 Assaults/ 1+ Liquor	132 (16.7%)	38 (8.4%)	53 (20.9%)	2 (7.1%)	225 (14.8%)
3+ Assaults/ 1+ Liquor	58 (7.3%)	52 (11.5%)	54 (21.3%)	7 (25.0%)	171 (11.2%)
Total	792(100%) ^a	451 (100%)	254 (100%)	28 (100%)	1,525 (100%)

^a Percentages may not add to 100% due to rounding.

Chi-square: 144.9 (12 df.), $p < .01$

These differences seem to be at odds somewhat with the results of the separate factor analyses by ethnicity, in which *Assault/Liquor* factors were clearly found for whites and blacks, but not so clearly for Hispanics. However, the two analyses focus on somewhat different issues. The factor analyses pointed up associations that were greater (or lesser) than expected for that sample, given the overall distribution of arrests. A review of earlier findings (Haapanen, 1990) found that liquor violations, *in general*, were much more prevalent among Hispanics (64% for Hispanics vs. 41% and 30% for whites and blacks, respectively). Thus, while white and black offenders with liquor violations may have a greater-than-expected tendency to also have arrests for assault, Hispanic distributions may not differ so much from expectations based on the overall prevalence of liquor violations and assault arrests among Hispanic offenders. Given this high prevalence of

liquor violations, in other words, one would *expect* to find over 63% of those with assault arrests to also have arrests for liquor violations.

This discrepancy points up the limitations of developing classifications based on associations found for entire samples of offenders. Earlier, it was noted that separate factor analyses by ethnicity might help to identify full-sample factors that may be less relevant for individual ethnic groups. The factor results suggest that for the whites and blacks in this sample, liquor violations were associated with a tendency toward assaultive behavior. While this association did not appear so clearly for Hispanics, the high incidence of liquor violations among these offenders would make them especially likely to be identified by a classification based on a history of arrests for assault and liquor violations. Even though this "classification" would be least relevant to Hispanics, 42% of Hispanic offenders would be classified as "alcohol-related assaulters"

Table 12
Percentages of Sex Offense Levels
By Ethnicity

<u>Sex Offense Level</u>	<u>Ethnicity</u>				<u>Total</u>
	<u>White</u>	<u>Black</u>	<u>Hispanic</u>	<u>Other</u>	
No Sex Offense Arrests	678 (85.6%)	341 (75.6%)	218 (85.8%)	20 (71.4%)	1,257 (82.4%)
1 Sex Offense Arrest	58 (7.3%)	58 (12.9%)	19 (7.5%)	5 (17.5%)	140 (9.2%)
2+ Sex Offense Arrests	56 (7.1%)	52 (11.5%)	17 (6.7%)	3 (10.7%)	128 (8.4%)
Total	792(100%) ^a	451 (100%)	254 (100%)	28 (100%)	1,525 (100%)

^a Percentages may not add to 100% due to rounding.

Chi-square: 25.0 (6 df.), $p < .01$

under this type of classification, while only 24% of whites and 20% of blacks would be so classified. Even a "successful" treatment program aimed at these alcohol-related assaulters might unnecessarily treat many more Hispanics than others and, in so doing, be inefficient and less effective overall at reducing this kind of assaultive behavior.

Sex Offenses. Table 12 shows the levels of Sex Offense arrests by ethnicity. The only percentages that deviate substantially from the marginal percentages are for blacks and the small group of "Other" ethnicities (Asians, mostly). Blacks were nearly twice as likely as whites or Hispanics to have been arrested for a sex offense. However, roughly the same proportion of individuals in each ethnic group with sex offense arrests were arrested more than once. This slight over-representation of blacks would not be problematic for the usefulness of the classification, since sex offenses factors were found for each ethnic group.

General Violence. Percentages of each ethnic group at each level of the *General Violence* dimension are shown in Table 13. Again, the most

noticeable difference is in the proportion of each ethnic group that met the criterion for classification: at least one arrest for both aggravated assault and armed robbery. The percentage of black offenders in the sample that met this criterion (26.3%) was over twice that of white offenders (11.1%). In addition, a higher percentage of black offenders had five or more arrests for aggravated assault, armed robbery or other person offenses. These differences are not surprising, given the factor results by ethnicity, which showed two "general violence" factors for blacks. The higher incidence of this combination of offenses for blacks set the stage for differentiating among them in terms of combinations of other offenses in their histories.

Overall, these ethnic breakdowns for the various dimensions point up the difficulty of classifying offenders on the basis of arrest patterns. If the intent of the classification is to identify particular "types" of offenders, a particular "meaning" is inferred from the existence of various

Table 13
Percentage of General Violence Levels
By Ethnicity

<u>General Violence Level</u>	<u>Ethnicity</u>					<u>Total</u>
	<u>White</u>	<u>Black</u>	<u>Hispanic</u>	<u>Other</u>		
No Felony Assault/ Robbery Arrests	704 (88.9%)	331 (73.4%)	206 (81.1%)	24 (85.7%)	1,265 (83.0%)	
2 - 4 Arrests	62 (7.8%)	45 (10.0%)	31 (12.2%)	3 (10.7%)	141 (9.2%)	
5+ Arrests	26 (3.3%)	75 (16.6%)	17 (6.7%)	1 (3.6%)	119 (7.8%)	
Total	792 (100%)	451 (100%)	254 (100%)	28 (100%)	1,525 (100%)	

^a Percentages may not add to 100% due to rounding.

Chi-square: 78.1 (6 df.), $p < .01$

combinations of arrests in an offender's record. The kinds of ethnic differences found in these analyses, however, suggest that combinations of arrests may mean different things for different ethnic groups. These differences would complicate any effort to intervene with these offenders.

For example, the assault/liquor combination seems to suggest that evidence of irresponsible alcohol use (leading to arrest) is associated, for some offenders, with assaultive behavior. For these offenders, arrests for liquor violations may "mean" (serve as an indicator of) excessive alcohol use, a tendency to "lose control" while under the influence of alcohol, or even of adherence to a lifestyle organized around drinking and gathering in bars. Any one of these may serve as a catalyst for assaultive behavior. However, the "meaning" of alcohol arrests probably differs by ethnicity, and, in fact, may have little or no relationship to assaultiveness (as for Hispanics).

Stability Across Four-year Periods

Stability in these patterns, or levels, of violence was explored by comparing classifications across

various four-year age blocks. The intent of these analyses was to determine whether the pattern an offender exhibited during one period of time was repeated during a subsequent period. Note that even if offenders maintained stable patterns of *behavior* from one period to the next, a similarity of *arrest patterns* would not, in general, be expected. Arrests, as discussed earlier, provide only an incomplete and somewhat selective sample of criminal behaviors. As a consequence, no firm conclusions regarding the stability of these patterns can be drawn.

Over these four-year periods, there were fewer arrests per offender; consequently, fewer cases met the criteria for the various patterns, and it was necessary to use fewer categories than for the earlier analyses. In addition, cases with less than six months of time on the street during each four-year period were eliminated. There were a total of 1,388 cases in these analyses.

As shown in Table 14, the assaultiveness pattern was reduced from five levels to three: no assaults, assaults *without* liquor violations, and

Table 14
 Percentage of Assaultiveness Levels Ages 22-25
 By Assaultiveness Level Ages 18-21

<u>Ages 22-25</u>	<u>Ages 18-21</u>			Total
	1+ Assault/ No Liquor	No Assault Arrests	1+ Assault/ 1+ Liquor	
1+ Assault/ No Liquor	72 (27.6%)	149 (14.9%)	32 (24.8%)	253 (18.2%)
No Assault Arrests	170 (65.1%)	783 (78.5%)	71 (55.0%)	1024 (73.8%)
1+ Assault/ 1+ Liquor	19 (7.3%)	66 (6.6%)	26 (20.2%)	111 (8.0%)
Total	261 (100%) ^a	998 (100%)	129 (100%)	1388 (100%)

a Percentages may not add to 100% due to rounding.

Chi-square: 59.7 (4 df.), $p < .01$

assaults *with* liquor offenses. The remaining two patterns were reduced to two categories—either the offender met the criteria or not. No *levels* of sex offenses or general violence were possible, because so few offenders had more than one arrest for these patterns during the four-year periods.

The figures in Table 14 suggest stable patterns of assaultiveness, accompanied by liquor violations, for some offenders. Of those cases with no assault arrests during ages 18-21, only 21.5% had any assault arrests during the next four years. Of those, only about one in three had liquor violations and assault arrests. In contrast, offenders who had arrests for both assault and liquor violations during ages 18-21 were more likely than other 18-21 year-old assaulters to have another arrest for assault during ages 22-25 (45% vs. 35%) and nearly three times as likely to have arrests for both offenses again.

For *Sex Offenses* (Table 15) and *General Violence* (Table 16), similar patterns were

observed. Those identified during ages 18-21 were twice as likely to exhibit the same pattern in the next period as were other offenders. However, the actual numbers were very small; for example, of the 160 cases identified as sex offenders during either of the two four-year age blocks, only 14 (8.8%) had one or more sex offenses in *both* blocks. For *General Violence*, a total of 107 cases had assault and robbery arrests in one period or the other; only six of these offenders (5.6%) had arrests for both offenses in both periods.

These analyses, then, suggest only limited predictive usefulness for classifications based on patterns of arrests. While the probability of exhibiting a particular pattern was higher for offenders who exhibited that same pattern in an earlier period, predictions based on these classifications would produce false-positive rates of over 75%.

Table 15
 Percentages of Sex Offense Levels Ages 22-25
 By Sex Offense Level Age 18-21

<u>Ages 22-25</u>	<u>Ages 18-21</u>		
	No Sex Offense Arrests	Any Sex Offense Arrest	Total
No Sex Offense Arrests	1223 (94.4%)	79 (84.9%)	1302 (93.8%)
Any Sex Offense Arrest	72 (5.6%)	14 (15.1%)	86 (6.2%)
Total	1295 (100%) ^a	93 (100%)	1295 (100%)

Chi-square: 11.9 (1 df.), $p < .01$

Table 16
 Percentages of General Violence Levels Ages 22-25
 By General Violence Level Age 18-21

<u>Ages 22-25</u>	<u>Ages 18-21</u>		Total
	No Felony Assault/ Armed Robbery	1+ Felony Assault/ Armed Robbery	
No Felony Assault/ Armed Robbery	1281 (96.2%)	51 (89.5%)	1332 (95.9%)
1+ Felony Assault/ Armed Robbery	50 (3.8%)	6 (10.5%)	56 (4.1%)
Total	1331 (100%) ^a	57 (100%)	1388 (100%)

Chi-square: 4.8 (1 df.), $p < .05$

Chapter 5: Discussion

This study was undertaken to explore the usefulness of violent arrest histories as a basis for classifying adult offenders. The present data, consisting of up to 20 years of arrest data on individuals identified as serious juvenile offenders, provided a unique opportunity to explore the extent to which certain kinds of crimes tend to occur together in overall criminal careers and the extent to which these overall patterns are discernable over shorter (four-year) periods.

Factor analysis results suggested that while violent and nonviolent crime are related, violence is not simply a byproduct of general offending. Analyses using arrest data for the whole sample and the entire follow-up period produced five major factors. Of the five, one included no violent offenses at all (thereby distinguishing violent offenders from nonviolent offenders), and the other four pointed to three separate violent orientations: assaultiveness, sexual aggression, and economic gain (robbery). One additional factor combined assault and robbery, suggesting a more generalized tendency toward violent behavior for some offenders. Similar results were found when only those arrests occurring during four-year blocks of time were considered. Over the four four-year periods between age 18 and age 33, violent offenses tended to fall into these major groupings.

Separate analyses for each ethnic group produced essentially the same factors, with some variations across groups. For each ethnic group, both an assaultiveness dimension and a sex offense factor were found. Assaultiveness and drinking (i.e., liquor violations) were linked for all three ethnic groups, but most clearly for blacks and whites. *General Violence*, which linked assault, robbery, and other serious offenses, was observed for minorities only. A separate "robbery" factor, suggesting instrumentally motivated violence, was found only for whites and Hispanics in the sample.

The cross-classifications among the patterns suggested that these orientations (or these groups) were neither highly related nor mutually exclusive. Offenders exhibiting certain patterns of violence were only slightly more likely than other offenders to exhibit other patterns of violence. Conversely, these offenders were no less likely than others to also exhibit other patterns. These patterns of violent behavior, then, do not suggest violence "specializations." Thus, while these patterns suggest somewhat independent dimensions of violent criminality, they are not mutually exclusive. Whatever bases there are for these patterns, whether social or individual, may simply be additive, so that having arrests that fit more than one pattern may not indicate anything special about offenders other than that they have been influenced by more than one set of etiological factors.

In general, these results suggest that the violent offenders in this sample were, to a limited extent at least, "different" from nonviolent offenders and that certain combinations of violent crimes seem to "go together." Violence, however, does not appear to be a stable characteristic of certain violent offenders' careers. The finding that types of violent behaviors are related (e.g., sex offenses, aggressive crimes, etc.) suggests possible directions for research into the root causes of various kinds of violence (rather than of violence in general). For now, however, the basis of differences between offenders who resort to various types of violence and those who do not is open to speculation. It is not possible, for example, to sort out the relative contributions of situational and predisposing factors using the present kind of data.

The importance of the link between alcohol and aggressiveness, however, was clear from the present analyses, especially for white and black offenders. For Hispanics, the assault/alcohol link, as a pattern that distinguished some Hispanic

offenders from others, was not as clearly observed. Hispanics had, in general, a higher incidence of both assault arrests and liquor violations, and consequently had a higher proportion with both types of arrests together than did either black or white offenders. However, the factor analysis results did not suggest that some Hispanic offenders had a greater tendency to exhibit this pattern than others.¹³ Nevertheless, these findings overall tend to underscore the importance of mind-altering substances in producing and/or sustaining patterns of violent, aggressive behavior. It is possible that for some offenders, assaultiveness is a byproduct of a lifestyle that emphasizes drinking, rather than vice versa. It may be that effective alcohol treatment for these offenders would substantially reduce the incidence of serious assaultive behavior among them.

Analyses designed to assess the usefulness of these typological distinctions for classifying

offenders and predicting *future* criminal behavior patterns showed very limited success. In part, this lack of predictive success was due to the use of official data, which introduced considerable *measurement error* into the analysis. It is also possible, of course, that the violent behavior patterns of these offenders were, in fact, unstable (i.e., unpredictable). The usefulness of these typological distinctions *for policies* aimed at individual offenders, therefore, seems questionable.

It may be possible, however, to identify additional, or alternative, indicators of certain violent orientations in order to better classify individual offenders in future research. These indicators may not only clean up the classifications and thereby improve prediction, but they may also point to treatment-relevant characteristics of the offenders or their environments. Better understanding may lead to better interventions and to lower levels of violence in the future.

¹³ However, a factor (not shown) that included liquor offenses, drug use, and "other offenses" also included aggravated assault and strongarm robbery at levels slightly below the inclusion threshold (.26 and .27, respectively).

References

- Blumstein, A., & Cohen, J. (1979). Estimation of individual crime rates from arrest records. *The Journal of Criminal Law & Criminology*, 70 (4), 561-585.
- Blumstein, A., Cohen, J., Roth, J., & Visher, C. (Eds.). (1986) *Criminal careers and career criminals (Volume I)*. Washington, D.C.: National Academy Press.
- Brennan, P., Mednick, S. & John, R. (1989). Specialization in violence: Evidence of a criminal subgroup. *Criminology*, 27 (3), 437-454.
- Bursik, R. (1980). the dynamics of specialization in juvenile offenses. *Social Forces*, 58, 851-864.
- Chaiken, J., & Chaiken, M. (1982). *Varieties of criminal behavior*. Santa Monica, Ca: Rand Corporation.
- Chaiken, J., & Chaiken, M. (1984). Offender types and public policy. *Crime and Delinquency*, 30 (2), 195-224.
- Cohen, J. (1986) Research on criminal careers: Individual frequency rates and offense seriousness. In A. Blumstein, J. Cohen, J. Roth, and C. Visher (Eds.), *Criminal careers and "career criminals" (Volume I)*. Washington, D.C.: National Academy Press.
- Curtis, L. (1989) Race and violent crime: Toward a new policy. In N. Weiner & M. Wolfgang (Eds.), *Violent crime, violent criminals*. Newbury Park, CA: Sage.
- Dunford, F., & Elliott, D. (1984). Identifying career offenders using self reported data. *Journal of Research in Crime and Delinquency*. 21 (1), 57-83.
- Farrington, D. (1982). Longitudinal analysis of criminal violence. In M. Wolfgang and N. Weiner (Eds.), *Criminal violence*. Beverly Hills, Ca: Sage.
- Groth, N. (1979). *Men who rape: The psychology of the offender*. New York: Plenum.
- Haapanen, R. (1990). *Selective incapacitation and the serious offender: A longitudinal study of criminal career patterns*. New York: Springer-Verlag.
- Haapanen, R. & Jesness, C. (1982). *Early identification of the chronic offender*. Sacramento: California Youth Authority.
- Hindelang, M. (1978) Race and involvement in common law personal crimes. *American Sociological Review*, 43 (February), 93-109.
- Hindelang, M., Hirschi, T., and Weiss, J. (1979) Correlates of delinquency: The illusion of discrepancy between self-report and official measures. *American Sociological Review*, 44 (December), 995-1014.
- Hartstone, E. & Hansen, K. (1984). The violent juvenile offender: An empirical portrait. in R. Mathias, P. DeMuro, and R. Allinson (Eds.), *Violent juvenile offenders: An anthology*. San Francisco: National Council on Crime and Delinquency.
- Jesness, C. (1965). *The Fricot Ranch study*. Sacramento: California Youth Authority.
- Jesness, C. (1969). *The Preston typology study: Final report*. Sacramento: California Youth Authority.
- Jesness, C. (1971a). The Preston typology study: An experiment with differential treatment in an institution. *Journal of Research in Crime and Delinquency*, 8, 38-52.
- Jesness, C. (1971b). Comparative effectiveness of two institutional treatment programs for delinquents. *Child Care Quarterly*, 1, 119-130.
- Jesness, C. (1975). Comparative effectiveness of behavior modification and transactional analysis programs for delinquents. *Journal of Consulting and Clinical Psychology*, 43, 758-779.
- Jesness, C., DeRisi, W., McCormick, P., and Wedge, R. (1972). *The Youth Center research project*. Sacramento: American Justice Institute.
- Luckenbill, D. & Doyle, D. (1989). Structural position and violence: Developing a cultural explanation. *Criminology*, 27 (3), 419-436.
- Megargee, E. (1982). Psychological determinants and correlates of criminal violence. In M. Wolfgang & N. Weiner (Eds.), *Criminal Violence*. Beverly Hills, CA: Sage.
- Monahan, J. (1978). The prediction of violent criminal behavior: A methodological critique and prospectus. In A. Blumstein, J. Cohen, & D. Nagin (Eds.), *Deterrence and incapacitation: Estimating the effects of criminal sanctions on crime rates*. Washington, D.C.: National Academy of Sciences.
- Petersilia, J. (1980). Criminal career research. In N. Morris & M. Tonry (Eds.), *Crime and justice: An annual review of research, Vol. 2*. Chicago: University of Chicago Press.
- Petersilia, J., Greenwood, P., & Lavin, M. (1978). *Criminal careers of habitual felons*. Washington, D.C.: U.S. Department of Justice.

- Peterson, M., Braiker, H., & Polich, S. (1980). *Doing crime*. Santa Monica, Ca: Rand Corporation.
- Piper, E. (1985). Violent recidivism and chronicity in the 1958 Philadelphia cohort. *Journal of Quantitative Criminology*, 1, 319-344.
- Smith, D. & Smith, W. (1984). Patterns of delinquent careers: An assessment of three perspectives. *Social Science Research*, 13, 129-158.
- Tinklenberg, J., Murphy, P., Murphy, P., & Pfefferbaum, A. (1981). Drugs and Criminal Assaults by Adolescents: A Replication Study, *Journal of Psychoactive Drugs*, 13 (3) July-September.
- Tracy, P. Wolfgang, M., & Figlio, R. (1984). *Delinquency in a Birth Cohort II: A comparison of the 1945 and 1958 Philadelphia birth cohorts; Final reports submitted to the National Institute of Justice*. Philadelphia: Center for Studies in Criminology and Criminal Law, University of Pennsylvania.
- Weiner, N. (1989). Violent criminal careers and "violent career criminals:" An overview of the research literature. In N. Weiner & M. Wolfgang (Eds.), *Violent crime, violent criminals*. Newbury Park, CA: Sage.
- Wolfgang, M. & Ferracuti, F. (1987). *The subculture of violence*. London: Tavistock.
- Wolfgang, M., Figlio, R., & Sellin, T. (1972). *Delinquency in a birth cohort*. Chicago: University of Chicago Press.

Appendix Sample Characteristics

	Sample Mean or Percent	Minimum	Maximum	Total	Percent with Any
Sample Size					
Former CYA commitments	100.0%			1,532	
Former adult prison inmates	82.2%			1,259	
Felony probationers	11.5%			176	
	6.3%			97	
Adult Follow-up (after age 18)					
Months of Follow-up	175.9	60	240		
Years of Follow-up	14.7	5	20		
Months Not Incarcerated	134.3	0 ^a	237		99.9%
as a Percent of Follow-up	75.6%	0.0%	100.0% ^b		
Age at Follow-up	32.7	23	41		
Ethnicity					
White	52.1%			798	
Black	29.4%			451	
Hispanic	16.6%			255	
Other	1.8%			28	
Total Adult Arrests					
All Offenses	18.45	1	119	28,265	100.0%
Violent Offense	3.00	0	33	4,595	74.3%
Violent Offenses as a Percent of Total	17.6%	0.0%	100.0%		
Violent Arrests					
Homicide	.12	0	6	178	9.3%
Aggravated assault	1.02	0	15	1,557	46.2%
Rape	.14	0	11	208	8.0%
Misdemeanor assault	.43	0	8	658	25.3%
Armed robbery	.63	0	21	959	30.0%
Strongarm robbery	.48	0	23	743	26.4%
Other person offenses	.19	0	11	292	13.1%
Violence-related Arrests					
Weapons offenses	.79	0	14	1,207	36.4%
Sex offenses	.20	0	12	310	11.0%
Pimping/prostitution	.09	0	35	135	3.0%
Property Arrests					
Burglary	1.93	0	25	2,957	64.0%
Receiving stolen property	.79	0	17	1,212	37.7%
Grand theft	.39	0	10	600	25.1%
Forgery	.57	0	51	876	21.8%
Grand theft auto	.35	0	8	531	20.3%
Other theft	.83	0	15	1,274	39.0%
Other auto theft	.50	0	14	761	26.6%
Drug/alcohol Arrests					
Liquor violations	1.06	0	18	1,629	40.2%
Drug use	2.43	0	29	3,727	61.0%
Drug sales	.22	0	12	330	13.0%
Miscellaneous Arrests					
Arson	.03	0	3	45	2.4%
Other offenses	5.27	0	39	8,076	86.8%

^a One individual, after release from CYA, committed a murder while 17 years old and was sentenced to adult prison for life.

^b The case with no incarceration time (100% of time not incarcerated) was followed-up for only 237 months. All of those cases with a full 240 months of follow-up spent some time incarcerated.