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1979

PREDICTABILITY OF VICTIM INJURY IN INCIDENTS OF RAPE

by

WAYNE S. FISHER

A dissertation submitted to the Graduate Faculty in Sociology in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York.

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INTRODUCTION

Purpose

The purpose of this study is to present an organized body of data useful in formulating a model predictive of victim injury in incidents of rape. This will be accomplished by presenting data which represents a wide range of factors, each of which exerts a potential influence on the phenomenon which is the object of this study. Included will be characteristics of the participants in the rape incident, the time and setting of the incident, and that period of interaction which surrounds the actual occurrence. It is the intention of this study to demonstrate that data which focuses on key elements of the rape incident can be used to make causal inferences concerning subsequent physical injury to the victim.

Inferences concerning victim injury embody implications for both theoretical and practical considerations of this issue. Theoretically, an identification of causal links to the expression of violence, resulting in victim injury, holds obvious value for an increased understanding of participant input in rape in particular, and all person to person criminal behavior in general. Practically speaking, at a time when much advice is forthcoming on the issue of dealing with or defending oneself against rape, quantitatively based inferences can result in that advice being grounded in something more solid than that which best fits

the rhetoric of the adviser. The goal is, then, arrival at a model enabling one to make sound causal inferences, which are grounded in an organized body of quantitative data. Inferences so based would seem to better serve any effort aimed at providing accurate, valid, and useable information to potential victims of rape, with regard to the likelihood of their sustaining physical injury in such incidents.

Theoretical Orientation

The collection of the body of data subsequently used in the formulation of a predictive model, relies heavily on Menachem Amir's, Patterns in Forcible Rape, (Amir, 1971) for its organization and structure. Many of the variables selected are replicative of Amir's work in seeking to present a comprehensive and thorough understanding of the participants and conditions which make up the sample under study. Collection of data is thus organized around what Amir has termed a situational approach, which takes into account the phenomenon of rape in its entirety: the victims, offenders, and settings which characterize such incidents. Amir viewed such an approach as one which, "...Allows gaining insight into the problem of differential behavior of predisposed persons or of those who are pulled into committing the crime by the circumstances of the situation." (Amir, 1971: 3) Whereas Amir was directing his effort toward shedding light on those who become involved in all rape situations, the effort here is to shift focus to those already involved in rape incidents. In essence we ask the data to perform the same function, to clarify the confusion between predispositions to behave in a given way and that which is the product of momentary circumstance, but we ask it at a more manageable level. Our aim is to project the likelihood of victim injury, given the fact of rape

occurrence, on the basis of data gathered in the general manner forward by Amir. The data is organized somewhat differently here in an attempt to maximize the distinction alluded to above, that of predispositional versus situational factors. Also, refinements have been made in the collection and categorization of specific variables, most notably in those intended to report phenomena arising from the interactive process immediately surrounding the actual rape, the area in which Amir's data seems to be most inadequate.

The need to proceed in this manner with specific crime related research has been noted in recent work in the area. Lynn Curtis observes, "Replicative work covering the same crimes and variables will still be needed to supply trend information and profile individual localities, but thoughtful analysts should now proceed beyond the contemporary first generation of such studies..." (Curtis, 1974:163) It is the intention here to do just that, for the most part with methods of analysis more sophisticated than the tabular presentation relied on by Amir. Amir notes quite early in his presentation that his aim is to construct order among observable phenomenon, and not to formulate or verify a theory of causation (Amir, 1971: Intro.). With Amir providing a useable framework with which to accomplish the former, the possibility to proceed to causal models seems

to be a significant step for second generation research.

The need for movement in this direction was raised by Don Gibbons in remarks on crime causation in general (Gibbons, 1971). Gibbons considers Sutherland's contrasting of historical or genetic views of causation, factors in the earlier life history of a criminal, and mechanistic or situational perspectives of causation which examine processes operating at or near the moment of the crime (Sutherland & Cressey, : 74-75). He notes that it is not an either/or choice that confronts researchers, but rather, "The problem for criminologists is one of explicating those relationships where genetic factors weigh most heavily, those where situational elements are most crucial, and those where both sets of influences seem to conjoin to produce the offensive behavior." (Gibbons, 1971: 271) The specific task of research in the area is, according to Gibbons, not only the explication of the relationships between these factors, but also determinations of the relative weight to be assigned to these factors in particular incidents of criminality. The analytic devices utilized in this project will seek to provide both the overall distinctions between the types of factors predictive of victim injury, and the weighting of their relative importance in such an explanation.

The use of data organized by the situational approach,

to project an outcome of victim injury, relies on an understanding of the rape incident as an interaction between participants, rather than the result of a victim being acted upon by her offender. Such an understanding of the victim-offender relationship has been dealt with at some length in recent years. The recent attention to this victimological perspective primarily from Hans Von Hentig, "I maintain that many criminal deeds are more indicative of a subject-object relation than of the perpetrator alone. There is a definite mutuality of some sort. The mechanical outcome may be profit to one party, harm to another, yet the psychological interaction, carefully observed, will not submit to this kindergarten label." (Von Hentig, 1948:461) Clearly an outcome of victim injury does constitute harm to only one party but that in no way precludes the possibility that it results from an interactive process into which both participants have significant input. Although the exclusivity of victim and criminal roles are embedded in the law, "... Experience tells us that this is not all, that the relationships between perpetrator and victim are much more intricate than the rough distinctions of criminal law." (Von Hentig, 1948 : 383) Thus the relationship is something more involved than that forwarded by the legal designations of crime.

An extension of this interactive understanding of the

criminal event must lead to a recognition that the input of each participant will exert some degree of influence on conditions or outcomes which arise as a result of the criminal event. Stephen Shafer, in developing such a perspective observes that, "Crime is not only an individual act but also a social phenomenon. Thus it is seen in the generative context of its participants as projected to their functional role." (Schafer, 1968:152) Implicit in this research project is an extension of the functional responsibility, of both participants, through the point at which the rape incident is generated, to the point at which the incident concludes with the presence or absence of injury to the victim. Variables have been designed to measure each participant's input in such situations, and to determine whether such factors are operative as predispositional characteristics brought to the incident, or as circumstances arising from the interactive process.

As to the actual prediction of violent behavior, Wolfgang and Ferracuti ground their efforts at such a task in their theory of a subculture of violence (Wolfgang and Ferracuti, 1964). They postulate the existence of such a subculture and assume that it exists in representative, identifiable individuals. Attempts at predicting the violent behavior would, then, rely on sets of testable propositions and hypotheses at the subcultural level, and

the use of validated psychological instruments at the individual level. With these assumptions in mind, the authors note a very practical problem in the prediction of aggression, "We must also remember that a prediction not only hypothesizes that a given event will occur, but also, perforce, assumes that the predictors will remain unchanged until the event takes place." (Wolfgang and Ferracuti 1964 : 291) Although it is recognized here that the scope of the predictive effort to be undertaken is much narrower than that contemplated by Wolfgang and Ferracuti, it may well be that such a limitation on the range of the effort provides an answer to the problem raised above. By dealing with one violent behavior pattern, one whose extent is within the realm of practical measurement, we allow ourselves to accurately assess those factors which would most likely account for the change in predictors. Our post facto analysis allows for a consideration of the interactive process immediately preceding the violent episode, thus complimenting predictors based, in essence, on long term patterns of socialization which are of course subject to intervention by the circumstances of the moment. The strength of predictors generated by an analysis of that domain, the interactive process, can then be compared with those of the predispositional type. Also, by limiting the scope of the predictive effort, we are able to gain some

sense of a control on the phenomenon to be predicted. The prediction of violent behavior in general, with no control via corresponding incidents absent that violence, makes it impossible to assess the influence of variables arising from the participation of anyone other than the inflicter of the violence. It also renders unexplainable any offender input which is altered or arises as a result of the necessary interaction with the victim of the intended violence. Unexplainable change in predictors may, in fact, be the normal or predictable outcome of the victim-offender interaction immediately preceding the violent encounter. If we are to view the criminal event as an interactive process, with the accompanying functional responsibility of all participants, we would certainly not want to develop a predictive device which ignores the input of either of them.

It is also recognized that this research effort actually entails the prediction of a degree of violence from a sample which includes only those who are engaged in aggressive-violent behavior in the first place. Implicit in rape is the force or threat utilized by the offender, what we are asking is when is that aggression carried to the point that it results in physical injury.

Stated another way, the effort here is to move beyond the limitations inherent in any theoretical device which seeks to explain violence in terms of structural determinants.

Such explanations remain insufficient because they fail to account for the large amount of variation among participants in violent encounters, and among the situations in which violence is the outcome. John Hepburn, commenting on sub-cultural explanations of violence reports on such a shortcoming, "...Any comprehensive theory of violence must do more than specify that it occurs in a subculture; it must specify the antecedents to violent behavior. ...This requires the examination of the transactions that occur between the participants prior to the perpetration of violence." (Hepburn, 1973: 420) Thus we are seeking to understand a very specific type of violent behavior in a way much the same that we would view any other interpersonal behavior. In so doing, our focus must include the construction of this degree of violence within an interpersonal situation, structured to a large degree by its participants. It seems to be a safe assumption that the likelihood and degree of victim injury will increase proportionately with the level of violent or aggressive behavior displayed by the offender. We are seeking to deal in a realm which Wolfgang and Ferracuti recognized as important in an article concerning research into the subculture of violence (Wolfgang and Ferracuti, 1963). They note that within the lower class subculture of violence, distinction must be made not only between the criminal and noncriminal, but also

between the violent and nonviolent criminal, i.e. degrees of violence in incidents of criminality. Thus we will seek to determine just what characteristics of the entire rape incident escalate an already violence-laden situation to one resulting in material physical harm to one of the participants, namely the victim.

Data Source

This study includes all incidents of forcible rape and attempted rape reported to the Newark, N.J. Police Department, during the 30 month period beginning July 1, 1975, and ending December 31, 1977. During that period a total of 916 rapes and attempted rapes were reported to the Newark Police. Of those 916 reported incidents, deletions were made for the following reasons:

1. other crime - investigation of the initial complaint disclosed that the crime of rape or attempted rape had not been committed, but some other crime had;¹
2. unfounded - investigation of the complaint revealed that no crime had been committed, inclusion in this category requires substantive proof that the original complaint was a fabrication;
3. other jurisdiction - investigation determined that the offense of rape or attempted rape took place outside the city of Newark;
4. insufficient information - although a rape or attempted rape was reported, the amount of information available was insufficient for inclusion in this sample;
5. duplication - the incident reported was subsequently determined to be a duplication of an incident reported at an earlier date or time.

¹ The crimes to which these incidents were reclassified include contributing to the delinquency of a minor, assault and battery, molesting, robbery and break and entry.

Table I Deletions from Sample

Reported Incidents		916
<u>Deletions</u>	<u>No.</u>	
other crime	41	
unfounded	37	
other juris	10	
insuff. info.	9	
duplicate	5	
Total	<u>102</u>	<u>-102</u>
Sample Size		814

The data for each incident included in the sample was obtained from the files of the police department's investigative unit whose responsibility it was to investigate all such offenses. Included in those files were initial reports of the rape or attempted rape incident, generally executed by field police officers, all follow-up or secondary reports of police investigators, and statements made by victims and witnesses in connection with the reported offense. Also available were the hospital emergency room reports of all victims taken to the hospital; virtually all victims of completed rape, and most victims of attempted rape were provided hospital service. For those incidents involving the identification and arrest of an offender, the police file

includes demographic and descriptive data of that offender, the offender's arrest history, and in some cases a statement by the offender concerning the incident.

The data reported in some variable designations are the result of items or information specifically called for by report forms in the above files, while other variables are the result of categorical judgements based on narrative components of police reports, and the statements of participants in the reported incidents. The decision to include data on reported incidents of attempted as well as completed acts of rape, is an effort to more completely assess the significance of victim input in determining the outcome of the incident. It seems that any analysis of such an outcome, physical injury to the victim, given a perspective which views the entire criminal act as an interactive process, must consider instances of attempted rape. Such an inclusion takes into account those cases in which the apparent intentions of the offender are thwarted, perhaps as a direct result of victim input, thus exerting a potential influence on the outcome under investigation. If variation in victim behavior holds any relationship with degrees of physical injury, it is essential to include those incidents in which resistive behavior is successful in its apparent goal, just as those incidents in which it fails are included. Of the 814 cases surveyed, 203 are incidents of attempted rape.

Data Presentation

The body of data generated by the sample employed in this study will be presented as a whole in the ensuing section of this report. The presentation will seek to reflect the temporal ordering of the data, as to the distinction between predispositional and interactive elements of the rape incident cited above. As indicated, the effort has been to present a comprehensive body of data, reflective of the wide range of factors necessary to adequately view the rape incident in the manner just mentioned. In as much as Amir's work has served as a basis for the collection of this data, the data will be presented in a manner facilitating substantive and structural comparisons with his work. While it is acknowledged that for given variables substantive comparisons could be made with a number of previous studies, such is not done, point for point, for the entire body of data reported. In view of the stated purposes and orientations of this project, comparisons concerned with the descriptive data presented are limited to Amir's Philadelphia study, and are contained in Appendix I for readers so interested. Although many research efforts have generated data with regard to specific areas covered in this project, none equal the comprehensive body of data presented by Amir. In those areas where significant differences are observed between the two studies, potential areas of explanation are forwarded, but are not explored in any depth. A designation of signifi-

cant difference, anywhere in the report, indicates that a chi square value significant for $p.05$, was obtained for the comparison in question.

In sum, since this project seeks to move beyond a replicative study, to demonstrate projective uses of a comprehensively organized body of data, it was not deemed necessary to draw comparisons with the large volume of research data available regarding specific variables encountered. Rather, the indicated comparisons with Amir provide some perspective to the substance of the body of data presented, and to point out areas where refinements in the organization and structure of the data enhanced its subsequent use in generating predictive and causal models.

Following presentation of the comprehensive body of data, the issue of victim injury is dealt with at length. Multiple regression procedures were utilized to arrive at the desired predictive equation, and the results of those procedures are reported. Similarly reported is the method of path analysis employed to facilitate subsequent causal inferences, as are operative explanations of the causal model developed. An extensive search of the existing literature with regard to all issues raised in this consideration of victim injury, and the method employed in such a procedure, are also reported in this section. The effort was made to survey existing research from a variety of disciplines as they apply to this consideration of victim injury in cases of rape.

THE POPULATION

Data on the population comprising this study will be presented in a manner designed to facilitate its use in later application to the issue of physical abuse in the rape situation. Toward that end the data is initially categorized into three broad divisions, with assignment to each based in large part on temporal considerations as the data relates to the rape incident. The first category incorporates status characteristics acquired by the rape victim and offender prior to the occurrence of the offense included herein. These are factors which can be neither determined or altered by any interaction between the offender and victim during the rape incident. Any analytic utility which they may later demonstrate, or any subsequent validity they may have in explaining outcomes of the rape offense, must be understood in terms of predispositions brought to the rape situation by those involved. This is not to say that such predispositions on the part of the rapist or victim have no bearing on the interactive process comprising the commission of the offense, but any such effect will be viewed as conceptually distinct from such predisposing factors.

The data presented in this first grouping quite obviously relates directly to either the victim or the offender. From all victims data has been gathered regarding their race, age and occupation. For the offender data in

This grouping, the amount of data available in each case depends upon whether or not the offender was identified and arrested. On the basis of victim descriptions, information regarding the offender's race, sex, and age is available in almost all cases. In those cases where an arrest was made more detailed information regarding the offender is included. Arrest and post arrest information not only provides more accurate data on the descriptive information elicited from victims, but also makes available large quantities of additional data on the subgrouping of all offenders in this study.

I Predispositional Characteristics

A. Victim

1. Race
2. Age
3. Occupation
4. Prior interpersonal relationship with offender

B. Offender

1. Race
2. Age
3. Sex

C. Offenders Arrested

1. Sex
2. Race
3. Age
4. Occupation

5. Prior arrest record
6. Number of prior arrests
7. Number of prior charges
8. Types of prior offenses
9. Number of prior serious sex offenses
10. Number of prior lesser sex offenses
11. Number of prior non-sex violent offenses

The second major grouping of the data includes variables which relate, for the most part, to the setting and time of the rape incident. These are factors which must be understood, conceptually speaking, as being within the purview of both the victim and/or the offender at the time during which the factors are operable. For instance, the choice to be at a given location at any given time, must be seen as the result of some process of selection of alternatives. Such choices may bear some relationship to the variables of the first group; they would also appear, at least on the surface, to play some significant role in the rape outcome which is to follow. Whichever is the case, what distinguishes the data in this grouping is the knowledge available to those involved, at the time at which these variables come into play. At least as far as the victim is concerned, we can be certain that when these variables are operative, and when she exercises any degree of freedom which she has over them, she is unaware of the

rape incident which is to follow. Consequently, although victim-offender interaction may be commenced, the victim's role at this time must be viewed as distinct from subsequent interaction in the course of the rape incident. Even for the offender, we cannot be certain at what point his actions become specifically directed toward the initiation of measures whose primary objective is the completion of a rape incident. Until we can recognize and identify actions which conclusively indicate the intentions of the offender, to assume otherwise can only lead to serious errors in analysis and explanation. Any attempt to ascertain the offender's intentions or goals from variables such as those included in this grouping, mainly time and spatial data, rests upon assumptions which simply cannot be made from this level of data for so complex a phenomenon. It is for this reason that all interactive variables which entail any doubt as to the offender's goal orientations are assigned to this category.

II Determinants of Offense Situation

1. Time of offense
2. Day of offense
3. Month of offense
4. Type premises initial contact victim/offender
5. Proximity victim residence/initial contact
6. Proximity offender residence/initial contact

7. Type premises of offense
8. Proximity victim residence/location of offense
9. Proximity offender residence/location of offense
10. Number of offenders

The third grouping of the data is comprised of those variables which identify and measure interactive qualities once the actual offense situation has commenced. These are factors occurring at or subsequent to that point at which the offender's intention becomes known to the victim. Although the victim and offender may have been together, and involved in interaction, prior to their shared knowledge of the offender's objective, the periods of time separated by such dual awareness will be distinguished for the purpose of this analysis. We will define the offender's first attempts to employ any verbal or physically coercive measures, directed at prompting, altering or modifying the victim's intended actions at the time, and so preceived by the victims, as the point at which the offender's intentions become known. Such coercive measures are accompanied by some reference to force or violence as the alternative to compliance. Such references may be visual, spoken, or communicated by contact, but once the victim preceives such as being directed toward the offender's intended outcome, the nature of the interactive process we are investigating has been drastically altered.

It is only at such a point that we may be certain that the victim is in fact aware of the offender's intentions, and be therefore confident that we can safely assume such to be the case in our analysis of the entire rape interaction. It is undoubtedly also the case that some victims do have some inkling, perhaps more than an inkling of an offender's intentions before any coercive measures are employed. We must be aware that such inklings, as fleeting and commonplace as they may be in any situations similar to the one reported, have been fueled by what did in fact take place subsequently in these particular incidents. The data has been gathered, by necessity, retrospectively. We must, therefore, be cautious of inaccurate inferences into the victim's past facto account, such as the above might well be. That which makes the incidents studied herein distinctive is not the inkling or notions of a victim, but rather the outcome of rape. The only point of certainty in separating the two, from the victim's perspective and thereby viewing the victims actions in their proper light, is that instant at which overt coercive measures are so perceived and identified by the victim. By choosing that as the cutting point, between the data in the second and third groupings, we may be cutting a little late for a few victims, but not too early for any of them.

The same might be said for the actions of the offenders. Since we have absolutely no way of knowing to what extent the rape incident was planned, if at all, we include in this third grouping only those variables which measure offender activity after his goal is known to the victim. This data grouping is then distinguished from both the preceding in terms of our certainty of interpretation of the perspectives from which the victim and offender interact.

III. Interactive Variables During Offense

1. Other offenses

Robbery

Break & Entry

Weapons Used

Abduction of victim

2. Type coercion

3. Point victim intimidated

4. Victim resistance after coercion

5. Attempted rapes - victim action

6. Sex acts

7. Offender actions following rape

I. Predispositional Characteristics

Race

Our analysis of the data in this area is in actuality one involving aspects of both race and ethnicity. The data has been categorized as either black, white or Hispanic. While it is fully recognized that the third categorization does not represent what is generally understood to be a race, the choice has nonetheless been made to treat it as distinct from the other two. Such a distinction was made at the outset to facilitate further analysis of the data should any significant associations be found. The Hispanic population in Newark is numerically significant, and represents elements of cultural background and life style which are distinguishable from the other two groupings. In addition, the point has been well made that the above ethnic distinction may exert a very real effect on its members' relationship to the social order in general, and forces a social control in particular. Since such an effect could have significant bearing on data such as that dealt with in this study, the Hispanic population has been treated separately in anticipation of that possibility. Henceforth in this report, discussion and commentary on racial breakdown on the data will be understood to encompass the three groupings mentioned, taking into account the above discussion.

Data gathered on Newark's population in the 1970 census reports facilitates our categorization of the sample population. By combining the census categories, Spanish

Origin or Descent, and Puerto Rican Birth or Parentage (U.S. Dept. Commerce, 1972:42), we can measure with reasonable accuracy the Hispanic population in Newark. Table I is arrived at by deducting the above two categories from the census total reported for the white race (1972:41).

Although some error may be introduced by this assumption, the degree of such error should not be so great as to prohibit its use for comparison with our data obtained from the rape incidents.

Table I Population of Newark by Race

<u>Race</u>	<u>Frequency</u>	<u>Percent</u>
Black	207,458	54.2
White	96,143	25.1
Hispanic	72,239	18.9
Other	6,577	1.8

An analysis of the racial characteristics of our population for rape incidents, reveals a disproportionate presence of black as both the victims and offenders.

Tabel 2 Race of Victims

<u>Race</u>	<u>Frequency</u>	<u>Percent</u>
Black	685	84.2
White	78	9.6
Hispanic	<u>51</u>	<u>6.2</u>
Total	814	100.0

Table 3 Offender Race - As Described by Victim

<u>Race</u>	<u>Frequency</u>	<u>Percent</u>
Black	822	83.5
White	51	5.2
Hispanic	75	7.6
Don't Know	<u>37</u>	<u>3.7</u>
Total	985*	100.0

An understanding of this data, in total, is made easier by computing rates (per 100,000 per anum) for each participant and racial grouping involved. Table 4 presents such a breakdown.

Table 4 Rates per 100,000 Victims and Offenders by Race

	<u>Victim</u>	<u>Offender</u>
Black	132.1	158.5
White	32.4	21.2
Hispanic	28.2	41.5

What we see then, is that blacks are more than four times as likely as whites to be the victim of a rape or attempted rape, and are almost five times as likely as those in our Hispanic grouping to be so victimized. As for participation as offenders, blacks are over seven times as likely as those of our white group to so participate and almost four times as likely as those in the Hispanic

*In those cases in which there were more than two offenders, the victim's description of two of the offenders was recorded.

grouping. We also notice that these rates are more stable within racial groupings than between them, regardless of the nature of one's participation in the rape situation.

Also of importance, when considering the relationship between race and the phenomenon being studied, is the question of intraracial versus interracial rape. For the entire sample of 814 incidents, 672 of those, or 82.6 percent, were incidents involving victim and offender of the same race. In 112 incidents, 13.7 percent, the victim and offender were of a different race, and in the remaining 30 incidents, 3.7 percent of the total, the victim provided no information as to the race of the offender. Table 5 illustrates the frequency of possible combinations of participants' races by incident.

Table 5 Victim & Offender Race by Incident

<u>Victim Race</u>	<u>Offender Race</u>	<u>Frequency</u>	<u>Pct. Vic. Group</u>	<u>Pct. Total</u>
Black	Black	619	93.8	79.0
	Hispanic	24	3.6	3.0
	White	<u>17</u>	<u>2.6</u>	2.2
	Total	660	100.0	
White	Black	39	52.0	5.0
	White	24	32.0	3.0
	Hispanic	<u>12</u>	<u>16.0</u>	1.5
	Total	75	100.0	
Hispanic	Hispanic	29	59.2	3.7
	Black	20	40.8	2.6
	White	<u>0</u>	<u>0.0</u>	<u>0.0</u>
	Total	49	100.0	
Total		784*		100.0

*The 30 cases for which no information was obtained regarding the offender's race has been deleted from this table.

We note that between victim racial groupings, there is a significant difference in the likelihood of being victimized by an offender of the same race. While more than nine of every ten black victims are involved in intraracial incidents, only six of every ten Hispanic victims, and three of every ten white victims are so victimized. Stated otherwise, Hispanic and white victims are seven and eight times as likely, respectively, as black victims to be involved in interracial incidents.

Age

The 814 victims included in this study range in age from 2 to 76 years old. Table 6 shows the age distribution of the victims in the sample.

Table 6 Victim Age

<u>Age</u>	<u>Frequency</u>	<u>Percent</u>
2-5	18	2.2
6-9	34	4.2
10-14	134	16.5
15-19	179	22.0
20-24	168	20.6
25-29	110	13.5
30-34	64	7.9
35-39	34	4.2
40-44	23	2.8
45-49	22	2.7
50-54	9	1.1
55-59	9	1.1
60 over	<u>10</u>	<u>1.2</u>
Total	814	100.0

The median age of victims in this sample is 21.0 years. We also observe that almost half (42.6 percent) of all victims are between the ages of 15 and 24, with approximately three-quarters (72.6 percent) between 10 and 29 years. While we do find the great majority of victims falling within the latter age range, we find that no peak age, with greater specificity, is readily observed for the victims in this sample.

With regard to the age distribution of the offenders, the decision was made to rely only on the data obtained in arrest reports from the offenders apprehended. The decision was made for a couple of reasons. First, when considering the descriptions obtained from victim with regard to the age of their assailants, approximately 15 percent of the victims in this study were unable to provide descriptive information of a degree useable in this research. In addition, it has been the experience of this researcher that a victim's description of an offender's age is often in error, even when same is supplied by a victim with great specificity. This is borne out by the discrepancies often verified between the described age of an offender, and his age recorded at subsequent arrest. Consequently, when considering those cases for which no information is available, and those for which the information is in error, it seems to make sense not to use this level as the source for data on the ages of offenders. Therefore, data on the ages of offenders will be reported in a later section dealing with the subsample of arrested offenders.

Prior Interpersonal Relationships

Although a determination of the presence and nature of prior victim-offender interpersonal relationships is quite obviously established prior to the rape situation, this variable is unique among those dealt with in this first grouping. Unlike considerations of race, age, occupation or histories of arrest, this variable does not treat the victim

and offender as distinct entities. Here we see a pre-disposing factor which involves a consideration of the victim and offender together, it is the measure of a characteristic developed between the parties involved, yet prior to the event under investigation.

Relative to the time of the rape incident, the establishment of any relationship between the victim and offender has been unalterably accomplished prior to the fact. Certainly the future quality of any such relationship might well be altered by the rape event, but any effect which prior relationship has on the initiation of a rape situation, or the dynamics which unfold during such an occurrence, has been determined prior to the commencement of the rape. Should considerations of the elements identified in this variable, especially the more durable relationships, prove useful in explaining any outcome of the rape situation they will have to be understood in terms of their temporal relation to the event which is the object of this study.

The scale herein employed to measure prior interpersonal relationship ranges from complete stranger to family relative. An attempt is made to categorize the relationships in order of increasing durability, however difficulty arises with relationships that might not be so durable, but were or are relationships characterized by high levels of intensity. Relationships 5 and 6 mentioned below, intimate

friend and male living in household, are examples of such a problem. While an absence in durability is noted, they have been placed in their respective positions to preserve some logical consistency to the ordering. Following are brief explanations of the categories used:

1. stranger - no previous contact of any type between victim and offender;
2. prior visual contact - victim reports having seen offender prior to incident, but has had no other contact and knows nothing else of the offender;
3. acquaintance - victim and offender have had prior casual contact and/or victim has knowledge as to the offender's identity;
4. friend - good friends, victim and offender have had numerous and close social or neighborly contact;
5. intimate friend - past or present boy friend - girl friend relationship between offender and victim;
6. male living in household - victim and offender reside in same household but are not related or intimate friends.
7. relative - victim and offender are related by consanguinity or law, excluding husband-wife.

Information concerning the above categorizations was obtained, for the most part, as a result of follow-up victim interviews by investigators, and is contained in victim statements and investigator's reports.

Table 7 Prior Victim-Offender Relationships

<u>Relationship</u>	<u>Frequency</u>	<u>Percent</u>
Stranger	370	45.5
Prior Visual Contact	73	9.0
Acquaintance	157	19.3
Friend	89	10.9
Intimate Friend	47	5.8
Male living in household	21	2.6
Relative	37	4.5
No Information	<u>20</u>	<u>2.5</u>
	814	100.0

We observe that in a majority of cases, 54.5 percent, the victim and offender are not strangers. In 45.5 percent of all cases, or 83.6 percent of the non-stranger incidents, the victim and offender share an interpersonal relationship characterized at the very least by mutual knowledge of each other's identity.

OFFENDERS ARRESTED

Of the 1,059 offenders responsible for the 814 incidents included in this study, 472 had been arrested by May 1, 1978, four months from the occurrence of the last incident included. The 472 arrests represent apprehensions in 417 (51.2 percent) of the 814 rape incidents in this sample. Table 8 shows the number of offenders arrested by the police in each of the 814 incidents.

Table 8 No. Offenders Arrested by Police

<u># Arrested</u>	<u># Cases</u>	<u>Percent of Total Cases</u>
0	397	48.8
1	374	45.9
2	33	4.1
3	8	1.0
4	<u>2</u>	<u>0.2</u>
Total	814	100.0

For each offender arrested the police file examined includes an official arrest report and a copy of the offender's prior arrest history. The record of prior arrests includes the dates and charges preferred for all incidents of arrest preceding the one included in this sample. From the above documents, as well as recorded statements by the offender and notes of the investigating detective available in some files, far more detailed data was available on the subgrouping of arrested offenders than for those not apprehended.

In those incidents where more than two offenders were arrested, data was recorded for only two of the total number apprehended. Since only ten cases resulted in the arrest of three or more offenders, the reduction of the sample was by just twelve offenders from 472 to 460. The data presented in the following six tables is derived from information contained in the arrest reports of those

460 offenders.

Table 9 Sex of Offender Apprehended

<u>Sex</u>	<u>Frequency</u>	<u>Percent of Total</u>
Male	458	99.6
Female	<u>2</u>	<u>0.4</u>
Total	460	100.0

Under New Jersey law it is possible for a female to be charged with the rape of a female. Such a charge does not derive from any sexual acts on the part of the offender, but rather from the state's statutory handling of the aiding and abetting issue. N.J.R.S. 2A:85-14, provides that any person aiding or abetting another in the commission of a crime is punishable as a principal in that crime.

It is under that authority that a female can be charged as a principal in the rape of another female. In each of the two such cases included in this sample the female offender was reported to have held a weapon, threatening the victim with same while the victim was raped by a male accomplice.

Race Table 10 presents the race of all offenders arrested.

Table 10 Race of Offenders Arrested

<u>Race</u>	<u>Frequency</u>	<u>Percent</u>
Black	407	88.5
White	24	5.2
Hispanic	<u>29</u>	<u>6.3</u>
Total	460	100.0

Such figures do not differ significantly from the descriptive information obtained from the victims concerning the race of all offenders, those not apprehended as well as these included above. The differences, however, do include an increase in the percentage of arrested offenders who are black compared to all offenders described (89.5 vs 82.2), a negligible increase in the white group (5.0 vs. 5.2), and a decrease in Hispanic offender grouping (7.4 vs. 6.3). Such change might be reflective of varying enforcement patterns, reluctance or willingness to prosecute within certain victim groupings, or even astuteness on the part of certain offenders.

However, for purposes of our later multiple regression analysis, we do see that the frequency distribution of offenders' race is not significantly altered by our use of the subsample, i.e. arrested offenders, in several subsequent variables.

Table 11 shows the race of both the offender arrested and the victim for each incident involved, providing the percentage of each offender - victim pairing within each offender race grouping as well as in the entire sample.

Table 11 Victim Race & Offender Race of Offenders Arrested

<u>Off. Race</u>	<u>Vic. Race</u>	<u>Freq.</u>	<u>Pct. Off. Grp.</u>	<u>Pct. Total</u>
Black	Black	384	94.3	83.5
	White	13	3.2	2.8
	Hispanic	<u>10</u>	<u>2.5</u>	2.2
	Total	407	100.0	
White	White	18	75.0	3.9
	Black	6	25.0	1.3
	Hispanic	<u>0</u>	<u>0.0</u>	0.0
	Total	24	100.0	
Hispanic	Hispanic	20	69.0	4.4
	Black	8	27.6	1.7
	White	<u>1</u>	<u>3.4</u>	0.2
	Total	29	100.0	
Total		460		100.0

While this table does not reveal any striking differences when compared to the races of offenders as described by victims, some points worth noting are evident within the offender racial groupings. We see that only 23 of 407 black offenders, 5.7 percent, are involved in interracial rape incidents, as compared with 25.0 percent

of the white offenders and 31.0 percent of the Hispanic offenders.

If we compare these findings with the rate of interracial involvement of all offenders, whether apprehended or not, we observe that their relative frequencies and ordering remain fairly constant. For all offenders, we find that 9.7 percent of the blacks, 41.5 percent of the whites, and 55.4 percent of the Hispanic offenders are participants in interracial incidents. Although the consistencies mentioned above are evident, it is also apparent that there is a significant increase in the absolute frequency of interracial involvement in each racial grouping. Such a discrepancy is undoubtedly a product of enforcement patterns with victims of intraracial rapes certainly more likely to be familiar and/or able to provide sufficient identifying information than victims of interracial incidents. The inclusion of these factors of race, in the regression procedure, was done from the bases of both descriptive and arrest data in order to account for any effect attributable to the distinction of offenders by way of the arrest process.

Age

As mentioned earlier, all considerations involving the age distribution of offenders will rely on the data obtained for those offenders who were arrested. Table 12 presents a frequency distribution by age of all offenders arrested in this sample.

Table 12 Offender Age - Offenders Arrested

<u>Age</u>	<u>Frequency</u>	<u>Percent</u>
10-14	31	6.7
15-19	99	21.5
20-24	112	24.3
25-29	73	15.9
30-34	59	12.8
35-39	33	7.2
40-44	22	4.8
45-49	13	2.8
50-54	10	2.2
55-59	5	1.1
60-over	<u>3</u>	<u>0.7</u>
Total	460	100.0

The median age of offenders in this group is 23.6 years, and we notice that almost half of all offenders arrested are between the ages of 15 and 24. The following table presents data as to the age disparity between victims and offenders in the incidents included in this sample.

Table 13 Offender - Victim Age Disparity

Off. Age	Vic. Younger 10 years		Vic. Younger 6-10 years		Same Age + 5 yrs.		Vic. Older 6-10 years		Vic. Older 10 years		Total	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
10-14	2	6.5	9	29.0	20	64.5	0	--	0	--	31	6.7
15-19	4	4.0	6	6.1	67	67.7	11	11.1	11	11.1	99	21.5
20-24	12	10.7	28	25.0	48	42.9	9	8.0	15	13.4	112	24.3
25-29	24	32.9	15	20.5	27	37.0	2	2.7	5	6.9	73	15.9
30-34	32	54.2	12	20.3	11	18.6	3	5.2	1	1.7	59	12.8
35-39	25	75.8	6	18.2	1	3.0	0	--	1	3.0	33	7.2
40-44	15	68.2	3	13.6	3	13.6	0	--	1	4.6	22	4.8
45-49	10	76.9	0	--	2	15.4	0	--	1	7.7	13	2.8
50-54	8	80.0	2	20.0	--	--	0	--	0	--	10	2.2
55-59	2	40.0	1	20.0	1	20.0	1	20.0	0	--	5	1.1
60-over	3	100.0	0	--	0	--	0	--	0	--	3	0.7
Total	137	29.8	82	17.8	180	39.1	26	5.7	35	7.6	460	100.0

Generally speaking, the older the offender the greater the likelihood that he will choose a victim from a younger age group. From age 25 on, the majority of offenders are involved with younger victims, and for offenders over 30 years of age, almost 85 percent choose younger victims.

Also of interest, for all incidents we note that relatively few offenders, 39.1 percent, choose victims from the same age cohort. We note that the younger the offender the greater the likelihood that such will be the case, with almost two-thirds of the offenders aged 19 or under choosing victims of the same age.

Occupation

For the offenders arrested, data on their occupation was derived from the arrest report, executed by a police officer shortly after the offender was taken into custody. The arresting officer, in most cases, is relying on self-report of the offender for the information concerning occupation. Such factors do place limitations on the reliability of the data obtained in this category. The offender may, given the obvious conditions at the time, choose to withhold or give incorrect information regarding his occupation and present employment. The police officer executing the report may pay relatively little attention to this item, deeming it of lesser importance than most of the other information he is obtaining at the time. With these limitations in mind, Table 14 lists the frequency of

occupational groupings as reported by the arrested offenders.

Table 14 Offender Occupation

<u>Occ. Group</u>	<u>Frequency</u>	<u>Percent</u>
Unemployed	210	45.7
Unskilled Laborer	81	17.6
Semi Skilled Laborer	59	12.8
Craftsman	6	1.3
Low-Mid White Collar	17	3.7
Professional	4	0.9
Student	77	16.7
No Info.	<u>6</u>	<u>1.3</u>
Total	460	100.0

With almost half of the offenders reporting themselves as unemployed, and with over 80 percent of the non-student employed offenders occupying unskilled or semi-skilled positions, the picture presented by this data is not unlike what we would expect to find. The relationship between offenders arrested for serious crime, and relatively low occupational statuses, is a well documented phenomena and is certainly reinforced by the above presentation.

Prior Record

As mentioned earlier, for those offenders who were arrested detailed information is available regarding their histories of arrest. It is on the basis of that available data that the remainder of the observations reported in

this section are made. Of the 460 offenders arrested, the above information was available for all but three, therefore, the following information is reported for 457 offenders.

Consequently, presentation of the data from this study, regarding the extent and type of arrest histories, will be on the basis of all offenders for which documentation is available, and further, no assumptions of any type will be made about offenders for which such documentation is absent.

Table 15 Prior Arrest Record - Offenders Arrested

<u>Record</u>	<u>Frequency</u>	<u>Percent</u>
Record	317	68.9
No Record	<u>143</u>	<u>31.1</u>
Total	460	100.0

The following tables, 16 and 17, include only those 317 offenders who have prior arrest records, and are intended to measure the extent of those records. Reported in the tables are the number of times each offender was arrested prior to the arrest included in this study, and the total number of offenses which each offender has been charged with prior to the offense charged in this data. This distinction is made because a single arrest, on one given date, can be for any number of charges and/or separate offenses.

Table 16 Number of Prior Arrests-Offenders with prior records *

<u>No. of Arrests</u>	<u>No. of Offenders</u>	<u>Percent</u>
1	57	18.1
2-5	105	33.3
6-10	61	19.4
11-15	27	8.6
16-20	33	10.5
21-25	18	5.7
26-over	<u>14</u>	<u>4.4</u>
Total	315	100.0

* Arrest histories were unavailable for two offenders.

Table 17 Number of Prior Charges - Offenders with Records

<u>No. of Charges</u>	<u>No. of Offenders</u>	<u>Percent</u>
1-2	77	24.4
3-5	74	23.5
6-10	52	16.5
11-15	32	10.2
16-20	20	6.3
21-25	23	7.3
26-30	16	5.1
31-35	12	3.8
36-over	<u>9</u>	<u>2.9</u>
Total	315	100.0

The number of prior arrests, these are incidents of arrest, each of which could include any number of offenses with which the offender is charged, range from one to 33 for the offender group. The number of charges, or separate offenses with which an offender has been charged, range from one to 51 prior charges.

The following seven tables present information concerning the presence or absence of major offense categories in the arrest records for offenders for whom such data is available. It was anticipated that such a handling of the data would be far more useful in attempting to establish a data base which could be employed in developing predictive models relative to outcomes in the rape situation, in this case, physical injury to the victim.

Table 18 Prior Homicide - Offenders Arrested

	<u>Frequency</u>	<u>Percent</u>
Yes	11	2.4
Rec. No Hom.	303	66.3
No Rec.	<u>143</u>	<u>31.3</u>
Total	457	100.0

Table 19 Prior Rape/Sodomy - Offenders Arrested

	<u>Frequency</u>	<u>Percent</u>
Yes	93	20.4
Rec. No. R/S	221	48.3
No Rec.	<u>143</u>	<u>31.3</u>
Total	457	100.0

Table 20 Prior Robbery - Offenders Arrested

	<u>Frequency</u>	<u>Percent</u>
Yes	93	20.4
Rec - No Rob.	221	48.3
No Rec.	<u>143</u>	<u>31.3</u>
Total	457	100.0

Table 21 Prior Assault & Battery - Offenders Arrested

	<u>Frequency</u>	<u>Percent</u>
Yes	179	39.2
Rec. - No A & B	135	29.5
No Rec.	<u>143</u>	<u>31.3</u>
Total	457	100.0

Table 22 Prior Break & Entry - Offenders Arrested

	<u>Frequency</u>	<u>Percent</u>
Yes	118	25.8
Rec. - NO. B & E	196	42.9
No Rec.	<u>143</u>	<u>31.3</u>
Total	457	100.0

Table 23 Prior Larceny - Offenders Arrested

	<u>Frequency</u>	<u>Percent</u>
Yes	147	32.2
Rec. - No Lar.	167	36.5
No Rec.	<u>143</u>	<u>31.3</u>
Total	457	100.0

Table 24 Prior Poss. Dangerous Weapon - Offenders
Arrested

	<u>Frequency</u>	<u>Percent</u>
Yes	95	20.8
Rec - No PDW	219	47.9
No Rec.	<u>143</u>	<u>31.3</u>
Total	457	100.0

We find that among the offenses specified, those offenders with prior arrest histories are most likely to have been charged with at least one assault and battery offense. Considering only the group with prior records, we observe that a majority, 57.0 percent, have been charged with the above offense. Also of note along that line, of the 314 offenders with prior records, 204 or 65.0 percent, have at least one prior arrest from the group of non-sex violent offenses including homicide, robbery, and assault and bottery. Such a percentage is decidedly greater than 29.6 percent of offenders, with prior records, who have been charged with offenses of rape and sodomy preceding this incident. However, when we consider property offenses, over half of the offenders with prior records have been charged with at least one of the property offenses, break and entry or larceny, specified in this data. What appears to be the case, with offenders in general in this sample, is that those with prior arrest histories tend to have been charged

with a relatively wide range of offenses, as opposed to being limited by specific crime types. It is intended that variables specifying types of offenses present in the offenders' prior records, along with subsequent variables intended to gauge the frequency of certain offense types, will be of use in predicting an offender's tendency to be involved in injury producing rape incidents.

The following tables seek to measure the extent of prior records in those offense areas which were anticipated to exert a potential influence on an offender's probability of injuring his victim. Toward that end, the number of offenses accumulated by each offender in the areas of serious sex offenses (rape-sodomy), lesser sex offenses, and non-sex violent offenses is herein reported. As with earlier tables concerning the extent of prior records, the following three tables include only those offenders with prior arrest records.

Table 25 Number Prior Serious Sex Offenses
Offenders with Prior Record for Same

<u>No. of Offenses</u>	<u>Frequency</u>	<u>Percent</u>
1	47	50.5
2	29	31.2
3	6	6.5
4	5	5.4
5	3	3.2
6	2	2.1
7	<u>1</u>	<u>1.1</u>
Total	93	100.0

Table 26 Number Prior Lesser Sex Offenses
Offenders with Prior Record for Same

<u>Number of Offenses</u>	<u>Frequency</u>	<u>Percent</u>
1	20	64.5
2	8	25.8
3	2	6.5
4	<u>1</u>	<u>3.2</u>
Total	31	100.0

Table 27 Number Prior Non-Sex Violent Offenses
Offenders with Prior Record for Same

<u>Number of Offenses</u>	<u>Frequency</u>	<u>Percent</u>
1	66	30.4
2-3	74	34.1
4-5	29	13.4
6-7	17	7.8
8-10	16	7.4
11-15	13	6.0
16-over	<u>2</u>	<u>0.9</u>
Total	217	100.0

We observe that with regard to the frequency of prior sex offenses, whether serious or lesser, a majority of offenders with same in their arrest history have been so charged only once. With regard to non-sex violent offenses, however, approximately 70 percent of offenders priorly charged have been so more than once. In addition, long histories of numerous charges for sex offenses is found to be quite uncommon, only about 7 percent of those with prior serious sex offense histories have been charged more than four times. As for non-sex violent charges, we find that almost 30 percent have been charged with same on five or more occasions. While such a finding may be just as indicative of the response of the criminal justice system to particular offenders, as of actual patterns of criminal behavior, it was anticipated that such variables would be

of value in projecting increased use of violence in the rape situation.

II. DETERMINANTS OF OFFENSE SITUATION

Time

The first variable to be considered in this section concerns the time of the offense. The twenty-four hour day is divided into six hour segments for purposes of comparison at this point. It should also be remembered that the data reported below indicates the time at which the actual rape took place, they do not take into account preceding interaction between the victim and offender which might have commenced before the recorded hour. As data regarding this variable was collected it was rounded to the nearest hour, thus the mode of presentation used.

Tabel 28 Time of Offense

<u>Time</u>	<u>Frequency</u>	<u>Percent</u>
3-8 A.M.	119	14.6
9 A.M.-2 P.M.	97	11.9
3 P.M.-8 P.M.	176	21.6
9 P.M.-2 A.M.	409	50.2
No Information	<u>13</u>	<u>1.7</u>
Total	814	100.0

There is, quite obviously, statistical significance found in the above distribution. While a finding that approximately half of the incidents take place in what might be termed the night hours, 9 P.M. to 2 A.M., is not surprising, other findings might not be so expected. It is observed that

a rape incident is one and a half times as likely to occur in the afternoon or early evening hours, 3 P.M. to 8 P.M., than it is in the early morning hours, 3 A.M. to 8 A.M., which could be viewed as an extension of the peak hours of occurrence.

Day

Table 29 lists the incidents of rape by the day of the week on which they took place. A division by day of week is, of course, just as arbitrary as the categories used in the preceding table, and must therefore be viewed with the same limitations in mind.

Table 29 Day of Offense

<u>Day</u>	<u>Frequency</u>	<u>Percent</u>
Sunday	125	15.4
Monday	123	15.1
Tuesday	93	11.4
Wednesday	100	12.3
Thursday	103	12.7
Friday	117	14.4
Saturday	142	17.4
No Information	<u>11</u>	<u>1.4</u>
Total	814	100.0

There is no significant relationship between rape and the day of the week on which the incident occurs, in this study. Saturday is the day on which rape is most likely to

occur in this study, but it exhibits only a six percent increase over Tuesday, the day with the lowest frequency. This situation, rapes spread evenly throughout the week, as opposed to their concentration during weekends, raises interesting questions in view of the often forwarded explanations of the latter phenomenon. Amir (1971:82) draws on a statement by Marvin Wolfgang, from his Patterns in Criminal Homicide, to explain the weekend concentration of rapes. "Among the folkway in Philadelphia and probably in most American and European cities too, weekends are considered a special conjecture of time." Here the allusion is to the change from weekday routine, increased social interaction, increased consumption of alcohol, and increased use of public space. The assumption is that such activities contribute to the likelihood of forcible rape. If this is so, the observation in this study implies that either the city of Newark is in some way different than other cities in weekday versus weekend activity, or the past twenty years have eroded those normative patterns which established that special conjecture of time, the weekend.

Month

The following table illustrates the monthly distribution of rapes, reporting only those incidents occurring in 1976 and 1977, the complete years included in the thirty month spread of this study.

Table 30 Month of Offense

<u>Month</u>	<u>Frequency</u>	<u>Percent</u>
January	54	8.3
February	48	7.4
March	43	6.6
April	61	9.4
May	49	7.5
June	54	8.3
July	52	8.0
August	65	10.0
September	52	8.0
October	69	10.6
November	49	7.5
December	<u>55</u>	<u>8.4</u>
Total	651	100.0

The frequencies observed by month do not differ significantly from what might be expected by chance. It will be noted that the summit month in this study is October (10.6 percent), followed closely by August (10.0 percent). Even if we combine the four warm months, we find they account for 33.8 percent of all incidents, precisely one-third of the twelve month total. Combining the cold months, December, January, February and March, we find 30.7 percent of all incidents, again approximately one-third the total. This data, then, displays no relationship at all between month or season and the incidence

of reported rapes.

Spatial Patterns

The variables considered in this section involve the spatial relationship between the victim's residence and those locations which prove to be pivotal in the ensuing rape incident. Not only is the distance between the victim's residence and the location of the actual offense of interest here, also gauged is the distance separating the victim's residence and the location at which she makes initial contact with the offender. The relative significance of each of these locations, in terms of their appropriate inclusion in this second major grouping of variables, will vary from case to case. It will be recalled that this grouping includes variables which involve choices made by the victim at a time when she is unaware of the offender's intentions. If the victim is intimidated, by the offender, prior to her being moved to the actual location of the offense, then only the point of initial contact is relevant for this data grouping. If on the other hand, no such movement takes place after intimidation, and that is the case in most incidents, then both locations would appropriately be placed in this group, with the possibility that the process in arriving at both locations was one and the same, i.e. intimidation and rape occurred at the same place. There are also a number of

incidents in which the victim moves willingly with the offender from place to place, ultimately to the location of the offense. Certainly in cases such as these, the victim's choice in both areas may be indicative of entirely different interactive forces, in neither of which would she be aware of what was to come. This discussion, at this point, serves only to recognize the possibility that some data from these variables should be considered, conceptually, in the third group. The issue will be considered further in a later section of this report, and is taken into account in the subsequent development of predictive models. With this preface in mind, the data for all cases will be presented at this point for the sole purpose of reviewing the distances separating the indicated locations.

The categories utilized to present this data represent increasing intervals of distance from the victims residence. The first two categories distinguish between the victim's apartment or that section of a dwelling in which the victim actually lives, and other portions of the entire building in which the victim and others may reside. The latter category would include such locations as the basement, hallway, porch, or roof of the building in which the victim lives. The next four categories radiate from the victim's residence and include the street on which she lives, the police patrol district in which she lives, a contiguous

patrol district, and non contiguous patrol districts. Although police patrol districts vary in area, most are under one square mile. The final category includes those victims who were raped in Newark, but reside in another municipality.

Table 31 Location of Offense - Victim Residence

<u>Distance</u>	<u>Frequency</u>	<u>Percent</u>
Vic. Apt.	209	25.7
Vic. Bldg.	82	10.1
Same Street	74	9.1
Same Patrol Dist.	149	18.3
Contig. Patrol Dist.	80	9.8
Non Contig. Patrol Dist.	126	15.5
Vic. Resides Non Newark	89	10.9
Info. NA	<u>5</u>	<u>0.6</u>
Total	814	100.0

Table 32 utilizes the same categories to note the relationship between the offender's residence and the location of the offense. Such data is of course limited to those offenders apprehended, those whose residence can be documented.

Table 32 Location of Offense - Offender Residence

<u>Distance</u>	<u>Frequency</u>	<u>Percent</u>
Off. Apt.	114	24.8
Off. Bldg.	47	10.2
Same Street	37	8.0
Same Patrol District	79	17.2
Contig. Patrol District	62	13.5
Non Contig. Patrol Dist.	68	14.8
Off. Resides Non Newark	<u>53</u>	<u>11.5</u>
Total	460	100.0

A mention is in order of the severe limitation of this type of data as it relates to offenders' residences. As indicated before, all documented information on offenders derives from information resulting from the identification and arrest of same. The degree to which apprehended offenders are representative of all offenders is perhaps nowhere as questionable as in this area. Obviously an offender's chances of being arrested are overwhelmingly greater if the rape takes place in his residence, than if it occurs several miles away. In fact, there undoubtedly exists an orderly inverse relationship between the distance separating an offender's residence from the rape location, and the likelihood that he will be arrested. Consequently, we must be extremely cautious in interpreting data such as that generated by Table 32, and its remarkable similarity to the preceding table. It is an absolute certainty that

at least the first two categories in that table are grossly overrepresentative of the case in all incidents.

However, for the same reason that the first two or three categories in that table are overstating the case, we can also safely assume that those categories reporting offenders residing at greater distances from the offense location are underrepresentative of their true proportion. Consequently, although we cannot do so with any degree of precision, it does seem that the offense is substantially more likely to occur in the proximity of the victim's residence than that of the offender. We observe that in over one-third of all incidents, 35.8 percent, the rape takes place in the victim's actual residence or the building in which she lives. In approximately two-thirds of all cases, 63.2 percent, the victim is raped at a location within the police patrol district in which she resides.

The two following tables report the distances between the victim's and offender's residences and the point at which initial contact occurred, contact which was continuous to the point of the actual offense. The first six categories are the same as those in the preceding table, while the seventh and eighth are a bit different. The seventh category includes those victims who reside outside of the city, but who made initial contact in the city. Category eight includes city residents for whom initial

contact occurred outside of the city. For those cases in which a non-Newark resident experienced initial contact outside of the city, culminating in a rape incident within the city, entry was made in the category most closely approximating the actual distance between residence and location of contact.

Table 33 Location of Initial Contact - Victim Residence

<u>Distance</u>	<u>Frequency</u>	<u>Percent</u>
Vic. Apt.	205	25.2
Vic. Bldg.	96	11.8
Same Street	120	14.7
Same Patrol Dist.	147	18.1
Contig. Patrol Dist.	82	10.1
Non Contig. Patrol Dist.	84	10.3
Vic. Non Newark	74	9.1
Contact Non Newark	<u>6</u>	<u>0.7</u>
Total	814	100.0

Table 34 Location of Initial Contact - Offender Residence

<u>Distance</u>	<u>Frequency</u>	<u>Percent</u>
Off. Apt.	65	14.1
Off. Bldg.	51	11.1
Same Street	52	11.3
Same Patrol District	99	21.6
Contig. Patrol District	65	14.1
Non Contig. Patrol Dist.	72	15.7
Off. Non Newark	48	10.4
Contact Non Newark	<u>8</u>	<u>1.7</u>
Total	460	100.0

A comparison of the data for the apprehended offender group, Tables 32 and 34, shows that a shift has occurred in the modal category from rapes occurring in the offender's apartment to initial contacts made in the surrounding patrol district. A significant portion of those offenders involved in rape incidents in their own residence initially encounter their victim somewhere else. This is in contrast to the marked stability in the proportion of victims raped in their residence, and initially contacting the offender in the same place. For victims, the only noticeable trend is that they are somewhat more likely to make initial contact with their offender in their immediate neighborhood than for the offense to occur in same. Whereas 44.9 percent of victims are raped either on the street on which

they live, or in their residence, 51.7 percent initially contact their offender within those confines. For the offender sample, other than the point mentioned above, no comparisons between initial contact and location of offense, as they relate to the offender's residence, warrant further notice at this point.

The following two tables also concern the locations at which an offender and victim make initial contact, and at which the actual offense takes place. The concern here, however, is with the type of location involved rather than its proximity to the residence of either participant. As mentioned earlier with regard to the preceding tables, in those cases in which the victim is intimidated prior to moving to the location of the actual offense, such a factor would be more appropriately placed in the third grouping of data. Such instances do comprise a minority of cases, thus the data is presented, as a whole, in this section. As this data is applied to the subsequent development of a predictive model for victim injury, account will be taken of the above type incidents.

For Table 35, the location of the offense by type, the first three categories refer to the actual living space, or apartment, of the victim, offender and non-participants respectively. The fourth category, residential structure, includes non-living spaces of residential

buildings.

Table 35 Type Location of Offense

<u>Location</u>	<u>Frequency</u>	<u>Percent</u>
Vic. Res.	209	25.7
Off. Res.	121	14.8
Other Res.	46	5.7
Res. Struc.	89	10.9
Outdoors	135	16.6
Motor Veh.	129	15.8
Abandoned Bldg.	42	5.2
Non. Res. Bldg.	37	4.5
Other	<u>6</u>	<u>0.7</u>
Total	814	100.0

Here we are able to note, more accurately than from the preceding variables, that 40.5 percent of all incidents take place in the actual residence of one of the participants. If we take into account those incidents occurring in non-living spaces of the building in which the victim or offender resides, we find that approximately half of all cases take place within the confines of the residential structure occupied by at least one of the participants.

Table 36 lists the type locations which characterized the points of initial contact between victim and offender. The breakdown of residential categories used in this table is the same as that employed in the preceding table.

Table 36 Type Location of Initial Contact

<u>Location</u>	<u>Frequency</u>	<u>Percent</u>
Voc. Res.	207	25.4
Off. Res.	46	5.7
Other Res.	39	4.8
Res. Struc.	99	12.2
Street or Sidewalk	306	37.6
Outdoor Non-Street	24	2.9
Tavern	57	7.0
Non Res. Building	25	3.1
Other	<u>11</u>	<u>1.4</u>
Total	814	100.0

The above data further supports the conclusion that rapes occurring in the residence of the victim are usually preceded by initial contact in same. As for incidents taking place in the residence of the offender, we note that while 14.8 percent of all incidents occur at that location, only 5.7 percent of all cases involve initial contact by the participants at that location. Thus we can say with more certainty, that when a rape occurs in the offender's residence, it most likely was preceded by victim-offender interaction at some location other than the residence of the offender. While on the other hand, rapes occurring in the residence of the victim are seldom preceded by initial contact or interaction at other locations. We can also observe a tendency of participants

who experience initial contact outdoors to move, either before or after victim intimidation, to indoor locations prior to the commission of the offense. Whereas 40.5 percent of all initial contacts occur out of doors, only 16.6 percent of all rapes take place in such locations.

Number of Offenders

The final variable included in this grouping of data is a bit different than those presented above, however, the rationale for including this variable is quite similar. As discussed earlier, the coming together of victim and offender at a given location and time involves alternative choices on the part of both participants, which may have nothing to do with the ensuing rape. Stated otherwise, we cannot be certain if the issue of rape was taken into account in the movements and interactions which brought the participants together in the first place. Whether the ultimate rape involved one offender, or many offenders, our knowledge of their intentions preceding their initial contact with the victim remains at a level of uncertainty. Consequently, the number of offenders involved in the incident takes its place among determinants of the offense situation, rather than a product of interaction once the offense is in motion.

Table 37 Number of Offenders

<u>No. of Offenders</u>	<u>Frequency</u>	<u>Percent</u>
1	643	79.0
2	115	14.1
3	37	4.6
4	12	1.5
5	3	0.4
6	2	0.2
No Info.	2	0.2
Total	814	100.0

It is apparent that the great majority of incidents included in this sample involve single offender rapes. Multiple offenders are present in only one-fifth of all incidents reported, with only one case in twenty involving more than two offenders.

III. INTERACTIVE FACTORS

Additional Offenses

Our consideration of interactive factors, those relating to situational characteristics once the offense incident has commenced, begins with a look at additional offenses committed in concert with the rape. These are offenses which may precede or follow the actual sexual assault, but nonetheless occur at the time when the offender's criminal intentions are or would be clear to the victim. The actions on the part of the offender which constitute these additional offenses may precede the point in time at which he attempts to coercively impose his will on the victim, but those offenses that do are clearly instrumental in achieving the coercive goal. For example, break and entry will in most cases precede offender-victim contact, but such an act leaves no doubt as to the offender's criminal intent. When we venture to the question of rape in particular being part of the intent, or an impulse once entry is gained, the available indicators are much less reliable. We will, therefore, at this point limit our conjecture to issues clarified by the variables at hand, as opposed to those only laid open to speculation. Our purpose here is a consideration of the offense as it relates to the interactional process of the entire rape incident, processes occurring when we can be certain all participants are

aware of the nature of the event. Table 38 distinguishes events in which an illegal entry, surreptitious or by force, accompanies the sexual assault.

Table 38 Added Offense - Break & Entry

<u>Break & Entry</u>	<u>Frequency</u>	<u>Percent</u>
Yes	76	9.3
No	<u>738</u>	<u>90.7</u>
Total	814	100.0

The relationship of the additional offense to the actual sexual assault, in terms of time, is most unsettled in cases of robbery. The overwhelming majority of the other offenses reviewed in this section precede the act of rape, in some manner lending themselves to explanation based on their instrumentality in the offender's successful accomplishment of his intended act. Robbery, taking the victim's property by force or by placing same in fear, does not disproportionately precede the act of rape. In fact, occurrences are about as likely to occur after the rape as they are to precede it. It is difficult to conceive of robbery as being of any utility in the accomplishment of rape, unless in those cases in which it precedes the actual rape it is seen as one of a succession of steps in which the offender intensifies his degree of control over the will of the victim. Whichever the case, our purpose here is to gauge the incidence of robbery occurrences in order to test its usefulness in the prediction of victim

injury. Table 39 presents such a measurement.

Table 39 Added Offense - Robbery

<u>Robbery</u>	<u>Frequency</u>	<u>Percent</u>
Yes	156	19.2
No	<u>658</u>	<u>80.8</u>
Total	814	100.0

An added felony included in this data is the offense of abduction. This offense deals with the movement of a victim from one place to another, forcibly and against her will. Although this sample does include a small number of cases in which the movement occurred following the rape, the majority involve incidents in which the forced movement was to the location of the offense. Even though applicable statutes have no provision relating to a minimum distance of victim movement, such a distinction has been made here for conceptual clarity (and later use in the predictive model). Excluded are incidents such as those in which a victim is taken to the rear of a building, to the nearest abandoned building, or around the corner to a vacant lot. Included are incidents in which the forced movement is beyond a city block contiguous to the one from which the movement is initiated. As might be expected most of the applicable incidents involve forced movement of the victim in a motor vehicle. Although we cannot be certain which, such a movement would appear to involve transport to a

known location, or a search for some distant, but not previously known location in which to commit the offense.

Table 40 Added Offense - Abduction

<u>Abduction</u>	<u>Frequency</u>	<u>Percent</u>
Yes	74	9.1
No	<u>740</u>	<u>90.0</u>
Total	814	100.0

The following two tables include data regarding the possession of weapons by the offenders in this sample. While the offender certainly does not choose to carry the weapon after the interactive process has begun, when the choice is made to use same may be an entirely different question. To assume that the offender carried the weapon only to facilitate the commission of the rape makes absolutely no sense. To carry a weapon, especially a knife, is a choice not at all uncommon among large city residents. In all probability, the offenders in this sample are armed on far more occasions when they do not commit any crime than when they do. This point is made to justify the inclusion of these variables in this third section, that reporting interactive characteristics or those which come into play only after both participants share awareness of the rape situation at hand. Since inclusion in these variables depends upon the victim actually seeing the weapon, obviously taking place at or

after the point of coercion, that is our first substantive indicator that the offender has chosen to commit the crime and to use the weapon. Clearly, such a choice by the offender must precede by some amount of time the victim's sighting of the weapon, but our only method of gauging that choice is through observable and reported action. It is probably more valid to assume that rapes are carried out by some offenders, while armed, who never employ the weapon, actively or as a threat, than to assume that the offenders in this sample armed themselves solely to facilitate a subsequent rape. That which distinguishes those in this study is that they use a weapon in the commission of a rape, not that they choose to arm themselves in the first place.

With the research purpose of this project in mind, projecting victim injury, the data on the possession of weapons was distinguished between possession of knives and possession of guns. The former category includes a very small number of cases involving the use of implements such as screwdrivers or other such tools, bottles, stones or pipes. The latter category is almost entirely comprised of handguns, although isolated incidents involving shotguns are present.

Table 41 Added Offense - Possession Knife

<u>Knife</u>	<u>Frequency</u>	<u>Percent</u>
Yes	206	25.3
No	<u>608</u>	<u>74.7</u>
Total	814	100.0

Table 42 Added Offense - Possession Gun

<u>Gun</u>	<u>Frequency</u>	<u>Percent</u>
Yes	73	9.0
No	<u>741</u>	<u>91.0</u>
Total	814	100.0

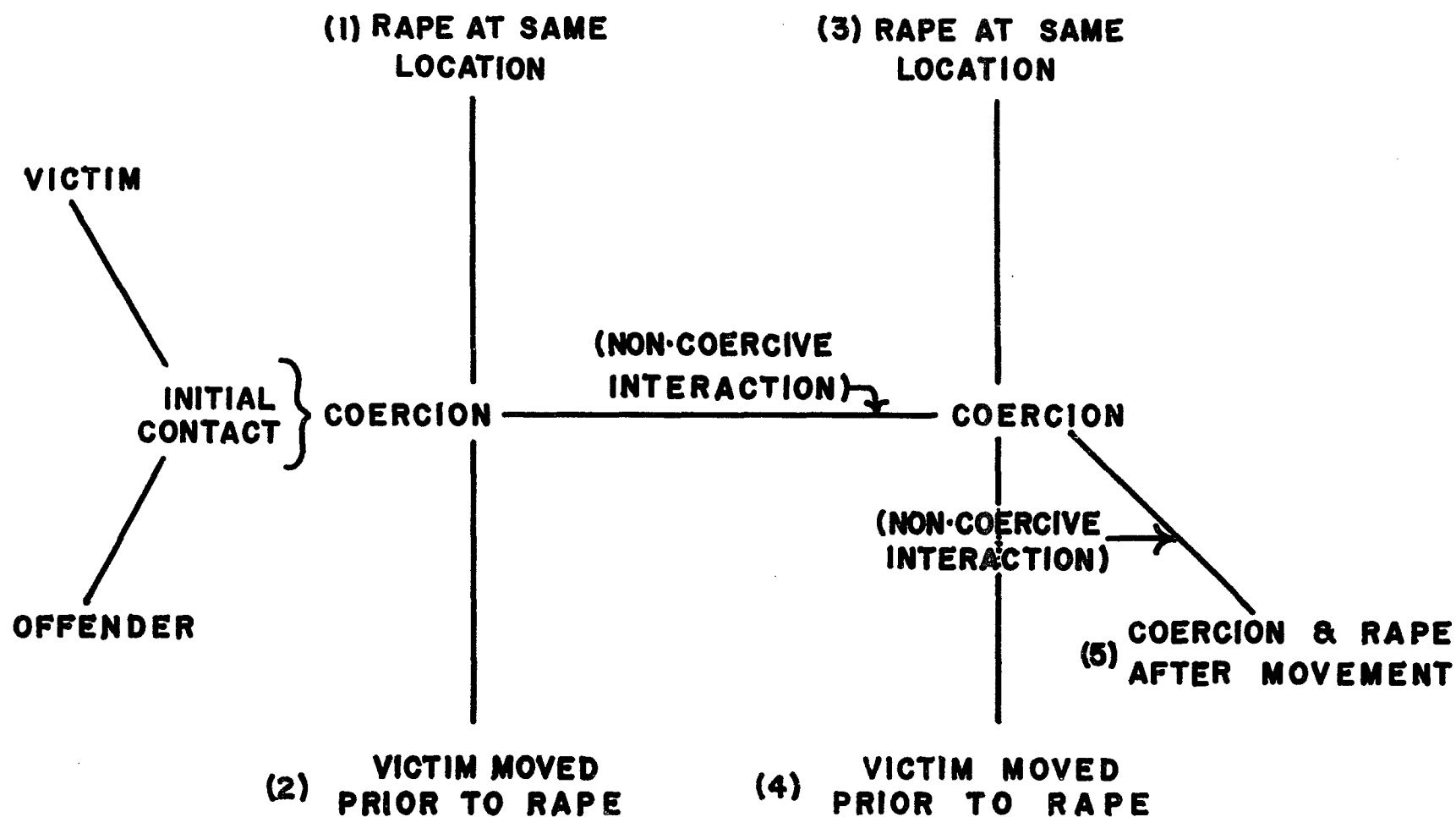
Coercion

The next series of variables dealt with in this section are those having to do with the introduction of coercion into the victim-offender interactive process. The point of coercion is that instant at which the offender initiates efforts to impose his will on the victim. If this point of coercion is not at the time of initial contact between offender and victim, and in the majority of cases it isn't, it signals the point at which their interaction is radically altered. Obviously it is the point at which the victim-offender interaction goes from legal to illegal, the point at which the offender's actions begin to satisfy the legal requirements of a rape litigation. This point is also important in any understanding of the nature of the participants' actions in the rape situation. There is no

question regarding its importance in indicating the input of the offender, as it may signal the first overt, and therefore identifiable, action on his part, specifically directed to the accomplishment of the rape objective. The point of intimidation is just as important as an indicator of the point at which the victim's perception of the interaction is changed. Any effort by behavioral science to gauge the victim's input with respect to the victim-offender interaction must take this factor into account. It is only from this point on that viewing the victim's behavior in terms of avoidance of the rape outcome makes any sense. Conversely, viewing the victim's behavior prior to the point of intimidation as in any way contributing to the rape outcome, must take into account her perception of the interaction as directed toward something other than rape.

The effort here has been to identify the point of coercion in its relation to the entire run of the victim-offender interaction. The elements considered were the time of coercion relative to the initiation of the interaction, and the relationship of the point of coercion to any change in location by the victim and offender during the interactive process. Amir writes on the subject (1971:151), "Studies and surveys on rape do not tell us in what phase of the crime, or in the process of committing it, the use of force begins." While he does present data

DIAGRAM 1



concerning the relation of physical force to the time of the actual rape, which will be discussed in detail later, he does not address the issue of coercion raised here. The preceding diagram schematically represents the relationship of coercion, time, and movement to the interaction process as a whole.

Rape situations (1) and (2) represent incidents in which the point of coercion and initial contact are the same, with the rape taking place at that location in the former, and the victim moved, after she has been intimidated, in the latter. Situations (3) and (4) are incidents in which non-coercive interaction takes place between the victim and offender after they make initial contact. The offender employs coercion after a period of interaction, and the rape occurs either at the point of contact and interaction or at a location to which the victim is moved following intimidation. The remaining rape situation involves incidents in which the victim and offender change locations in the course of non-coercive interaction, with coercion and rape following such movement.

Table 43 presents a frequency distribution of the above rape situations, with the addition of those incidents in which no coercion is utilized by the offender. These cases, for the most part, involve very young victims, as well as some with mental or physical handicaps.

The issue with the very young being either their inability to comprehend the nature of the offender's request or instruction, or age disparity insuring compliance and thus obviating the need for coercion. The issue is similar for the handicapped victims with the question of consent taking on extended meaning.

Table 43 Point of Coercion

<u>Coercion</u>	<u>Diagram No.</u>	<u>Frequency</u>	<u>Percent</u>
None	-	57	7.0
Initial Contact Same Location	1	173	21.3
Initial Contact Victim Moved	2	165	20.3
Not in. Cont. Same Location	3	149	18.3
Not in. Cont. Victim Moved	4	78	9.6
Coercion & Rape After Move	5	186	22.9
No Info.	-	<u>6</u>	<u>0.7</u>
Total		814	100.0

We observe that coercion is somewhat more likely to occur after some non-coercive interaction has taken place between the victim and offender, than it is at the point of initial contact. In 50.8 percent of all incidents coercion takes place subsequent to non-coercive interaction, while in 41.6 percent of the cases it occurs at initial contact. Also of interest is the modal category representing cases in

which the victim and offender together change location at least once prior to any overt coercion on the part of the offender.

The next consideration in this section concerns the type of coercion employed by the offender in his attempt to intimidate the victim. In general, that coercion either takes the form of threatening by word or gesture, or actual physical force. Certainly these modes of coercion are not mutually exclusive, with verbal threats quite often accompanying the use of physical force. In those cases, we have designated the coercion as physical force, in as much as it may be understood as an extension in intensity, or degree of the verbal threat also utilized by the offender. Also of importance with regard to the type of coercion is the presence or absence of a weapon in conjunction with the threat or physical force used.

Table 44 Type Coercion Used by Offender

<u>Type</u>	<u>Frequency</u>	<u>Percent</u>
None	57	7.0
Threat No Weapon	69	8.5
Threat w/Weapon	213	26.2
Phys. Force no weapon	387	47.5
Phys. Force Weapon Present	60	7.4
Use of Weapon	12	1.5
Other	14*	1.7
No Info.	<u>2</u>	<u>0.2</u>
Total	814	100.0

*This category included cases in which the victim reports being either asleep or unconscious at the time the sexual assault was initiated.

We see that in 54.9 percent of the incidents physical force was used to coerce the victim, this is not including the 1.5 percent in which a weapon was used at the point of coercion, as compared to 34.7 percent of the total in which threatening was relied upon. It is interesting to note the role of weapons in relation to these two modes of coercion. In only 13.4 percent of the physical force incidents was the offender armed, as compared to 75.0 percent of the incidents in which threatening was used. It would seem that a weapon is viewed, by the offender, as a sort of guarantee of compliance on the part of the victim, yet in only 35.1 percent

of all cases does the victim report that the offender was armed.

Victim Resistance

The next series of variables, in this grouping of interactive factors, deals with the degree of victim resistance which follows the offender's coercive efforts. What we are seeking to gauge here is the nature of the victim's behavior between the point of coercion, and that point in time at which either the offender successfully intimidates the victim or abandons his efforts to do so. Should the offender's coercive behavior succeed in intimidating the victim, i.e. the point at which the victim's will in fact becomes submissive to that of the offender, the role of the victim in the rape interaction has been dramatically altered once again. It is only during that period, between the points of coercion and intimidation, that an interpretation of victim input designed to identify or measure behavior which actively militates against completion of the rape makes any sense. In the same way that we conceptually distinguish victim input prior to her knowledge of the offender's intentions, we must recognize the point of intimidation as the conclusion of the only segment in the entire interaction in which considerations of "resistance" are meaningful. We may be speaking here of a period of time lasting only a matter of seconds, of

course it could be longer, but it is the only time during which the victim is both aware of the offender's intent and has not resigned herself to the fact that it will be accomplished.

In our attempt to understand the role of the rape victim, in the context of the entire victim-offender interactive process, resistance may be of relatively short duration, yet at the same time might be of critical importance in determining the outcome of the interaction. For that reason it is necessary that it be measured at the proper time during the interactive process. Resistance, or its absence, has come to be applied to many aspects of the victim-offender interaction, but if we view resistance as the victim's efforts to repel an impending rape, it can only occur in the time period mentioned above. Victim behavior following the point of intimidation, and in virtually all cases of completed rape that point precedes the sexual act, is indicative only of acquiescence, assent, and submission. This behavior, which may even involve a change in location, is that which takes place immediately prior to the forced sex act and is thus often mistakenly viewed as the absence of resistance. It is essential to recognize, if one is to accurately gauge resistance, that it is in most cases separated from the actual rape by a period of time. Even in incidents where physical resistance is offered by the victim, in all but a few cases that resistance ends in

failure before the forced sex act begins, not during the sex act, or after it has been completed.

Taking this into account, all data in the case files has been carefully scrutinized with regard to the points of coercion and victim intimidation, or offender abandonment of the rape objective. The victim's behavior during that portion of the interaction has been reviewed to determine whether active resistance was present. Resistance was deemed to be victim efforts beyond an expression of reluctance or limited expressions of refusal or denial when confronted with the offender's initial coercive effort. Incidents in which victim resistance was present are designated as either verbal or physical in nature. Verbal resistance includes extended refusals or pleadings on the part of the victim and/or verbal efforts to attract external attention. Physical resistance involved prolonged victim struggling or actual fighting with the offender, it is physical resistance beyond an initial recoil or avoidance maneuver when coercion is initiated. The type of resistance is also accompanied by an observation of its relative success. The resistance was considered successful if the victim was able, in any way, to thwart the rape intent of her offender.

Table 45 Victim Resistance after Coercion

<u>Type</u>	<u>Frequency</u>	<u>Percent</u>
None	375	46.1
Verbal Unsuccessful	131	16.1
Verbal Successful	38	4.7
Physical Unsuccessful	101	12.4
Physical Successful	97	11.9
Interupt.	15*	1.8
No Coercion	<u>57</u>	<u>7.0</u>
Total	814	100.0

* In these incidents the offender's coercive efforts were interrupted at a point making a determination of resistance impossible.

In as much as the entire rape incident is being viewed from an interactive perspective, it was decided to include incidents in which the victim's resistive efforts appear to have met with success, i.e. attempted rapes. Also, when considering the further intention of this project, to arrive at a predictive model for victim injury, the need to include such cases is a necessity to insure a more accurate representation regarding victim input. Toward that end, cases of attempted rape in this sample were reviewed to determine the primary reason for their ending as attempts, and not completed rapes. First, a determination was made as to whether the outcome was directly attributable to actions, verbal or physical, solely undertaken by the

victim. These are incidents in which the victim, with no aid or intervention, was able to alter the probable outcome of the incident from rape to an attempt at same. Cases so designated were then distinguished to indicate those in which the victim's resistive efforts, of any type, seemingly caused the offender to abandon his course of action, and those in which the victim was able to effect an escape from the control of the offender. A third designation includes those incidents in which the offender's efforts resulted in failure as the consequence of intervention by some person or factor external to the offender-victim interaction. Cases in this category include, among others, intervention by the police, a passerby, or a sound which apparently caused an offender to flee. The fourth category of attempted rapes are those in which the offender is reported as being sexually incapable of completing the rape act.

Table 46 Factors in Attempted Rape

	<u>Frequency</u>	<u>Percent</u>
Victim Resistance	64	31.5
Victim Escape	49	24.1
External Factor	67	33.0
Offender Unable	18	8.9
No Info.	<u>5</u>	<u>2.4</u>
Total	203	100.0

Sex Acts

A charge of rape is constituted by an act of sexual intercourse absent the consent of the victim, this amounts to in concise terms, both the legal requirement and general understanding of what such an incident involves. What often occurs, however, are incidents in which the victim is forced to engage in, or submit to, sexual activity in addition to sexual intercourse. The data presented in this section reports the frequency of incidents involving fellatio, cunnilingus, anal intercourse and repeated intercourse. Determinations of the incidence of these sex acts relied, for the most part, on statements of the victim, and in some cases on offender statements.

Table 47 Additional Sex Acts - Fellatio

<u>Act</u>	<u>Frequency</u>	<u>Percent</u>
Present	111	13.6
Absent	<u>703</u>	<u>86.4</u>
Total	814	100.0

Table 48 Additional Sex Acts - Cunnilingus

<u>Act</u>	<u>Frequency</u>	<u>Percent</u>
Present	25	3.1
Absent	<u>789</u>	<u>96.9</u>
Total	814	100.0

Table 49 Additional Sex Acts - Anal Intercourse

<u>Act</u>	<u>Frequency</u>	<u>Percent</u>
Present	54	6.6
Absent	<u>760</u>	<u>93.4</u>
Total	814	100.0

Table 50 Additional Sex Acts - Repeated Intercourse *

<u>Act</u>	<u>Frequency</u>	<u>Percent</u>
Present	144	17.7
Absent	<u>670</u>	<u>82.3</u>
Total	814	100.0

* Includes incidents of repeated intercourse by the same offender.

The final variable considered in this section relates to the actions of the offender following the rape incident. Although it might be expected that the offender would

disappear from the rape scene as quickly as possible, our observations show this to be so in only about half the cases. The other incidents display a wide variety of conclusions to the interactive process surrounding the rape.

Table 51 Offender Actions Following Rape

<u>Action</u>	<u>Frequency</u>	<u>Percent</u>
Immed. Fled	418	51.4
Remain at Scene	124	15.2
Comfort Apology	52	6.4
Victim Captivity	28	3.4
Future Meeting	17	2.1
Victim Wait	31	3.8
Verbal Threat	93	11.4
Immed. Arrest	39	4.8
No Info.	12	1.5

The second category is comprised of those cases in which the offender remained at the scene of the rape, and either instructed the victim to leave or did not attempt to stop her when she did so. The third category includes incidents in which the offender apologized, or in some way offered comfort to the victim following the rape. The next two categories are made up of cases in which the victim was held captive for an extended period of time after the rape, and those in which the offender suggested a future meeting

or contact with the victim. Categories six and seven seem to relate to the offender's efforts to minimize the chance that he will be identified and/or apprehended at some subsequent time; those incidents in which the victim is ordered to remain at the scene for a given period of time, and those in which the victim is threatened with reprisal or later physical harm should she tell anyone about the rape incident. The final category is comprised of those incidents in which the offender was apprehended prior to culminating his interaction with the victim.

VICTIM INJURY

Victim Injury

As indicated earlier in this report, the purpose herein is to develop a model useful in predicting physical injury to the victim in rape incidents. Data has been collected with regard to the degree of physical injury suffered by the 814 victims included in this sample. That data was obtained, for the most part, from hospital reports of the emergency room examination of the victim, at the time the incident was reported. All victims of completed rapes, and about half of the victims of attempted rape, were examined at the hospital, with emergency room records available in every case. For those cases of attempted rape in which the victim was not examined at the hospital, approximately 12 percent of all cases, in this study, a determination of physical injury was made on the basis of initial and follow-up police reports, in each of which information concerning victim injury is specifically called for. Also, in cases reported a considerable time following their actual occurrence, injuries might have been present which were no longer visible at the time of the victim's medical examination. In such cases, only 5 percent of the total were reported seven or more days following occurrence, once again police reports and victim statements were relied upon for the desired information.

For our purposes, injury was defined as physical harm in addition to the sex act itself. (Curtis, 1974:113)

Our aim is to investigate conditions surrounding physical abuse over and above the abuse constituted by the sex act, or attempt at same, which is the necessary element for inclusion in the sample. Such an operational definition is not intended to dismiss or fail to acknowledge that the sex act does itself constitute physical abuse, but is designed to distinguish those incidents in which additional harm only compounds the sexual abuse present in all cases. This definition of injury is also not intended to deny the well documented presence of emotional trauma, or long term psychological harm, which often occurs independent of physical harm. Such emotional damage could not be reliably measured with the resources available for the majority of cases in this study.

Each of the 814 victims was assigned to one of four categories intended to measure the presence and degree of injury inflicted during the rape incident. The categories represent increasing intervals of severity with regard to the total amount of injury suffered by the victim. Thus, for those cases in which some injury is present, inclusion in a category representing more severe injury does not preclude the possibility that injuries of a less severe type are also present. In fact, this proves to be the case in most incidents of relatively severe injury. The following categories were employed to report victim injury.

None - no injury.

Mild - no material or lasting physical damage; scrapes, bruises, minor lacerations etc.

Moderate - lacerations sutured or evidence of prolonged or extensive beating.

Serious - injuries for which the victim was admitted to the hospital.

Table 52 presents a frequency distribution of victim injury, utilizing the above designations.

Table 52 Victim Injury

	<u>Freq.</u>	<u>Pct.</u>
None	565	69.4
Mild	184	22.6
Moderate	44	5.4
Serious	<u>21</u>	<u>2.6</u>
Total	814	100.0

Thus we see that 30.6 percent of all victims were injured to some degree, with about one-quarter of those having suffered injuries of the severity classified herein as moderate or serious.

Victim Injury in Previous Studies

Although much research has been generated in the area of rape, there is no corresponding abundance of published data pertaining to victim injury in such incidents. Clearly, much of the difficulty in this area stems from the unavailability of reliable data concerning the incidence and severity of victim injury. D. Chappell and his research associates report such a problem in two research projects, in their recently published collection of work in the area of rape (Chappell et al, ed., 1977). In an analysis of rape data from New York City, they report "... In an estimated 15 to 20 percent of the cases surveyed the victims appeared to require some hospital treatment for physical injuries." (Chappell and Singer, 1977 : 260-1) In addition to the limitations on such an estimate, it is further reported that no information was available to the authors as to the severity of victim injury. The situation as to data availability appears even worse in a comparison of rape data in Boston and Los Angeles. As to victim injury in those two cities, Chappell et al can only remark, "There were a number of general impressions derived from the data that could not be tested significantly because of the failure of the reports uniformly to take cognizance of the items. We gained the impression, however, that more victims in Boston than in Los Angeles received serious injuries during the course of

the rape offenses." (Chappell et al, 1977:241)

A recent study of forcible rape, conducted by the Battell Institute Law and Justice Study Center (1977), considers, among many other factors, the incidence of victim injury. The study is quite broad in scope, including data from 208 law enforcement agencies with regard to rape offenses during the year 1974. Of those agencies, 65 serviced jurisdictions with populations between 100,000 and 500,000, equaling the size of Newark. The survey indicates jurisdictions of that size report 56.7 percent of rape victims sustained some degree of injury. This finding is considerably larger than the 30.6 percent noted in this study, however, both the classification system used, and the method of data collection in the Battelle study raise some doubt as to the validity of that figure. Their categorization of the least serious of reported injuries includes those requiring no medical treatment. In the absence of hospital or medical records, it is impossible to distinguish what may amount to victim complaints of physical discomfort, certainly to be expected in cases of rape, from physical injury in the sense defined in this project. The method by which data was collected raises even more serious questions as to its validity. The questionnaire sent to the responding agencies calls for either actual data, or an estimate of the incidence of victim injury. In the reporting of the data, no distinc-

tion is made between actual and estimated responses in answer to the question at hand. In as much as the questionnaires were completed by police officers, it is quite likely that hospital records were not available to many respondents, resulting in estimated reports of injuries. Whereas such limitations might not be crucial in all variables reported, it seems that with respect to victim injury a high degree of confidence in the findings is not warranted.

We do find some additional quantitative data regarding the incidence of victim injury in reports of programs established at medical facilities to deal with the victims of rape. A.F. Schiff, reporting on 100 consecutive cases of rape seen by personnel of the Dade County Medical Examiner's Office, notes that 38 exhibited signs of trauma, with the remaining 62 classified as having no injuries (Schiff, 1969). Although such a finding is somewhat higher than the 30.6 percent with injuries noted in this study, we notice that Schiff reports in ten cases trauma only to the genitalia, some of which entailed only observations of a recently ruptured hymen. If the latter were detected in this study, and accompanied by no additional injuries, it would not have been included in any injury category. C. Hayman reports 125 of 451 female victims of sexual assault were observed to have suffered bodily harm in a Washington, D.C., hospital servicing victims of rape (Hayman et al, 1969). Such a finding, an overall

injury incidence of 27.7 percent is consistent with the 30.6 percent of victims injured in this study. Hayman also notes that 68 of those 125 victim were classified as having had severe physical assault, of whom 18 were admitted to the hospital. If we assume similarity in classification by severity of injury, or even of hospital criteria for admittance, we notice that the injured victims surveyed by Hayman were almost twice as likely to be severely injured, and one and a half times as likely to be admitted to the hospital as the victims in this sample. However, in light of the similarity of overall injury rates, it seems that some of the difference in the likelihood of more serious injury can be explained by variation of severity classification and by the inclusions of attempted rape in this data. Injuries of the serious type, those resulting in hospital admisssions, are somewhat less likely to occur in incidents of attempted rape. It is also quite possible, however, that admission criteria do differ between the two cities.

In his report of a survey of violent crime in seventeen large cities, in 1967, Lynn Curtis, defining injury as we have above, reports that 21.4 percent of the victims of rape were injured (Curtis, 1974: 113). Utilizing the L.E.A.A./ Census Bureau victimization data of 1972, including interviews of about a quarter of a million persons, in thirteen cities, M. Hindelang and B. Davis note that more than half of the

victims reporting completed rapes, and one-eighth of those reporting attempted rape, were injured to the extent that they required medical attention (Hindlelang and Davis, 1977:). They also report that 7 percent of the completed rape victims, and 3 percent of the attempted rape victims received hospital medical care overnight or longer. The reason for the significantly higher proportion of injuries in this victimization data appears to be the lack of distinction between victims who report having sought medical attention, and those who actually suffered physical harm in addition to the forced sex act. However, the 7 percent hospital admission rate is also substantially greater than that reported in this study or that reported by Hayman in Washington, D.C. Several factors are of potential value in explaining such a discrepancy. First, the victimization data relies on unverified reports of the victims, whose accounts of many hours in hospital emergency wards may have been recorded as "overnight hospital care." It is also possible that criteria for hospital admission varies between cities with, among other things, variation in the relative availability of hospital beds. Still another possibility is that the incidents reported to the survey teams, in actuality constitute crimes other than rape or attempts at rape. Also not to be overlooked, is the possibility that the victimization survey has in fact tapped a pool of victims not present in samples

of reported incidents, even though one might expect that unreported incidents would tend to be cases involving relatively less physical injury to the victims.

A breakdown of the data in this study by offense and injury, shows that among reported offenses, victims of completed rape are less likely to be injured than those of attempted rape. Of the former group, 27.3 percent suffered injury, as compared with 40.4 percent of the latter group of victims. Such a finding seems to illustrate quite a discrepancy between this study and the victimization data. However, what it may very well be confirming is the notion that it is victim injury which is an important impetus for the reporting of attempted rapes. Such a conclusion would seem to follow when we note that victims reporting attempted rape are more than three times as likely to be injured than the victims of the same crime in the victimization sample. This consideration of injury by offense also further confirms the consistency of the rate of victim injury, in completed rapes, between this study and the others cited above. As for the rate reported in the victimization data, double that reported in the other studies, the combining of those seeking medical aid with those actually injured seems to be the most probable explanation. We see the problem more so in completed rather than attempted rapes, in as much as a victim of the former would certainly be more inclined to seek

medical attention for examination only, or diagnostic screening for pregnancy or disease in the absence of other physical injury, than would the victim of an attempted rape.

To sum up the literature that does exist, we do see a consistent pattern in the incidence of victim injury in rape events. The studies cited, those relying on reported incidents, and utilizing some form of hospital records or medical documentation yield a rate of victim injury in the range of one quarter of all victims.

Even the Battelle effort, with its indicated shortcomings as to classification and data collection, reports that, "Approximately one quarter of all victims suffered injuries severe enough to require medical attention or hospitalization," (1977 :21) a definition of injury more closely paralleling the other studies cited in this section.

Comparisons between studies of reported incidents and victimization-based data are quite difficult, made so, for the most part, by the absence of documentation and verification in the latter, and confusion over the very definition of the item under investigation. Nonetheless, explanations of the disparity between the two, based upon structural differences between the methods, appear at least as plausible as explanations alledging the validity or correctness of one method over the other.

Participants in Rape-Injury Incidents

Our next step is to ascertain just who it is that is being injured, and by whom. Toward that end, observations will be reported as to the race and age of the participants involved in those incidents of rape which result in victim injury. Table 53 presents the victims of injury by race.

Table 53 Race of Victims Injured

<u>Race</u>	<u>Freq.</u>	<u>Pct. Inj.</u>	<u>Pct. All Victims</u>
Black	210	84.3	84.2
White	29	11.7	9.6
Hispanic	<u>10</u>	<u>4.0</u>	<u>6.2</u>
Total	249	100.0	100.0

Although there is no significant association between the race of the victim and subsequent injury, white victims are somewhat more likely to be injured than either of the other two groupings. If we combine the white and Hispanic groupings, their chances of being injured are identical to black victims.

Table 54 reports observations of the race of offenders involved in victim injury situations.

Table 54 Offender Race--Victim Injury Incidents

<u>Offender Race</u>	<u>Percent Victims Injured</u>	<u>Percent Non-Injured</u>	<u>Total</u>
Black	34.5	65.5	100.0
White	17.1	82.9	100.0
Hispanic	16.9	83.1	100.0

Black offenders are significantly more likely to injure victims than offenders of the white or Hispanic groupings. Whereas black offenders injured their victims in 34.5 percent of the incidents in which they were involved, white and Hispanic offenders inflicted injury on their victims 17.1 percent and 16.9 percent of the time respectively. Thus we see black offenders are twice as likely to be involved in injury producing incidents as their white or Hispanic counterparts.

Table 55 considers the race of both the victim and the offender in rape incidents resulting in victim injury.

Table 55 Victim Injury by Race of Participants

<u>Offender Race</u>	<u>Victim Race</u>	<u>Freq.</u>	<u>Pct. Inj. Cases</u>	<u>Pct. Total Cases</u>
Black	Black	201	80.7	79.0
	White	19	7.7	5.0
	Hispanic	8	3.2	2.6
White	White	7	2.8	3.0
Hispanic	Black	7	2.8	3.0
	White	3	1.2	1.5
	Hispanic	1	0.4	3.7
No Info.		<u>3</u>	<u>1.2</u>	<u>-</u>
Total		249	100.0	*

We observe, that when taken together, the race of both participants in the rape incident is not significantly associated with outcomes of victim injury. Similarly, if we consider all interracial incidents, we find they are no more likely to result in victim injury than incidents involving participants of the same race; 31.6 percent of the former group involved victim injury as did 30.4 percent of the latter. We do find, however, that the highest incidence of victim injury is found in cases involving black offenders and white or Hispanic victims, while the least chance of victim injury exists in cases involving white offenders and black victims, and cases in which both participants are Hispanic.

Observations on the ages of victims injured is presented in Table 56.

Table 56 Age of Victims Injured

<u>Age</u>	<u>Freq.</u>	<u>Percent of All Injuries</u>
2-9	6	2.4
10-14	28	11.2
15-19	53	21.3
20-24	59	23.7
25-29	41	16.5
30-34	24	9.6
35-39	11	4.4
40-44	4	1.6
45-49	9	3.6
50-54	4	1.6
55-59	5	2.0
60 over	<u>5</u>	<u>2.0</u>
Total	249	100.0

The median age for victims injured is 22.6 years, as compared to a median age of 21.0 years for all victims. Also, if we look at the more severe victim injuries, those categorized as moderate or serious, we find that the median age of victims so injured increases to 26.8 years. Table 57 further illustrates the trend observed with regard to the age of victims injured, by presenting the likelihood of a victim in any age bracket to be subjected to physical injury.

Table 57 Percent Injured per Victim Age Grouping

<u>Age</u>	<u>Percent Injured</u>
2-9	11.5
10-14	20.9
15-19	29.6
20-24	35.1
25-29	37.3
30-34	37.5
35-39	32.4
40-44	17.4
45-49	40.9
50-54	44.4
55-59	55.5
60 over	50.0

As can be seen, with little exception, the older the victim the greater the likelihood she will be injured during the rape incident.

When observing the age of the offenders involved in victim injury situations we are not confronted with the same trend. As with the data presented earlier regarding the ages of all offenders, that utilized at this point is gathered only from those offenders identified and arrested. The arguments previously mentioned in support of using only documented data in this area apply even more to incidents of

victim injury. In such incidents the reliability of victim descriptions concerning the age of their offender is, if anything, less than in non-injury incidents. The added trauma and confusion inherent in injury producing situations will only detract from the accuracy of victim observation in the rape situation. Of the 249 incidents resulting in victim injury, 139 resulted in the arrest of an offender. Table 58 reports the ages of those offenders.

Table 58 Offender Age - Victim Injury Incidents

<u>Age</u>	<u>Freq.</u>	<u>Pct.</u>
10-14	6	4.3
15-19	32	23.0
20-24	37	26.6
25-29	22	15.8
30-34	15	10.8
35-39	13	9.4
40-44	5	3.6
45-49	3	2.2
50-54	4	2.9
55 over	<u>2</u>	<u>1.4</u>
Total	139	100.0

The median age of offenders arrested in victim injury incidents is 23.5 years, almost identical to the 23.6 year median age of all offenders arrested. If we consider only offenders

involved in moderate or serious injury producing incidents the median age remains at 23.6 years. In addition, no trend is discernable when considering the likelihood of an offender of a given age inflicting injury on his victim.

Table 59 Percent Injury Incidents per Offender Age Grouping

<u>Age</u>	<u>Percent</u>
10-14	19.4
15-19	32.3
20-24	33.0
25-29	30.1
30-34	25.4
35-39	39.4
40-44	22.7
45-49	23.1
50-54	40.0
55 over	25.0

Race and Age Re Victim Injury in Previous Studies

Very little research exists as to the race and age of participants in rape incidents resulting in injury to the victims. Curtis reports that the frequency of victim injury is greater in incidents involving black offenders and white victims, and those in which both participants are white, than those incidents in which both participants are black. (Curtis, 1974 : 113-;4) Findings here show the frequency of victim injury in the first pairing (48.7 percent), to be greater than the second and third pairing, which exhibit relatively equal victim injury frequencies (29.1 percent and 32.4 percent respectively). M.W. Agopian et al., report concerning rape incidents involving black offenders and white victims, "Only two of the victims, according to the police reports, suffered what could be classified as 'brutal beatings', though 11 of the 63 victims were reported to have been beaten by their assailants in the course of the offense" (Agopian, et al 1977 : 134). If the 11 of 63 reflects all victims who were injured it is a proportion substantially less than the 19 of 39 who were injured in this sample. However, only two of the 19 suffered injuries which were classified as moderate or serious. Amir, rather than presenting data on injury to victims, deals with whether or not the offender employed force. He notes that the use of force was greater in incidents involving black offenders,

regardless of the race of the victim (Amir, 1971: 155). This is consistent with the findings herein, concerning injury, although in interracial incidents the proportions are roughly equal.

As for the age of the participants in victim injury incidents, Curtis reports that the chance of a victim being harmed increased with the victim's age. He further notes that the likelihood of inflicting injury peaked for offenders aged 21-30 (Curtis, 1974 : 113-14). While the data in this study are consistent with the first observation, the second observation cannot be supported.

The Predictive Model

As mentioned in an earlier section, multiple regression analysis is employed as the basis for arriving at a linear equation predictive of victim injury outcomes. The regression subprogram of the Statistical Package for the Social Sciences system of programs was utilized in formulating such a predictive model (Nie et al, 1975 : 342-67). The initial task in such a procedure was to screen the large number of variables for which data had been obtained, for indications of those variables upon which victim injury exhibited linear dependence. Regression runs were carried out using both the standard regression and hierarchical methods, in order that allowances could be made for the logical ordering of the variables posited earlier in this report. As a result of those runs, variables were deleted or retained on the basis of the F ratio calculated for the regression coefficient associated with each variable. Any variable whose regression coefficient did not yield an F ratio found to be significant at the .05 level was eliminated from the predictive model being formulated. The following table reports the variables deleted on the basis of the above criterion, presenting both the standardized regression coefficient and F ratio calculated for each. For variables not originally conducive to interval categorization, the dummy variables created for the regression procedure are reported.

Table 60 Summary of Variables Deleted From Predictive Model

Predispositional Characteristics:

<u>Variable</u>	<u>Reg. Coeff</u>	<u>Standard Reg. Coeff</u>	<u>F.</u>
Victim Race			
Black	.505	.025	0.22
White	-.379	-.001	0.00
Offender Race			
Black	.125	.052	0.38
White	.227	.064	0.61
Offender Age	.276	.036	0.27
Offender Occupation			
Unemp.	-.156	-.010	0.00
Unskilled	.360	.018	0.01
Semi-Skilled	.556	.024	0.02
Craft	-.225	-.036	0.20
Low/Md. W.C.	-.251	-.056	0.33
Prof.	-.462	-.060	0.70
Student	.571	.027	0.02
Prior Arrest Record	.576	.003	0.00
# Prior Arr.	.623	.061	0.10
Prior Homicide	.201	.039	0.52
Prior Rape	.766	.041	0.23
Prior Robbery	-.979	-.052	0.62
Prior A & B	-.248	-.002	0.00
Prior B & E	.943	.054	0.55

Prior Dang. Weap.	-.121	-.006	0.01
# Prior Serious Sex Offense	.323	.042	0.21
# Prior Non-Sex Violent Off.	.933	.037	0.14
Offender Height	-.174	-.084	1.56
Offender Weight	.752	.029	0.17

Determinants of Offense Situation:

<u>Variable</u>	<u>Reg. Coeff</u>	<u>Standard Reg. Coeff</u>	<u>F</u>
Time	.122	.015	0.08
Day			
Sun.	-.354	-.002	0.00
Mon.	.621	.030	0.18
Wed.	.265	.113	2.94
Thurs.	.127	.057	0.67
Fri.	.136	.062	0.86
Sat.	.595	.030	0.19
Mid Week	.890	.056	1.58
Month	.334	.015	0.19
Type Prem. Initial Contact			
Vic. Res.	.205	.123	0.23
Off. Res.	.434	.149	1.11
Oth. Res.	.245	.076	0.33

Tavern	.241	.087	0.38
Street	.240	.144	0.42
Non Res Bld.	.143	.028	0.11
Outdoors	.234	.058	0.32
Res. Struc.	.374	.141	0.83
Vic. Res/In. Cont.	.337	.087	0.43
Off. Res/In. Cont.	.510	.129	1.37
Vic. Res/Loc. Offense	-.497	-.013	0.01
Off. Res/Loc. Offense	-.468	-.128	0.99

Interactive Variables:

<u>Variable</u>	<u>Reg. Coeff</u>	<u>Standard Reg. Coeff</u>	<u>F</u>
Other Offenses			
Robbery	-.374	-.021	0.24
B. & E.	.125	.051	1.06
Poss. Gun	-.157	-.063	2.72
Abduction	.896	.036	0.61
Type Coercion			
Verbal	-.893	-.078	1.14
Contact	.116	.102	2.06
Sex Acts	-.723	-.043	0.60

Pt. Vic. Intim

In. Cont.	-.129	-.046	0.87
Subseq.	-.220	-.012	0.04
Vic. Moved	-.344	-.042	1.64
After Move	-.498	-.029	0.25

In some instances, the creation of dummy variables for the regression analysis yielded results in which only a portion of an original variable was retained for the predictive model. The following table reports on such variables, distinguishing those categorizations retained and those deleted.

Table 61 Added Categorical Deletions

Predispositional Characteristics:

<u>Variable</u>	<u>Reg. Coeff</u>	<u>Standard Reg. Coeff</u>	<u>F</u>
Prior Acquaintance			
Stranger	.358	.020	0.03
Pr. Vis. Con.			*
Acquan.	-.311	-.018	0.03
Friend	-.422	-.021	0.06
Int. Friend	-.694	-.002	0.00
Relative	-.125	-.030	0.27

Determinants of Offense Situation:

Type Prem. Offense

Vic. Res.	-.321	-.187	0.50
Off. Res.	-.645	-.341	2.48
Oth. Res.	-.404	-.130	0.87
Aban. Bldg.			*
MV	-.377	-.019	0.31
Outdoor			*
Non Res. Bldg.	-.273	-.079	0.44
Res. Struct.	-.698	-.261	2.84

Interactive Variables:

Att. Rape Vic. Action

Vic. Resis.	-.232	-.080	2.13
Ext. Force	-.371	-.013	0.06
Off. Unable	-.155	-.028	0.33
Vic. Escape			*

*category (dummy variable) retained for predictive model.

Developed as a result of the numerous regression runs reported above, was a predictive model utilizing ten independent variables from the body of data generated by this project. The variables were ordered to reflect the causal sequence intrinsic in their make-up. For example, variables measuring predispositional characteristics of the participants may exercise causal influence on elements of the interactive process involved in the rape incident, but the reverse could not be the case.

Table 62 Predictive Model

Dependent Variable: Victim Injury F=16.26*

<u>Indep. Var.</u>	<u>Multiple R</u>	<u>R Square</u>	<u>Reg. Coeff.</u>	<u>Standard Reg. Coeff.</u>	<u>F</u>
Predispositional:					
# Pr. Charges	.0128	.0002	-.146	-.187	10.10
Pr. Vis. Cont.	.2141	.0458	.359	.142	10.80
Vic. Age	.2975	.0885	.927	.138	9.50
# Lssr. Sex Off.	.3029	.0917	-.142	-.079	3.15
Pr. Lar. Chg.	.3493	.1220	.315	.193	11.86
Interactive:					
Knife	.4415	.1949	.565	.288	43.94
Aban. Bldg	.4566	.2085	.469	.136	9.89
Outside	.4737	.2244	.221	.096	4.89
Vic. Resis.	.5316	.2826	.247	.278	37.15
Att. R.- Escape	.5400	.2916	-.343	-.100	5.04
(Constant)			-.872		

*Significant $p < .001$

It will be noted that two of the variables included in this predictive model as being interactive, offenses occurring in abandoned buildings and out of doors, were originally designated as among the determinants of the offense situation. When the data pertaining to the type location in which the rape takes place was presented, in the preceding chapter, mention was made that in a portion of all incidents studied, inclusion of this variable would be more appropriate in the interactive grouping. Such incidents are those in which the victim moves to the location of the offense after coercive efforts by the offender have, in most cases, resulted in victim intimidation. Occurring at this time, when the victim is obviously aware of the offender's intent, the variable more closely fits our grouping of interactive variables. Interestingly enough, these two variables are the only designations from information regarding the location of the offense which can be categorized as interactive. They are also the only variables from the entire second grouping, determinants of the offense situation, which proved significant in predicting an outcome of victim injury. A crosstabular check of the above two offense locations, with the point or time of the offender's coercive efforts, provides the basis for their inclusion among the interactive variables. For those incidents taking place in abandoned buildings, 92.9 percent were cases in which coercion preceded movement to same, and

such was also the case in 61.2 percent of the incidents taking place outdoors. In no other locational grouping did a majority of the incidents bear the same relationship to the point of coercion.

With the above adjustment made, we observe that of the ten independent variables retained in the linear equation, five are predispositional and five interactive. A quick examination of the Beta scores and F ratios, however, discloses that the two strongest predictors in the equation, offender's possession of a knife and victim resistance, are variables from the interactive domain. Immediate observation of the linear model also reveals three variables which are significant predictors of the absence of physical injury; the number of prior charges contained in the arrest history of the offender, the number of lesser sex offenses contained in same, and those incidents of attempted rape in which the victim thwarts the intent of the offender by escape.

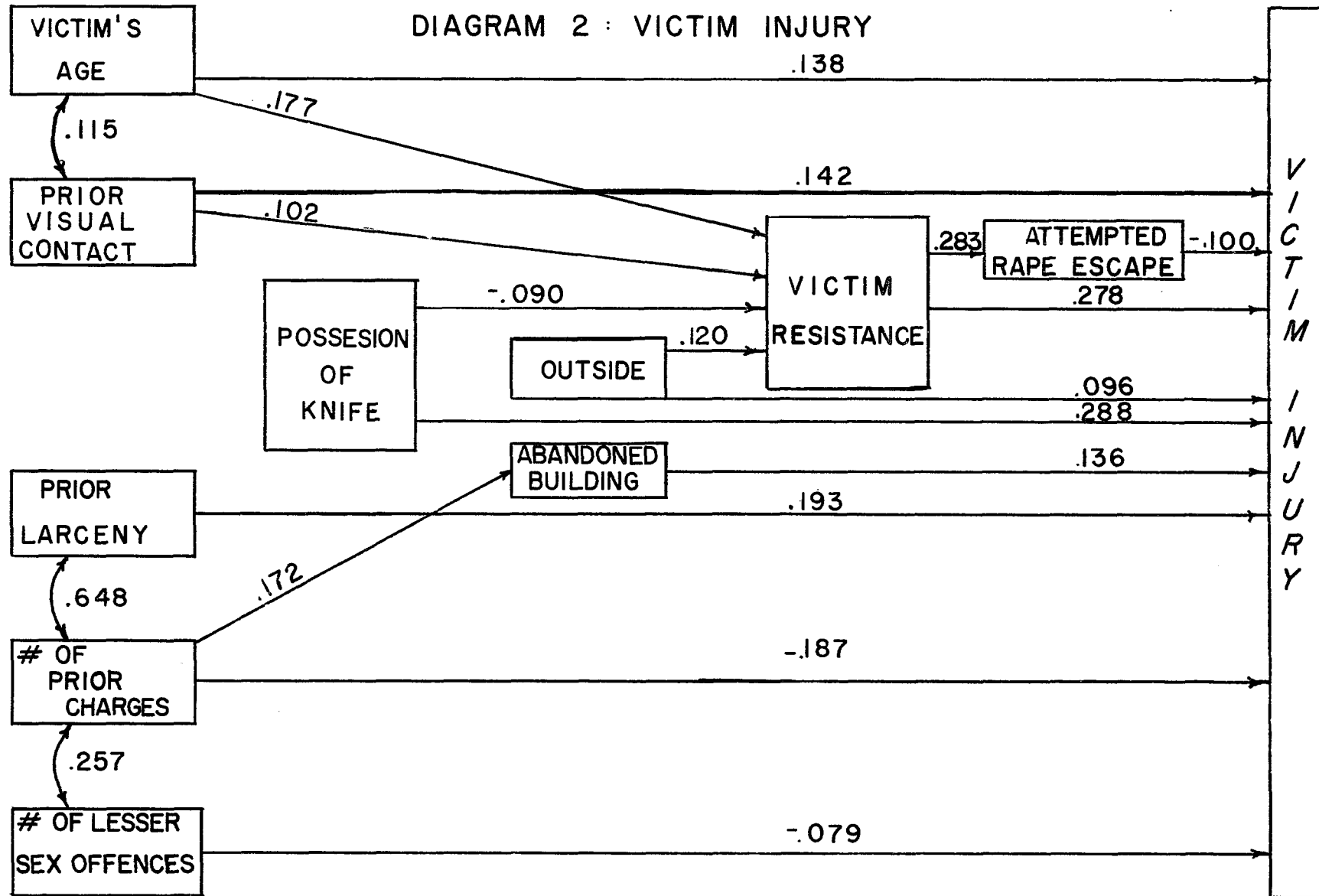
Having arrived at a regression equation predictive of victim injury, the task becomes one of moving to a more useful application of the device. Blalock has forwarded the notion that there exist two distinct uses for regression equations: first, as estimating or predicting equations; and second, as causal models (Blalock, 1961:43-4). For development of a causal model, path analysis has been employed as a method of measuring the direct and indirect effects

of one variable upon another, and as a means of decomposing the correlation between pairs of variables into its component simple and compound paths. H. Asher notes that, "Path analysis is also superior to ordinary regression analysis since it allows us to move beyond the estimation of direct effects, the basic output of regression. Rather, path analysis allows one to examine the causal processes underlying the observed relationships and to estimate the relative importance of alternative paths of influence." (Asher, 1976:34-5) The execution of such an analysis is reliant on rules and assumptions forwarded by Sewall Wright relative to the decomposition of variable correlations (Wright, 1934:161-215). His rules assert that any correlation between two variables can be decomposed into a sum of simple and compound paths, and that a compound path will equal the product of the simple paths which comprise same.

A causal or arrow diagram was constructed utilizing the ten independent variables included in the regression equation. The structure of the causal diagram was deduced largely on the basis of the temporal ordering inherent in the independent variables, also with regard to their origin, i.e., victim or offender, and considering logical inferences of causality in the rape incident. The initial construction of the diagram included all paths, simple and compound, which could be potentially operative given the above bases of

inference. Utilizing Wright's rules and regression procedures, path coefficients were obtained for all variable linkages in the postulated causal model. In as much as the goal of this project is to facilitate the formulation of sound causal inferences, with regard to victim injury in rape incidents, indirect paths not meeting minimal standards of significance were deleted from the final model. Any such path, whose coefficient was not significant with $p < .05$, was dropped from the causal diagram. This reliance on the magnitude of linkages, and the above mentioned issues of substantive rationale, as criteria for the inclusion or deletion of various paths from the causal model, is consistent with standards forwarded by Asher in his consideration of the substantive applications of path analysis (Asher, 1976, 35-44).

DIAGRAM 2 : VICTIM INJURY



Interpretation

Our immediate impression from the causal model in the preceding diagram is the central role played by victim resistance. With only one exception, all indirect paths in the model, retained with regard to the aforementioned criteria, pass through that variable. It is also evident that those variables involved with victim resistance are either interactive variables, or predispositional variables generated by the victim. In fact, of the seven independent variables in the model which are from those two groupings, only one does not exhibit some significant path to or from victim resistance. On the other hand, none of the three predispositional variables generated by the offender have any demonstrated relationship with the victim resistance variable, and only one indirect linkage to any of the interactive variables in the model is observed. The starting point for an explanation and analysis of the causal model will, consequently, consider the distinction between victim injury scenarios involving victim resistance and those that do not.

It will be noted that the magnitudes of the direct paths from victim resistance (.278) and presence of knife (.288), to victim injury, are the highest contained in the model. It is further observed that presence of a knife exhibits a negative path coefficient (-.090) to victim resistance. The

explanation posited for such a relationship entails a consideration of the dependent variable which distinguishes victim injury on the basis of its relationship to the offender's accomplishment of the rape objective. Although it would be impossible for us to know just what the offender's motivations are at the time he inflicts injury, we do have one item of information at our disposal which sheds light on the issue. We are able to determine the time at which the offender injured the victim, relative to the successful intimidation of that victim. Injuries inflicted prior to the victim's intimidation, the point at which her will becomes submissive, can be seen as instrumental to the accomplishment of the rape objective. Likewise, injuries inflicted following intimidation, in some cases even following the actual rape, cannot be viewed as instrumental to the accomplishment of the rape objective.

Also of interest, with regard to any causal inferences made concerning the presence of a knife and victim injury, are the degrees of injury observed in such cases. It seems quite obvious to infer that victims are injured in these cases because knives are sharp, i.e. because the weapon is there it is used. However, we find that in a majority of the knife-injury incidents, 59.3 percent, the injury was in the mild category, therefore in all probability not inflicted by means of that knife. Thus what might seem the simplest

inference to be made from the magnitude of the direct path from knife to victim injury proves to be an insufficient explanation.

Table 63 breaks down incidents of victim injury relative to the point of infliction.

Table 63 Point Injury Inflicted

	<u>Freq.</u>	<u>Pct. All Injuries</u>
Initial Contact	38	15.3
Pre Intim.	131	52.6
Afr. Intim./Pre Rape	43	17.3
During Rape	24	9.6
After Rape	<u>13</u>	<u>5.2</u>
Total	249	100.0

The first two categories, including injuries inflicted at the point of initial contact between victim and offender, and those inflicted after initial contact but prior to victim intimidation, comprise the group of instrumental injuries. It is evident that the majority of victim injury, 67.9 percent, is thus directed toward the successful accomplishment of the offender's objective. The remaining categories, injuries occurring after victim intimidation but prior to the actual rape, those which are inflicted during or between the sexual acts constituting the offense, and those taking place after the rape, comprise 32.1 percent of victim injuries.

As to the relationship between victim resistance, presence of a knife, and victim injury, if we look at those cases in which a knife is present we find that 65.9 percent of the victims did not resist. Of that group, 27.8 percent were injured, of which over half, 54.1 percent, were the victims of noninstrumental injury. On the other hand, of the victims who physically resisted when a knife was present, 78.9 percent were injured, with 90.8 percent of those injuries being of the instrumental type. Stated otherwise, an explanation of the role of victim resistance, as an intervening variable in this relationship, seems to revolve around the relative instrumentality of the injuries inflicted. Considering all cases of injury when a knife is present, if it is accompanied by physical resistance only one case in ten will be noninstrumental, whereas if no resistance is offered, over half the injuries will be of that type.

Continuing on with the concept of the instrumentality of the injuries inflicted, it appears to be of further explanatory value when considering the paths exhibited by the location variables in our model. Incidents occurring in abandoned buildings display a significantly positive path (.136) to victim injury, but are not related significantly to victim resistance. As might be expected from such an observation, we find that injuries sustained by victims in abandoned buildings are disproportionately of the noninstru-

mental type. Whereas 32.1 percent of all injuries are of that type, 63.2 percent of the injuries in abandoned building incidents are noninstrumental. In fact, such a location is the only one in which a majority of the injuries are not related to the rape objective. When we look at incidents taking place outdoors, we observe a direct path to victim injury (.096), and an indirect path through victim resistance, with the magnitude of the outdoors-resistance path (.120) greater than the above mentioned direct path to the dependent variable. It only makes sense that a victim attacked outdoors would calculate a greater chance of either escape, or attracting attention, through resistance than would a victim in an abandoned building, or perhaps in any other location. It would follow, and we find it to be the case, that injuries sustained in outdoor incidents would tend to be instrumental (70.1 percent).

Victim Resistance

This consideration of the role of victim resistance in the entire rape interaction, specifically as it relates to victim injury, has received some attention from other research efforts. The consensus seems to be that victim resistance is positively associated with subsequent injury. Curtis, (1974:113) in attempting to explain the discrepancy between his observation that white rapists were more likely to inflict injury, and Amir's (1971:155) finding that black rapists were more likely to use force, focuses on the issue of resistance.

He writes, "Black rapists are relatively more likely to use force, but the possibility of injury or humiliation is relatively greater at the hands of whites. One partial explanation might be that the more force displayed from the outset, the more intimidated becomes the female against fighting back and so enhancing serious injury." A survey of rapes involving black offenders and white victims notes that of 36 victims who, by self-report, were submissive, only four were beaten. While of those victims who fought back, seven of thirteen were physically beaten (Agopian et al., 1977). The Battelle survey (1977:22) reports that in cities the size of the one in this study, the rate of injury nearly doubles when the rape victim offers resistance.

The predictive model developed herein certainly confirms the conclusions reported from tabular processes above. We find that not only is the direct coefficient from victim resistance to injury among the two strongest generated by our model, but it is also quite evident that the variable plays a central role in the compound paths generated as well. A substantial portion of the variation in victim injury explained by the interactive variables in this model has to do with the issue of victim resistance. In looking at the direct causal link between resistance and injury we find that the greater the degree of resistance, the more likely the injury is to be of the instrumental type.

Table 64 Victim Resistance by Type Injury

<u>Resis.</u>	<u>Pct. Injured</u>		
None	20.0	Instrumental:	41.8
		Non Instrum:	58.2
Verbal	29.0	Instrumental:	61.2
		Non Instru:	38.8
Physical	54.6	Instrumental:	89.8
		Non Instru:	10.2

It is evident that the injury which is causally linked to victim resistance is directed toward the accomplishment of the rape objective. This point is made clearer by the relatively constant relationship exhibited by the incidence of noninstrumental injury in each resistive category when all cases are considered, injured and noninjured. Among victims who offer no resistance, or only verbal resistance, the incidence of noninstrumental injury is approximately 11 percent. Among victims who physically resist, the incidence of the same type injuries drops to about 6 percent. This observation indicates that while the introduction of verbal resistance increases the overall likelihood of injury, that increase is limited to the instrumental type. When physical resistance is offered, the overall incidence of injury rises dramatically, while the likelihood of noninstrumental injury actually decreases. Such a decrease is very likely the result of a

limitation on our measurement of the variable in question. Since our designation of instrumentality is made on the basis of the time of injury infliction, relative to the point of victim intimidation, physical resistance may only be hastening the occurrence of what would otherwise have been a non-instrumental injury. In other words, physical resistance on the part of the victim may be forcing the hand of the offender, with the demands of the interactive process altering whatever the motives might be which result in the inflicting of bodily harm totally unrelated to the accomplishment of the rape objective. Thus the causal influence of victim resistance, with regard to ultimate injury, locates itself in injuries which are a direct product of the interactive process initiated by the offender's coercive efforts. In such situations the victim's input is a decisive factor in the projection of her ultimate injury, as is aptly illustrated in the causal diagram presented earlier.

Further evidence as to the validity of this understanding of the causal link between resistance and injury arises when we examine the relationship between resistance and the severity of victim injury. If resistance-caused injury was not directly related to, and thus limited by, the goal of accomplishing the rape objective, we would expect such injury to be representative of the severity range in all injuries. In fact, it would seem that the greater the resistance the

more severe would be the resulting injury. Such a relationship is observed when we consider the mild and moderate injury classifications. Among injured victims who verbally resist, 85.4 percent suffer mild injuries while 8.3 percent sustain injuries in the moderate range. For injured victims who physically resisted, we observe that 69.7 percent were mildly injured with 27.5 percent suffering moderate injuries. Thus, an injured victim who physically resists is over three times as likely to suffer moderate injury than a counterpart who verbally resists. In contrast, when we consider serious injury, requiring hospital admission, injured victims who offered no resistance were more than twice as likely to be seriously injured than those who verbally resisted, and were six times as likely to be hospitalized for their injuries as those who physically resisted. This discrepancy with regard to the intensifying effect of resistance on injury can, once again, be explained by a consideration of the instrumentality of the injuries involved.

Table 65 Injury Type by Degree of Injury

<u>Type</u>	<u>Pct.</u> <u>Mild</u>	<u>Pct.</u> <u>Moderate</u>	<u>Pct.</u> <u>Serious</u>	<u>Total</u>
Instrumental	75.0	21.4	3.6	100.0
Non Instru.	70.9	10.1	19.0	100.0

Instrumental injury, which by our definition ceases at the point at which the victim is successfully intimidated, displays a range of severity which is readily understandable. Although the offender inflicts moderate injury in about one-fifth of the injury cases, few victims, regardless of their mode or degree of resistance, are injured to a degree requiring hospitalization in order that the intimidation objective be achieved. It is quite logical that as coercion is intensified, and along with it degree of injury, fewer and fewer victims will continue their resistive efforts. On the other hand, injury for which this research has uncovered no objective goal, injury which may in fact be a goal in itself, does not exhibit a corresponding decrease in frequency when severity increases. The goal appears to be, quite simply, the inflicting of some injury, or the inflicting of very serious injury on the victim. It is this type of injury for which victim resistance is not so causally significant. Examples of such were forwarded in the above interpretations of the causal paths linking nonresistive knife incidents, and those occurring in abandoned buildings, to the victim injury variable.

Attempted Rape-Escape

Also part of the overall relationship between victim resistance and subsequent injury, is the path through the attempted rape-escape variable to the dependent variable. It will be recalled that the former is one of four categori-

zations representing the mode by which the rape intentions of the offender were thwarted. The escape designation indicates incidents in which the victim was able to effect an escape from the control of the offender, as opposed to those in which her resistive efforts resulted in the offender abandoning his efforts to accomplish the rape. Although it is recognized that inclusion of this variable in the causal model raises problems of colinearity with the resistance variable, it has been retained in view of its contribution to a practical understanding of the processes by which the injury outcome is determined. In virtually all cases of victim escape some form of resistance was offered by the victim, and in the majority of the cases some physical resistance occurred. In other words, in only two cases in which the victim displayed no overt resistance toward the offender was the victim able to accomplish an escape. What is significant to this inquiry is the result, whether by design or chance, of victim resistance ending in escape. We observe a negative coefficient for the direct path from the escape variable to victim injury. Thus a significant causal link between successful victim resistance resulting in her escape from the control of the offender, and the absence of victim injury is demonstrated.

If we observe the severity of injuries which did occur in this group, we notice that victim injuries are limited

to the mild category. Given our earlier observations of the relationship between victim resistance and severity of injury in general, it follows that victim escape would most often be accomplished by resistance of very short duration. Again, whether such outcomes are the result of well timed resistance on the part of victims, or resistance occurring by chance at the right time, we can safely infer that escape is seldom the outcome when the resistive interaction extends to any period of time. We can infer that injury free, successful resistance, is dependent upon the speed with which the victim is able to effect the desired outcome. Attempted rapes effected when victim resistance repels the offender would, no doubt, entail a protracted resistive interaction, relative to escape attempted rape incidents. As expected, although these cases also represent successful resistive efforts as far as the rape is concerned, we find not only a higher incidence of injury in general, but also injuries of a more serious nature.

Victim Age

When we move on to consider the predispositional variables included in the causal model, we note that both variables generated by the victim exhibit paths through the victim resistance variable. For victim age, the magnitude of the path to resistance (.177) is greater than the direct path to the dependent variable (.138). As reported earlier, the literature that does exist regarding the relationship between

age and injury (Curtis, 1974:134) (Amir, 1971:167) although scant, is consistent with this finding. Whether or not a victim resists, and whether or not the injury is instrumental, increasing victim ages exhibits a positive causal link to the dependent variable. Older victims who resist are exposed to the instrumental type injuries discussed above, as would be expected. Evidently, older victims are less inclined to be immediately intimidated and consequently resist more often. To be more accurate, we should say non-child victims are more resistive, since the frequency of resistance jumps quickly as victims enter their teen years, and declines dramatically in victims over 50 years of age.

The question remains, however, as to why age is causally linked to injury among victims who do not offer resistance. Two possible explanations are forwarded for this observation. First, if offenders correctly anticipate a greater likelihood on the part of older victims to resist, they will be more forceful at the outset of their coercive efforts in order to discourage such resistance. In such cases the offender is utilizing physical force early in the coercive interaction to, in effect, serve notice as to the seriousness of his intent. It is the offender's perception of the victim's probable reaction and input, at the time of coercion, which prompts him to abandon less forceful measures which he believes hold little chance for success. As evidence of this, if we compare those

cases in which the offender relied on physical force as opposed to employing verbal threats, we observe a median victim age of 22.1 years in the former and 15.6 years in the latter incidents. These comparisons were made between incidents in which no weapon was used, in order to eliminate offender perceptions of successful intimidation which were a function of the perceived utility of the weapon. Thus we see the effect of victim age on the offender's choice of coercive methods, with older victims the offender is more likely to abandon the use of threats in favor of immediate physical coercion. Obviously, the greater the reliance on physical coercion the greater the chance of subsequent injury, regardless of the presence or absence of victim resistance. Therefore, the increased use of physical force is not only the result of greater resistance, but arises from an anticipation of such, increasing the likelihood of victim injury whether or not the offender's perception is actually borne out in the course of the coercive interaction.

Also of importance in understanding the causal role of victim age, is a quite obvious consideration. The application of a given amount of physical force will, in general, be more likely to result in injury in direct proportion to the age of the victim. Such a generalization would appear to be valid, excluding the child or preteenaged victim. Assuming that our earlier inferences concerning age and injury are

valid, and taking into account our observation that the child victim is less likely to be subjected to physical coercion, the noted relationship between age and susceptibility to injury is of value in explaining the findings in question. As reported earlier, the more severe the victim injury, the higher the median age of victims so injured, as well as an increase in the overall risk of injury with age. Rather than assuming that physical force is generally more intense with older victims, it appears that it is more frequently applied in such cases, which, coupled with increasing physical vulnerability to injury, results in the findings exhibited in our causal model.

Prior Visual Contact

The remaining victim oriented predispositional variable in the causal model has to do with the victim's reported prior acquaintance with the offender. Incidents in which the victim reports prior visual contact, short of acquaintance, with the offender significantly predict outcomes of victim injury. While this variable's paths through victim resistance can be explained in the same fashion as earlier such relationships, in terms of the instrumentality of the injury inflicted, another quite specific objective of injury must also be considered. Hepburn has dealt with five factors critical to the triggering of violence (1973:424), one of which is the cost of failure as perceived by participants in the interaction. In our understanding of instrumental injury one such cost has been implicitly dealt with, the failure to

complete the rape objective. The cost of such failure, from the offender's perspective, is quite difficult to identify and measure. Although it is reasonable to assume its existence, we have no way of getting at the nature of an offender's cost or loss when an intended rape is thwarted. No doubt there is some cost of failure in terms of self image, self esteem, or in some cases peer evaluation of the offender. However, the cost of failure in a rape effort can be more specific in nature. Failure may not mean that the rape objective is not attained, but may mean that the offender pays a very tangible cost even when the rape is accomplished, i.e. arrest and incarceration. In the same way that the rape offender relies on violence to avoid the cost of failure regarding the rape itself, he also relies on violence to avoid the costs of failing to get away with the rape. Thus injury producing violence may be triggered by the offender's perception of imminent, or subsequent, apprehension and imprisonment.

Incidents in which the victim and offender share only prior visual contact constitute a rather unique situation with regard to the offender's perception of the likelihood and cost of failure, in terms of subsequent arrest. If an offender is apprehended at some time other than during the rape incident, a time when very few apprehensions are made, he must, in some way, be identified by the victim. If the

victim and offender shared a prior relationship of acquaintance or stronger, such subsequent identification is of no issue. While the offender may be confident of the victim's hesitancy to report the incident itself, there can be no doubt as to her ability to identify him should she do so. For such an offender, dissuading the victim from reporting the incident would thus be viewed as rather important. At the same time, the infliction of injury, from a standpoint of subsequent conviction, is to be most avoided by this group of offenders. Although unable to support such a notion with quantitative data, it is the experience of this researcher that offenders with prior victim relationships of acquaintance or closer, invariably rely on a consent defense when charged with the offense here considered. The consent defense is one which acknowledges the occurrence of sexual intercourse between victim and offender, but denies that such was achieved by force. Consequently, the absence of victim injury is essential if such a line of defense is to be utilized. Although we cannot be certain that such precautions are in the mind of the offender at the time of the rape, numerous offender statements surveyed in this project, obtained immediately following arrest, indicate that such reasoning is present before the court process has commenced or legal counsel has been obtained. So, in incidents of this nature, verbal threats become the method of choice in achieving the inti-

midation needed to accomplish the actual rape, and in efforts directed at preventing victim disclosure of the incident. From the offender's perspective, the nature of his prior relationship with the victim probably serves to enhance the perceived validity of his verbal threat, if only from residential proximity and his resultant physical accessibility to the victim.

In incidents involving strangers, the use of violence to minimize the likelihood of arrest is, for all purposes, limited to the question of immediate detection. In such cases, the costs of failure with regard to both the rape accomplishment and avoiding apprehension merge very closely with respect to time. Thus, intimidation of the victim, beyond the time of the actual rape, is far less meaningful. Injuries in these cases may be instrumentally directed toward the accomplishment of the rape objective, or may be of the noninstrumental type, but it is doubtful that they would be intended to effect victim response following the rape. Our data indicates strangers are least likely to threaten their victims with reprisals should they report or disclose the rape incident. Stranger offenders seem little concerned with the prospect of subsequent victim identification, and probably appropriately so.

By contrast, incidents involving participants characterized by prior visual contact constitute cases in which

long term victim intimidation will be preceived as desireable by the offender, while at the same time, factors militating against victim injury are absent. If the victim can visually associate her attacker with a place, or with other persons, his subsequent identification should not prove too difficult. Also, in such incidents, the feasibility of the above mentioned consent defense is greatly diminished, and with it the barrier against the use of physical injury in any aspect of the rape, including the offender's generation of long term victim fear or intimidation, as to her subsequent disclosure of the entire incident. So we see that in these incidents, this additional instrumental type injury achieves its greatest utility. Physical force, and thus injury, may be employed here to serve notice on the victim not only of the offender's immediate intent, but also of the potential for reprisal. In the same manner that the offender's vulnerability to later identification is recognized, so undoubtedly is that of the victim. Not only is the infliction of injury, in and of itself, a more intense message of intimidation, but it is further necessitated, from the offender's perspective, by the lack of residential proximity which so continuously reinforces threats of a verbal nature. In summation, rape incidents of prior visual contact between participants present a unique situation for the fostering of physical violence, not found in other prior relationships at either end of the scale.

Prior Charges

Three predispositional variables generated by the offender were retained in the causal model. Two of those three, the number of prior criminal charges against the offender, and the number of prior lesser sex offenses noted in his arrest history, were found to exhibit negative coefficients for their direct paths to victim injury. The findings in this study, with respect to the total number of prior charges against the offenders, in terms of frequency and nature, are generally consistent with existing major research efforts. The report of the Commission on the Causes and Prevention of Violence, notes the average number of prior arrests as 7.7 for those charged with rape (1969: 531). While Amir observed substantially lower numbers of prior charges, his report on the variety of prior charges is consistent (1971:112-114). Gebhard reports that among the sex offender groupings he utilized, the aggressors were most likely to have committed a variety of sexual and non-sexual offenses (1965:708). B. Glueck found only 2 percent of the rape offenders in his New York study to have had no prior arrests, with 47 percent having at least three prior non-sexual offenses (1956:87-89). Beyond confirming earlier observations, this effort finds that a causal link exists between longer criminal records, as measured by the number of offenses charged, and the absence of victim injury in the rape incident.

If we take the number of prior charges as an indicator of the overall prior extent of the offender's involvement in criminal activity, remaining fully aware that detection and arrest are not valid indicators in all cases, some interpretive comments can be made with regard to the above finding. As has been discussed, instrumental injury, that constituting the majority of all injury cases, most often arises as a result of situations during the victim-offender interaction which either threatens the accomplishment of the rape, or increases the detectability of the offender. If we assume that no offender enters the rape situation believing that either of those conditions will actually arise, it follows that the offender experienced in criminal activity will be better prepared to see that they don't. A threat to the accomplishment of the rape objective generally arises as a result of victim resistance, or the failure of the offender's coercive efforts to control the interaction, from his perspective. Since, in such situations, victim injury is the method by which the offender brings the interaction back under his control, those offenders least likely to lose control in the first place are least likely to resort to the infliction of injury. It only makes sense that an offender not new to offender-victim interactions of any type, would be more likely to take numerous steps, whatever they might be, to maximize his control of the event. Whether the issue of increased

detectability, during or subsequent to the incident, is most related to victim selection, the location of the rape, or any other factor, the experienced offender is more likely to believe that he has adequately taken account of such factors. It is the belief that control has been lost, and the belief that detectability has been increased, whether or not that perception is borne out by the facts, which will prompt an offender to inflict injury, who probably would not have otherwise done so. Whether or not the offender with a long list of prior offenses is really the most experienced, he is probably the most likely to believe that he knows the ropes, and thus confident that he won't be caught again.

The path observed between number of prior charges and the location variable of abandoned buildings, sheds more light on the discussion at hand. The foregoing argument was limited to instrumental type injury, here we will consider injuries of the noninstrumental type. It will be recalled that almost two-thirds of the injuries occurring in abandoned buildings were noninstrumental, far more than in any other offense location. Although the prior charge variable displays a negative path coefficient in its direct link to victim injury, a positive causal linkage is observed with the abandoned building variable. Once again, it is the concept of noninstrumental injury, injury which seems to be inflicted as an end in itself, which is of use in explaining

what seems to be a discrepancy. The experienced offender bent on injury his victim, independent of his accomplishment of the rape objective, chooses a location which clearly minimizes the opportunity for victim resistance or escape, as well as the likelihood of interruption or detection during what will be more than a rape. While it is true that only a small proportion of all incidents take place in abandoned buildings, about 5 percent, the experienced offender who makes such a choice of location may be the most dangerous of all offenders.

Prior Lesser Sex Offenses

The negative path from the number of prior lesser sex offenses to the dependent variable seems to be fairly consistent with most research in the area. With just under 7 percent of the offenders in this sample having at least one prior charge for a lesser sex offense, the observation is somewhat higher than the 3.5 percent reported by Amir (1971:114). Guttmacher concluded from his investigation that there was no basis in the belief that sex criminals engaged in sexual crimes of progressive malignancy (1951:113-114). Gebhard reported that non-aggressive sex offenders generally showed a lack of violence as evidenced by the relative absence of aggression in subsequent offenses (1965:727-728). To repeat, we do find that only a small proportion of offenders in this sample have records for lesser sex offenses, and they are exceptions in the nonevolutionary progression

of sex crimes, in that they have committed any subsequent aggressive sex offense. However, while their involvement in rape is atypical of nonviolent sex offenders, they still exhibit a negative causal link to victim injury.

Such a finding is at odds with the conclusions of two reports from treatment facilities for convicted sex offenders. Cormier and Simons, reporting on eight cases of dangerous sex offenders, indicate their view that dangerous sex offenders do, in fact, display progressive records. "Invariably found in these eight cases was an escalation from less severe to more aggressive offenses. This progression has previously been underestimated." (1969:333) Marcus (1970) reports on sessions held with 50 incarcerated sex offenders, 11 of whom were there for rape and attempted rape. As a result of these sessions, 14 factors were formulated as a way of quantifying data in order to establish criteria regarding the degree of dangerousness of the sexual offender. Among the 14 were, (4) escalation of sex offenses, and (5) inter-related criminality with sex offenses. With potential injury to one's victim as a criteria, and with this system developed as a method for evaluating parole potential, we find both factors to be in direct conflict with the model formulated from this data. Point (4) is clearly replicated by this variable, while (5) is comparable to the previously discussed offender variable, given the range of offenses which charac-

terize offenders in general in this sample. While the above two research efforts obviously entail a more detailed analysis per case than was done here, N's of eight and eleven raise doubts as to the possibility of generalizing from the results, particularly on the basis of two variables which require no detailed analysis of specific cases.

Prior Larceny Offense

Perhaps the most difficult finding to be interpreted, from the causal model, is the direct linkage between the presence of at least one larceny offense in the offender's arrest history, and subsequent victim injury. As reported in the preceding section, data was collected from offenders' arrest histories with respect to the presence or absence of seven specific offenses: homicide, rape-sodomy, robbery, assault and battery, break and entry, larceny, and possession of dangerous weapons. Contrary to what might have been expected, none of those offenses, with the exception of larceny, or variables measuring the frequency of prior violent or serious sex crimes charges, exhibited any significant linkage to the dependent variable. Several data manipulations were executed in order to consider the possibility that the larceny variable exercised a masking effect, or in some way suppressed an existing relationship between other offense variables and victim injury. Even when larceny was excluded from a regression run including all other offense variables, none emerged as embodying a significant link to the dependent variable.

An expectation that a history of prior violence would beget the increased use of violence in the rape situation, which is admittedly a violent act regardless of its outcome, and thus increase the likelihood of victim injury is borne out by previous work in the area. MacDonald, (1969:236-7) in speaking of rapists who repeat the same offense, reports his impression that such offenders resort to brutality to enforce their demands for victim compliance. In a comparison of 88 cases of offenders arrested for assaultive and non-assaultive offenses, not including rape, Peterson et al (1962) find that in 91 percent of those cases the offender's record is marked by the exclusive commission of either assaultive offenses or non-assaultive property crimes. They conclude that, "An analysis of police record indicates that offenders have stable patterns of deviancy, being arrested for crimes of violence or crimes against property, but not for both sorts of crime." Our findings, with respect to the regression equation, do not support the above conclusions. Not only do we find that prior records for rape or assault and battery offenses are in no way predictive of victim injury, but it is also observed that the arrest records, as a whole, of the offenders in this sample exhibit no concentration of offenses entailing violence on the threat of same.

Any attempt to interpret the strong causal link between prior larceny and the inflicting of victim injury has little

existing research upon which to build. Gebhard noted that in comparing the per capita number of property crimes among all sex offenders, with the general prison population, the rate for the former was less than half that for the latter (1965:703). He does, however, report one exception, "...Aggressors are more inclined toward crimes against property than other (sex offenders) groups, an inclination in keeping with the philosophy of taking what one wants, be it property or sex." Gardner (1949) deals more specifically with larcenous behavior as an indicator of aggressivity, forwarding a position upon which he bases a subsequent discussion of the aggressive impulse in the sex offender (1950).

"Stealing... seems to us to be just such a destructive act in that it does symbolically involve the taking up unto ourselves and transformation for our own use of that object or thing which was part of--belonged to, we say--some other person. This extension of ownership is a destructive act in a double sense: it incorporates the object taken, and it to some degree symbolically destroys (mutilates, injures or strips) the person of another. The power to steal is the power to destroy, and stealing is in essence a destructive act." (1949:544)

An observation of victim injury inflicted by offenders with a history of larceny offenses, in terms of the apparent function of that injury shows that 75.5 percent of the injuries are of the instrumental type, slightly larger than the 67.9 percent of all injuries so designated. Given the relationship already discussed with regard to instrumental

injury and victim resistance, we would expect that the prior larceny variable would display a positive relationship with victim resistance. In other words, given the strong causal link between prior larceny and victim injury, and the tendency for those injuries to be instrumental, we would expect that offender larceny-victim injury incidents are characterized by victim resistance to the offender's coercive efforts. What we find to be the case is not what we would immediately expect, regression procedures demonstrate that no path of any consequence exists between the two variables.¹

As discussed previously, in connection with the number of prior charges variable, instrumental injury, in the absence of victim resistance, may be related to the perception on the part of the offender that he is unable to maintain control of the interactional process surrounding coercion of the victim. It was postulated that offenders inexperienced in such victim interactions would be more likely to perceive that lack of control, and thus resort to the infliction of injury to regain same. Therefore, if offenders with a history of larceny were relatively unlikely to have had prior involvement with close victim contact, as in the coercive process, such might explain the tendency to instrumentally injure victims who do not resist. A correlation matrix of the seven offenses

1. standardized regression coefficient=0.031 F=0.23

for which data was collected indicates that while larceny is least associated with prior homicides or rapes, it exhibits the highest correlation with prior robbery offenses, and the second highest with prior assault and batteries. Although these findings cannot support the contention that relative to the presence of other specific offenders, offenders with prior larceny offenses are least likely to have been experienced in close victim-offender interactions, another finding indicates something to the contrary. In checking on the frequency of violent victim-offender interactions in the arrest history, we find that with the exception of offenders with prior homicides, those with larceny present exhibit a correlation lower than that found for any other specific offense variable. In addition, a relatively high correlation between prior larceny and total number of prior charges with its negative linkage to victim injury, is noted in diagram 2. Thus, an indication that prior larceny offenders inflicting injury are those with lower total charges in their arrest histories, and so generally less victim-experienced than their noninjury counterparts. At best then, we can say that the evidence to support an explanation based on the notion of experience versus control is mixed. Consequently, any acceptance of such interpretation for the larceny-injury linkage remains tenuous at this time.

Summary and Conclusions

The primary aim of this project has been to explore incidents of rape and attempted rape in terms of the degree of physical injury suffered by the victims of such offenses. The basis of this investigation has been the empirical study, and subsequent analysis, of 814 rape and attempted rape cases occurring in Newark, N.J., during a recent thirty month period. Data was collected which reflected identifiable and measureable social characteristics of the offender and the victim, as well as the setting, and the substance or nature of the offense in question. The resulting variables were organized in such a way as to indicate their temporal or sequential relationship with the actual occurrence of the rape incident. The data was viewed as either predispositional with respect to the victim or offender, as a physical or temporal determinant of the offense situation, or as arising from the victim-offender interaction, once the actual offense had been set in motion by the offender's initiation of coercive measures. The 68 variables which comprise those categorizations constituted the pool of independent variables which, through multiple regression procedures, resulted in the formulation of a model to predict outcomes of victim injury.

Data on victim injury, obtained for the most part from hospital records, was collected with regard to its presence,

degree of severity, and point of occurrence, relative to other elements of the rape incident. The goal of the regression model was to determine which of the independent variables were significantly predictive of outcomes of victim injury, as well as indicating the magnitude, or relative weight, of those variables. Path analysis procedures were utilized to decompose relationships among the retained independent variables, and to determine the retention of compound or indirect linkages to the dependent variable. Making use of the original categorization of the independent variables, as well as temporal ordering inherent in their relationship to the sequential unfolding of rape incidents, the independent variables were organized to illustrate their causal sequence relative to subsequent victim injury. The diagramatic presentation of such a process facilitated the formulation of causal inference relative to the occurrence of victim injury in the rape incidents studied. On the basis of this entire procedure, some conclusions can be drawn as to causes and specific explanations of victim injury, within the limitations of the variation in same explained by this model.

We have found that 30.6 percent of all victims suffered some physical injury, with injury defined as physical harm in addition to the sex act itself. Of those victims who were injured, 73.9 percent suffered mild injury-scrapes, bruises, minor lacerations, etc.; 17.7 percent suffered moderate

injuries--lacerations sutured, evidence of prolonged or extensive beating, fractures; 8.4 percent were seriously injured--injuries for which the victim was admitted to the hospital. The regression equation formulated in this research accounts for, or explains, 29.2 percent of the total variation in victim injury. Of the ten independent variables retained in the equation, five are characteristic of the victim-offender interaction, while five are predispositional characteristics, two generated by the victim and three by the offender. No variables from the determinants of the situation category were found to be significant predictors of victim injury. That category included temporal, seasonal, and spatial variables associated with the rape incident. Two location variables were retained in the causal model, but our analysis found them to be more appropriately considered among the interactive variables. Table 66 compares the relative strength of those predictors, by means of a computational comparison of their respective standardized regression coefficients, in terms of the percent of explained variation accounted for by each independent variable.

Table 66 Relative Strength of Independent Variables as
Percent of Explained Variation

<u>Predispositional</u>	<u>Pct.</u>	<u>Interactive</u>	<u>Pct.</u>
Victim:		Poss. Knife	26.4
Age	6.1	Vic. Resis.	24.5
Pr. Vis. Cont.	6.4	Aban. Bldg.	5.7
Offender:		Arr. R. Esc.	3.2
Pr. Larceny	11.8	Outside	2.9
No. Chgs.	11.1		
No. Lssr. Sex	1.9		
Total	37.3		62.7

It can be seen that almost two-thirds of the explained variation is accounted for by interactive variables, with two of them, offender possession of a knife and victim resistance, together accounting for half of all explained variance. Of the explained variance accounted for by predispositional variables, those which are generated by the offender account for twice the amount explained by victim generated variables. In fact, the presence of at least one larceny offense in the offender's arrest history, and the total number of prior offenses, of any type, with which he has been charged, together account for just under one quarter of the explained variation.

With regard to victim-generated predispositional variables, the two included in the model are approximately equal

in strength, and total 12.5 percent of the explained variation. Of the variables intended to measure what are generally considered demographic characteristics, only victim age is a significant predictor of victim injury. Of the range of possible prior relationships between the victim and the offender, from total stranger to relative, only those incidents in which the victim reports prior visual contact with the offender are predictive of victim injury. Prior visual contact includes those incidents in which the victim reports having seen the offender prior to the rape incident, but is not acquainted with him, and does not know his name, residence, place of employment etc.. Both variables also exhibit positive predictive significance as to victim resistance, and thus compound or indirect paths to victim injury.

All offender-generated predispositional variables retained in the predictive model have to do with the offender's prior arrest history. None of the demographic or descriptive variables regarding the offender display predictive significance as to victim injury. Of the data gathered as to the specific offenses contained in the arrest histories of the offenders, only the presence of prior larcenies was found to be significantly predictive of the dependent variable. The total number of charges or offenses of any type contained in the offender's arrest history is found to be a negative predictor of the infliction of victim injury. A similar

relationship exists, although to a far lesser extent, between the total number of lesser sex offenses charged to the offender and the infliction of victim injury. A significant positive relationship is noted between the total prior charges variable and those locations occurring in abandoned buildings, constituting an indirect path positively associated with the dependent variable.

Of the interactive variables in the model, the possession of a knife by the offender exhibits the greatest predictive influence on victim injury, closely followed by the direct influence of victim resistance. The victim resistance variable displays linear dependence on both victim-generated predispositional variables in the model: victim age, and prior visual contact with the offender. Victim resistance is similarly dependent on the location variable indicating those incidents taking place out of doors, and negatively linked to incidents in which the offender possesses a knife. Two variables reporting the type location in which the offense took place are significant predictors of victim injury, with outdoor incidents and those occurring in abandoned buildings exhibiting direct positive linkages. Of the attempted rape incidents included in the sample, those incidents in which an intended rape becomes an attempt by virtue of the victim's escape from the control of the offender, exhibit negative predictive influence on the dependent variable.

The findings have been interpreted with respect to the apparent objective, or function of the injury inflicted. Initial designations of instrumental and noninstrumental injury were made on the basis of the timing, or point during the rape interaction, at which victim injury was inflicted. Utilizing the point of victim intimidation, that point at which the victim assents or becomes submissive to the will of the offender as pivotal, inferences were made as to the evident objective of the offender. Injuries inflicted prior to the point of intimidation, whether or not they occurred at the time of initial contact between the offender and the victim, can be seen as directed toward the accomplishment of the rape objective and are thus designated instrumental. Injuries inflicted subsequent to the point of victim intimidation, whether before, during or after the actual rape are designated noninstrumental. Injuries occurring at that time have no utility in facilitating the offender's accomplishment of the rape objective, they may be inflicted as ends or goals in themselves rather than as measures directed toward the attainment of the rape. Of all injuries taking place in the sample studied, 67.9 percent are designated as instrumental, with 32.1 percent classed as noninstrumental. Mild injury characterizes 70-75 percent of the injuries in both designations, but victims injured instrumentally are twice as likely to suffer injuries in the moderate range, while

victims of noninstrumental injury are hospitalized in over 18 percent of all incidents, six times more often than the instrumental group.

Instrumental injury is understood, more generally, as related to the offender's consideration of the costs of failure in the rape incident, and his perception that such failure is imminent. Failure, from the offender's point of view, may be in terms of the accomplishment of the rape objective itself, or it may relate to the possibility of his apprehension and potential imprisonment for such actions. The latter addresses the offender's perception of his vulnerability to detection both during and subsequent to the actual rape incident. During the rape incident, the question of detectability is closely associated with the successful accomplishment of the rape objective, and central to both is the real and perceived ability of the offender to exercise control over the interactive process. The necessity for controlling the interactive process begins at the point at which the offender initiates coercive efforts, and extends to the point at which the offender and victim part company. The offender's perception that he can gain and maintain such control is just as important as his actual ability to do so. Loss of control, or the inability to gain same in the first place, could result in either a failure to accomplish the rape, or in immediate detectability should the victim attract

external attention, or in both. The inflicting of instrumental injury is thus viewed as a device for the offender to either establish and maintain control over his interaction with the victim, or to reaffirm or reestablish that control should he perceive that he is losing same. Variations in the establishment and maintenance of the offender's control of the interactive process with the rape victim, with regard to completing the rape and avoiding detection at the time of the rape, are significant in predicting outcomes of instrumental victim injury. To a lesser extent, variation in the application of instrumental injury is also a product of the offender's efforts to extend control beyond the actual rape incident. In such cases, the cost of failure is with respect to detectability and apprehension subsequent to the time at which the rape incident takes place.

This understanding of instrumental versus noninstrumental injuries facilitates the formulation of more systematic conclusions with regard to the causal linkages developed through the regression procedures. A consideration of the apparent objectives or function of the injuries inflicted provides a framework in which to assess the specific causal inferences arising from the number of paths, direct and compound, linking the independent and dependent variables in this model. Such an assessment is necessary in order to proceed beyond the restatement of already obvious findings, to the formulation

of conclusions which advance or build on the findings generated by the analytic procedures utilized in this project.

Instrumentality characterizes injuries linked to the victim resistance variable. Such injuries have as their objective, from the offender's viewpoint, the successful accomplishment of the rape objective. Resistance could be perceived by the offender as having possible consequences with respect to both the failure to complete the rape, and to detectability during the rape. Whichever is the case, instrumental injury accompanying victim resistance is directed at maintaining control of the rape interaction. Thus, the increased resistance linked to victim age, prior visual contact with the offender, and incidents occurring outdoors are causally linked to instrumental injury associated with the maintenance of control.

In injury incidents combining offender possession of a knife and victim resistance, although the latter exhibits a negative dependence on the former, the injuries are characteristically instrumental as well. Similarly, injury linked with increasing victim age, absent victim resistance, prompts instrumental injury also, but it is injury aimed at establishing control in a situation perceived by the offender as more difficult to control from the outset. In the same vein, injuries linked to outdoor incidents, even with no victim resistance, prompt instrumental injury in a situation perceived

by the offender as more vulnerable to detection at the time of occurrence. Prior visual contact between offender and victim, in the absence of victim resistance, is also linked to increased injury of the instrumental type. In such cases, the cost of failure is in terms of detectability subsequent to the actual rape, with injury directed at the offender's control not just during the rape incident, but subsequent to the time of occurrence.

Victim injury linked with offender possession of a knife, in the absence of resistance, and incidents taking place in abandoned buildings are characterized by their noninstrumentality. Here issues of control as it relates to failure are minimized, and the injury bears no apparent relationship to either the successful completion of the rape or the issue of immediate or subsequent detectability. In the absence of such objectives, we can only conclude, at this point, that the infliction of physical harm operates as an objective itself. Whether that objective is necessarily fused with that of the rape alone, or arises subsequent to the accomplishment of the latter cannot be determined here. We can, however, conclude that this type of injury is relatively unrelated to the interactive variables and processes tapped by this research, and linked to instrumental injury.

Offenders with longer arrest histories, as measured by the total number of prior offenses with which they have been

charged, are more likely to take steps to minimize the likelihood that their control of the interaction will be threatened. They are also more inclined to believe that they have adequately taken into account and controlled for factors increasing their detectability. Thus the negative linkage of this variable with victim injury characterizing a decrease in the instrumental type. On the other hand, the experienced offender intent on injuring his victim will likewise take into account issues of control and resistance, choosing a location maximizing his advantage. The link between this variable and the abandoned building location is such a choice, with the injury inflicted being of the noninstrumental type.

Offenders with at least one larceny offense present in their arrest histories are positively linked with victim injury. The injuries tend to be instrumental, with no significant linkage to victim resistance. A relatively high correlation between the presence of larceny offenses, and the total number of charges in an offender's arrest history indicates that the linkage involves offenders with relatively short arrest histories. Larceny-present offenders exhibit a relatively low correlation with the frequency or total number of violent offenses in an offender's arrest history. Such an offender, relatively inexperienced in victim-offender coercive interactions, is more likely to perceive threats to his control of the interaction, and thus inflict instrumental

injury, even in the absence of victim resistance.

In this manner we see that variables which exert significant predictive influences on victim injury can, for the most part, be understood in terms of the type of injury effected. Although this research has done little more than identify the noninstrumental type of injury, or perhaps distinguish it from its counterpart--instrumental injury, a framework has been developed which seeks to incorporate input generated by a wide range of variables. We are investigating an act which in itself embodies violent coercion, and have sought to isolate those factors which are causally associated with intensified violence within such an act. It is that intensification which adds physical harm to the damage already suffered by the victims of rape incidents. The variables which do exert influence on resultant victim injury represent the entire spectrum from which data was gathered, and present difficulties in systematically explaining the relationship of predispositional and interactive elements in determining the outcome in question. The interrelationships between variables from those domains become more intelligible, in terms of their causal links to the dependent variable, when the infliction of injury is understood in terms of its connection with rather distinct goals and objectives, or their absence, in injury producing incidents.

APPENDIX I

This section includes comparisons of the data obtained in this study with that obtained by Amir in his Philadelphia study. Although it is recognized from the outset that no questions of substance can be answered by such a comparison, such is forwarded, nonetheless, to provide some perspective to the data presented, and to indicate areas in which organizational refinements of the data enhanced its subsequent use. In areas where statistically significant differences were noted between the studies, only surface explanations, or suggestions of such, are offered in response to the observed discrepancies. In cases where organizational shortcomings in Amir's data collection or presentation are noted, such is done to explain alterations made in this research effort in response to such deficiencies. The following table lists twenty variable groupings, for which direct statistical comparisons were possible, and indicates the general results of such comparisons. The ensuing commentary addresses those points deemed necessary, as well as issues involving variables which were not amenable to direct comparisons.

Table AI Direct Variable Comparison

<u>Variable</u>	<u>Similar</u>	<u>Significant Difference</u>
Rate/Vic. Race	X	
Rate/Off. Race	X	
Vic. Age	X	
Off. Age		X
Age Disparity		X
Interracial Incidents		X
Off. Race/Off. Arr.	X	
Pr. Interper. Rel.	X	
Off. Occup.		X
Off. Pr. Rec.		X
Off. Off./Prop.	X	
Pr. Off./Person		X
Time Off.		X
Day Off.		X
Month Off.	X	
Type Loc. Off.	X	
Type Loc. In. Cont.	X	
No. Offrs.		X
Vic. Resis.	X	
Sex Acts		X

I Pre Dispositional Variables

With regard to the rates of participation in rape incidents, by race, the observation herein that rates are more stable within racial groupings, regardless of the nature of one's participation in the rape situation, is consistent with the findings in Amir's study (1971:44-45). However, some other interesting differences, with regard to the same area, can be observed. Adjusting Amir's calculations to compute rates on a base comparable to that used in this study, we find blacks slightly over thirteen times as likely as whites to be offender participants, and approximately twelve times as likely as whites to be victims. The magnitude of the discrepancy between black and white offender rates obtained by Amir is almost double that obtained from this data (13.2 points vs. 7.5). In addition, the magnitude of the rate discrepancy between black and white victims obtained by Amir is nearly triple that obtained here (11.7 points vs. 4.1). This seems to demonstrate a marked narrowing of the gap between races with regard to their participation in incidents of this type. Whether such a difference can be explained by the nature of the two cities and their respective populations, or the passing of almost two decades in which the relationship of race to all areas in our society has been greatly altered, or to some substantive difference in the criminal activity

being investigated cannot here be answered. However, such a trend, if demonstrated in other populations, could be one of significant implications.

In the area of frequency of participation in interracial incidents, Amir observed that both the victim and offender were of the same race in 93.2% of the cases he studied (1971: 44). This observation is somewhat larger than the 87.2% in this study, arrived at when the white and Hispanic groupings are combined for purposes of comparison to Amir's data. Although the percentages of black interracial incidents are fairly uniform, 79.0% here and 76.9% for Amir, some significant differences appear in other pairings. Whereas Amir reports 16.3% white interracial incidents, only 8.2% are noted herein. For those incidents involving white victims and black offenders Amir notes 3.3% of his total, while in this sample the same type comprises 8.7% of the total. A smaller increase is noted in cases of the black victim and white offender from Amir's 3.6% to 5.2% for this data.

Even though differences between the two populations may be greatly effected by the drastic variation in racial composition, the fact that the proportion of interracial incidents have nearly doubled, from 6.8% to 12.8% in this population, still stands out. Since rape incidents often arise out of otherwise normal interactions between victim and offender, such an increase may be a product of changing

norms regulating interaction between races in a variety of situations and settings. Also of note, in the area of interracial incidents, is a small change in the frequencies of the two potential pairings, relative to each other. Whereas Amir found white offender-black victim, and black offender-white victim incidents to be approximately equal, 3.6% and 3.3% respectively, the present data shows the latter pairing to be more than one and one half times as prevalent as the former, 8.7% and 5.2%. Such a difference, however is not significant, and only further data from other populations will tell whether this shift reveals an additional element of changing racial patterns in this area.

When considering the race of offenders involved in interracial rapes, Amir observed that of the white offenders in his sample, 18.0% were involved in interracial incidents, while only 4.1% of the black offenders were so involved. The relationship between offender race and involvement with interracial rape, within each sample, is a significant one. Also obvious is the similarity between samples with regard to this characteristic. Even with the changing racial patterns in terms of participation rates in rape and in the overall incidence of interracial rape noted in this population, the relative tendencies for offenders of a given race to be involved with a victim of a different race has remained fairly constant. Also of interest with respect

to this issue is our observation of Hispanic offenders, their rate of interracial participation is like that of the white group in each sample. While a detailed explanation of these findings will not be attempted here, we can rule out explanations based on the racial compositions of either sample. The radical differences in racial composition of both the overall populations of each city involved, as well as the victim groups in each study would render such an explanation highly improbable. What it does tell us is that in terms of victimization and interracial rape, the pool of potential victims, numerically speaking, has little to do with the selection of same.

As to the age of the victims involved, the data obtained in this study does present a distribution similar, for the most part, to that reported by Amir (1971:52), but a trend toward slightly older victims is revealed. Whereas Amir reports a median age of 19.6 years for all victims, the median age in the above distribution is 21.0 years. That difference can be explained by comparing the four highest frequency groupings in the two victim populations, ie. ages 10 through 29.

Table A2 Comparison of Victim Age Distribution-by
Percent of Total Victim Dist.

<u>Age</u>	<u>Phil.</u>	<u>Newark</u>	<u>Pct. Change</u>
10-14	19.9	16.5	-3.3
15-19	24.9	22.0	-2.9
20-24	13.5	20.6	+7.1
25-29	10.5	13.5	+3.0

It can be easily noted that as might be expected, the vast majority of all rapes involve victims in these age brackets, 68.8% in Amir's study and 72.6% in this data. What is also evident is the significant trend in the Newark data toward the older end of those age groupings. One of every three victims in this study is between 20 and 29 years old, as compared with only one of every five in Amir's data. As indicated above, with that exception, the age distributions between the two studies are quite uniform.

If we look at the age distribution of offenders, in this study, we find it to be significantly different from the data reported by Amir regarding the age of the offenders (1971:54-57). The median age of offenders in this study is 23.6 years, as compared to 21.6 years in Amir's study. Interestingly enough, although there has been a general aging of offenders, the 10-14 year group in this study comprises 6.7% of the offenders as opposed by only 3.6% in Amir's population. The following table displays the net change,

in percentage of offenders, by age, between the two studies.

Table A3 Comparison of Offender Age-by Pct. of Total

<u>Age</u>	<u>Phil.</u>	<u>Newark</u>	<u>Pct. Change</u>
10-14	3.6	6.7	+3.1
15-19	40.4	21.5	-18.9
20-24	25.6	24.3	-1.3
25-29	16.1	15.9	-0.2
30-34	7.7	12.8	+5.1
35-39	2.8	7.2	+4.4
40-44	1.7	4.8	+3.1
45-49	0.7	2.8	+2.1
50-54	0.8	2.2	+1.4
55-59	0.3	1.1	+0.8
60-over	<u>0.3</u>	<u>0.7</u>	<u>+0.4</u>
Total	100.0	100.0	

It can be readily observed that the significant decrease in the 15-19 year old grouping, from the Philadelphia to Newark data, is not reflected until we reach the categories reporting Newark offenders over thirty years old. Even from that point on, the increases are fairly uniformly distributed over the rest of the sample. What we are seeing then is an overall aging of offenders, as opposed to a more specific displacement of offenders to adjoining age groupings, as was the case with victims. Reasons for such a trend are certainly not clear. In as much as this data reflects offenders :

arrested, the thought comes to mind that perhaps those in the 15-19 year old bracket are simply better at escaping apprehension, therefore explaining the decrease noted above. The reservations noted earlier concerning offender age as described by victim notwithstanding, data obtained from that source was looked at to shed light on the explanation posited above. When those cases in which the victim could provide no useable data on offender age are deleted, offenders described as falling into the 15-19 year old group comprise only 18.8% of the total; if anything, they are somewhat more likely to be arrested than those in other age groupings.

With this aging trend noted, we move on to look at the question of age disparity between victim and offenders, and same is reported in Table 13 in the preceding chapter.

Concerning age disparities between offenders and victims, comparisons with Amir's data is made somewhat difficult by his breakdown or categorization of the data (1971:56). He has somehow managed to categorize all incidents as involving either plus or minus five years between victim and offender, or as situations in which the victim is at least ten years older, or ten years younger than the offender. In any event, where Amir finds 63.8% of the cases involving victim and offender from the same age cohort, this data shows only 39.1% of the cases so found. For comparison purposes, if we combine the two "victim younger" groups, and do the same for the "victim older" groups we note an

interesting shift. Whereas Amir finds 18.6% of the offenders choose victims ten years younger than themselves, this data shows 29.8% with a similar age disparity, and if the above combination is made, 47.6% of the cases involve victims who are at least six years younger than the corresponding offender. Similarly, even if we combine categories to include all cases with victims at least six years older than the respective offenders, we find a total of 13.3%. This is still less than the 17.6% of offenders which Amir found to be involved with victims at least ten years older.

Unfortunately, due to the unanswered questions about Amir's grouping of this data, and the issue of victim error in descriptions of age, resulting in the use of differently constituted samples, it is difficult to be sure if the observed differences are artifactual or substantive. Such uncertainty makes any attempt at explanation practically impossible; should we look in the area of sample make-up, do the studies reflect changing enforcement patterns, or is a real change in victim selection being presented? Beyond the trends already established regarding older offenders in general, as well as slightly older victims, the problems enumerated above prohibit further explanation at this time. For purposes of this research, the trend has been noted and will be considered in its relation to victim injury, and reported in that respect in a subsequent section.

The findings of this study, concerning prior victim-offender interpersonal relationships are entirely consistent with those of Amir (1971:234). The only noticeable difference is an increase in the percentage of the final category, representing cases in which the offender and victim are related. Amir's finding of 2.5% of the cases in that category increases to 4.5% in this study. That increase may be due to the decision to include, in this study, all cases in which the victim and offender are related, even incestuous relationships, if the event reported constituted rape, as well as incest, under provisions of the law discussed earlier.

In the area of offender occupations, although Amir uses a somewhat different breakdown for occupational grouping, (1971:71) some interesting comparisons can be made. The most striking difference in the two samples is in the percentage unemployed. Amir's data shows 28.5% unemployed¹ as compared with 45.7% reported above. This can no doubt be explained in part by differences in the economic climate between 1958-1960 and 1975-1977. As might be expected, the category in this data which appears to be contributing to the noted discrepancy is "unskilled laborer." Amir's data shows 53.8% of the offenders in that category, even if we were to combine the unskilled and semi skilled categories in this

1. Amir's actual figure is 18.2%, but when allowing for his inclusion of undetected offenders a figure of 28.5% is computed. All following comparisons with Amir's data, in this area, take that into account.

population, (Amir did not include the latter designation) the result would be only 30.4%. What we are probably noting is the shift which has taken place in the types of jobs available, a shift whose effect would be most profound on that segment of the work force which relies on the shrinking number of unskilled jobs. A comparison of the data also shows an increase in the number of offenders who report themselves as students, from 11.5% to 16.7%. Since no downward trend in the ages of the offenders has been demonstrated, such a difference in all probability reflects a lengthening of the educational process. In essence, it appears that a comparison of the two samples on the basis of offenders' occupations shows them to be quite similar with differences being only a product of the years which separate them.

With regard to the prior arrest records of the offenders in this sample, a problem with Amir's data must be mentioned before any comparisons can be drawn. Amir reports that 124 of the 646 rapes he studied were classified by the police as undetected. "Those cases for which the police could not attribute the recorded offense to an identified offender(s) ..." (1971:281) Amir combines these undetected cases with those classified by the police as vanished. "Those cases about which the police have some information on suspected, identified, or alleged offender(s), but the suspect is still at large." (1971:281) Together, as unsolved cases, they represent 445, or 34.4% of Amir's total of 1,292 offenders.

With this in mind, we also note that Amir reports that 637 (49.3%) of his offenders have previous records, while 655 (50.7%) had no previous arrest record (1971:112). These two groups total 1,292, all of Amir's offenders, no mention of missing data is made. How does Amir know whether or not the undetected offenders, at least one-fifth of his total, have any previous arrest record. We can only assume that they have been included in those counted as having no record, a decision for which there is no explanation and which makes no sense. Even if we wished to delete the undetected offenders from the group reported as having no record, we cannot do so with certainty. Amir has combined them with the vanished offenders, about which information is available, and we have only the total, reported as unsolved rapes. We are also unable to determine the number of offenders which Amir can document as having no previous arrest record, even when he reports previous records categorized by types of offenses. For those breakdowns, Amir presents the offender frequencies for each offense as percentages of only those offenders with previous records. Not only does this make the above determination impossible, it presents a less accurate depiction than if the base of the relative proportions were all offenders for which the information is available. The 68.9% of offenders in this sample who have prior arrest records appears to be significantly larger than the 49.3% reported by Amir,

although we must keep in mind the difficulties cited above with that data. We will deduct all of the 445 offenders comprising Amir's unsolved grouping from his no record group, fully aware that, if anything, we are over deducting from that group. This is so because a portion of the 445 offenders are those classified as vanished, about whom Amir had arrest data, and some must, therefore, have had arrest records. Since we do not know how many fall into that condition we will deduct the entire complement. So doing, we find that 63.6% of Amir's offenders have prior records, a figure still somewhat less than the 68.9% found here, and one which we know to be overestimated to some degree.

With regard to the number of prior charges, this data presents a radically different picture regarding the extent of prior records for rape offenders than does the findings of Amir. Amir presented that data in a table which he headed, "Number of Offenses for which Offenders had been Arrested Prior to Present Offense of Rape ..." (1971:112) From that title it appears that he is referring to the number of charges as opposed to arrest incidents, however, he concludes that table by calculating what he terms the "mean number of arrests." Regardless of which of the two preceding tables are used for comparison, the differences between the two studies are significant. Whereas Amir reports that 80.9% of the offenders in his study had records

of one or two prior offenses, only 24.4% of the offenders in this study had a similar number. That difference is reflected at the other end of the scale where Amir reports 2.2% with six to ten prior offences, his highest grouping for number of offenses, as compared to 16.5% in the same grouping for this data. In addition, 35.6% of the offenders in this data, have more prior offenses than the highest number recorded by Amir for any single offender in his sample. Amir's data shows a median of 1.1 prior offenses for those offenders with records, as compared to a median of 5.2 arrests on 5.6 charges for similar offenders in this data.

An examination of Amir's data for any categorical exclusions of certain offense types, which might explain such a difference, raise only one such possibility. Later breakdowns of criminal records, by type of offenses, make mention of all offenses included in this sample except contempt of court or bench warrant arrests. Amir does not mention such an exclusion, but arrests of this type do not seem to be included in his categorization of offense types. Even if we assume Amir's data does not include arrests of that nature, such an exclusion could not explain the disparity between studies. A more likely possibility would be the higher age of offenders in this data. Or perhaps changes within the criminal justice system, in disposing of cases or

treatment of offenders, has contributed to such a change in the extent of criminal records. The data presented in the ensuing tables will attempt to exhibit the nature of the more extensive records found among the offenders in this study. Concerning the nature of the offenders' prior records, Amir presents similar data by grouping crimes against property and crimes against the person, also public disorder, drug related, forcible rape, and other sex offenses. He explains that, "Each category of offense is computed from the total number of persons having at least one offense of these types on their arrest record." (1971:114-115) He also mentions that only 12.5% of the offenders had been arrested for one type, indicating that more than one entry is made for each offender in most cases. However, when the material is graphically presented the categories appear to be mutually exclusive. Also, all percentages are based on just those offenders who have prior records, again preventing a determination of the total number of offenders for which Amir had arrest data. Making adjustments, when possible, for the above circumstances, some interesting comparisons can be made.

Amir reports that 41.9% of the 637 offenders with prior records, had a record of offenses against property. This finding can be compared to the data herein regarding break and entries and larceny offenses. Since the two offense

categories are highly correlated, .61 zero order correlation, a comparison will be made between Amir's finding and the larceny category in this study. When we compute the percentage of offenders in this study who have prior larceny offenses, in a fashion similar to Amir's method, we arrive at a figure of 46.8%. This is not significantly different than the 41.9% Amir reports with prior property offenses, but both figures are deceptively large since they are limited to offenders with prior records. A decidedly different situation arises when we compare offenders on the basis of crimes against the person. In this study, a total of 204 offenders have at least one prior arrest from the group including homicide, robbery and assault and battery. Those 204 comprise 65.0% of all offenders with prior records as compared to Amir's finding that 20.4% of offenders with prior records had been arrested for offenses against the person.

Comparisons can be more easily made with Amir's categories of forcible rape and sex offenses other than rape. Whereas Amir reports 9.1% of offenders with prior records having at least one prior rape offense, the same offender group in this study shows 29.6% with prior rape offenses, an increase which is obviously significant. Amir reports 3.5% of offenders with records as having records for sex offenses other than rape, as compared with

9.9% of offenders with records in this sample who have been charged with lesser sex offenses. Lesser sex offenses reported herein include all sex offenses other than rape or sodomy. Sodomy is included with rape because prosecutions for such generally involve cases of anal intercourse achieved by force of threat, or with very young children with whom the issue of consent is meaningless. It therefore seems more reasonable to include such offenses, and they are not numerous, with rape offenses rather than incidents of exhibitionism, voyeurism or the like which make up the lesser sex offense grouping. In any event, the 9.9% in this study is significantly larger than that found by Amir.

Although there are difficulties in comparing the type of prior arrest records for the two groups, some valid information is obtained to help explain the wide disparity in the extent of prior records between the two. To be sure, increases are evident in every offense category for the offenders from the Newark study. However, the relative increases in offense categories generally understood to involve violence are striking; the percentage of offenders in this study, with prior records, who have prior offenses against the person, or prior rape offenses, is more than triple the rate for the offenders in Amir's work. This is in contrast to the modest increase recorded with regard to offenses against property. In fact, the relative stability

for property offenses between the two studies emerges as the unusual case. Also to be mentioned, is the increase in the percentage of offenders with records for lesser sex offenses, or those other than rape. Once again the 9.9% in this study is almost three times the 3.5% reported by Amir. Also to be noted is the change in the order by frequency of offense types within each group of offenders. For this study, crimes against the person are more likely to be found in the records of offenders than crimes against property, while the opposite was found to be the case by Amir.

II. Determinants of the Offense Situation

Concerning the time of the offense, the distribution observed in this study was statistically significant. In comparison with Amir's data, we find the modal categories quite similar (1971:84). Amir reports 48.8% of the incidents occurring between 8 P.M. and 1:59 A.M., as compared to 50.2% between 9 P.M. and 2 A.M., in this study. The differences observed between studies are in the early morning hours. Where Amir reports 21.8% of the incidents occurring between 2 A.M. and 7:59 A.M., only 14.6% of the incidents in this study took place during similar hours. Most of the decrease in that time period is made up for by an increase in daytime rapes, with the 11.9% occurring between 9 A.M. and 2 P.M. in this study, being one and a half times as many as those observed by Amir in the same time period.

There is no significant relationship between rape and the day of the week on which the incident occurs, in this study. Such a finding is, however, significantly different from Amir's finding with regard to the day of occurrence of rape incidents (1971:81). Amir reports a high frequency on Saturday (24.4%) and a low frequency on Monday (8.4%).

The frequencies observed by month, in this study, do not differ significantly from what might be expected by chance distribution. Amir reports a similar finding, but does note that the peak time is the hot months of May, June,

July and August (1971:75). He finds July to be the summit month with 12.2% of the cases, with the above four months accounting for 41% of the total incidents. It will be recalled that the summit month in this study is October (10.6%), followed closely by August (10.0%). Even if we combine the same warm months as Amir, we find they account for 33.8% of all incidents, or one-third of the twelve month total.

As for the question of the distance between the residences of the participants, and the locations of the rape incident the method by which Amir has presented data in this area makes comparisons rather difficult (1971:93). He presents no detailed data useful in determining interval distances between the residence of victims and the locations of all rape incidents. As for offenders, Amir reports a total of 74.6% living in the vicinity of the offense, which he defines as an area of five city blocks. In this study, 60.2% of the offenders live in the same patrol district, or closer, as the location of the offense. Since patrol districts are considerably larger than five blocks, and in as much as 43.0% live on the same street or closer, the best estimate would be approximately 50% of the offenders residing within five block of the offense. Such an estimate would indicate a much greater spread of what Amir called the "mobility triangle," a concept taking into account the residences of the victim and the offender as well as the

location of the offense. For victims, we are unable to make a similar comparison, in that Amir's tables in this area are based on numbers of offenders and not separate incidents. We are therefore unable to distinguish the categories in which group rape incidents have resulted in the repeated counting of victims.

The limitations of the validity of offender data as to place of residence was discussed in an earlier section, largely concerning one's increased likelihood of arrest for incidents in areas of maximum familiarity. However, since Amir's data suffers from the same limitations, the comparison made regarding a spreading of the mobility triangle probably has some validity. We also know that this increased mobility on the part of offenders has not been accompanied by any increase in the proportion of incidents involving strangers. Rather it seems that increased mobility in all areas of life, in particular normative patterns regulating social interaction, has afforded rape participants an increasing area of selection.

With regard to the type of location in which the offense takes place, very little difference is observed between the above findings and those of Amir in the same area (1971:145). Although Amir does not differentiate between offenders' and victims' residences, he reports that 55.7% of all incidents occurred in a participant's residence.

If we combine the two categories accounting for the residence of participants we arrive at 40.5%. We cannot be certain where Amir has included locations such as the basement, hallway, or roof of the victims residence, but it appears that such are included in the above cited figure. If this is so, a comparable grouping of this data would include the great majority of the 10.9% of the cases reported as "residential structure," which represent offenses occurring in non-living spaces of a victim's building. An addition of those cases would mean that in the area of 50% of the cases in this study took place within the confines of Amir's "participant's residence" category. This would represent a total only slightly less than that reported by Amir. In other categories the similarities persist as well: Amir reports 14.9% in autos as compared with 15.8% here; Amir reports 17.8% in open spaces as compared to the 16.6% reported outdoors in this study; and Amir's 11.6% taking place in buildings other than a participant's residence, is only somewhat less than the 15.4% observed in a similar locations herein.

Concerning the type of locations characterizing initial contact between victim and offender, once again, the similarities between this data, and the corresponding observations by Amir are most pronounced (1971:139). Amir reports 26.4% of initial contacts occurring in the victim's

home, and 6.7% in the home of the offender, practically identical to the 25.4% and 5.7% respectively, observed in this study. If we combine Amir's categories relating to outdoor initial meetings, we notice that they constitute 48.3% of all incidents. The vast majority of that 48.3% are meetings which Amir characterizes as taking place with the participants on the street walking. In this study we note that 40.5% of the meetings occurred in outdoor areas, again the majority on the street or sidewalk. Even if we look at initial meetings in taverns, Amir reports 7.8% as compared to 7.0% for this data. What we have noticed then, is that the types of meeting places, and the locations at which the rapes actually take place, exhibit very few differences between the two studies. Participants may be a bit more mobile in this study, but the type locations in which their involvement in rape situations is enacted has changed very little over the two decades separating them from their counterparts.

The differences observed in the number of offenders involved in the rape incidents, between the two studies, is indeed striking. Amir records the rape incidents as either single rapes (one offender), pair rape (2 offenders) or group rapes (three or more offenders) (1971:200).

Table A4 Percent Differences - Number of Offenders

	<u>Philadelphia</u>	<u>Newark</u>	<u>Diff.</u>
SR	57.3	79.0	+21.7
PR	16.2	14.1	-2.1
GR	26.5	6.9	-19.6
Total	100.0	100.0	

The substantial shift from group to single rape incidents is made quite clear by the above table. Central to Amir's explanation of group rape is his application of theories of gang behavior to the phenomenon (1971:185-191). At least on the surface, the incidence of group rape in this study would seem to lend credence to Amir's explanation. There can be no doubt that the "gang sub-culture", so well documented in our larger cities in the 1950's, has withered considerably. During the time period encompassed by this study, 1975-1977, no highly organized youth gangs, of the type prevalent two decades earlier, were known to the Newark Police Department. Certainly a drop in the incidence of group rape from approximately one out of every four cases to one in fifteen attests to the validity of the association Amir postulates between group rape and the presence of gangs. However, the data may also suggest one portion of Amir's analysis which now appears open to question. Amir vacillates a bit on the question of pair rapes, as evidenced by two sentences from the same paragraph. "For analysis the PR and

GR categories can be combined to form a MR (multiple rape) category, since both subcategories represent incidents of rape in which there are several assailants Also a preliminary examination of the data indicated that in certain situations there are similarities in the characteristics of SR's and PR's" (1971:200). Table A4 indicated that pair rapes and group rapes fare quite differently in their relative comparison between studies. In his Sociological Theory of Group Rape, that alluded to above which relies on gang theory, Amir deals with group rape and pair rape as conceptually the same. In the same manner that the drop in group rape attests to the validity of the gang theory explanation, the relative stability of pair rape attests to the conceptual independence of pair rape, at least in its relation to the explanation forwarded by Amir.

III. Interactive Factors

In the area of the commission of additional criminal offenses, along with the rape, Amir reports on what he terms felony rape, cases in which a felony was committed in addition to the rape (1971:179-181). He limits this consideration to cases in which the rape followed a burglary or robbery. Amir makes no mention of cases in which the rape incident precedes the robbery; whether he intentionally omitted such cases, or none were reported, is not made clear. The former does not seem to be the case since his remarks in reporting the Philadelphia data open by stating, "In 26 cases, or in 4 percent of the 646 rape cases, a felony was committed in addition to the rape" (1971:179). It seems more likely that he has made an assumption as to the occurrence of rape related robberies, and either failed to take note of information to the contrary, or such information was not contained in the files at his disposal. That issue notwithstanding, any comparison between studies remains limited to the two added felonies which his data takes into account.

A comparison of the studies, in the above indicated area, produces widely disparaging observations. Whereas Amir reports only 4% of all incidents involving burglary or robbery, this data reveals a total 23.0% of all cases involving either or both offenses. Such a difference is impossible to explain given the scope and purpose of this presentation. One cannot help but think that the source of Amir's data was in some way

lacking information with regard to this issue.

In dealing with the issue of coercion in the rape incident, unfortunately, comparisons with Amir's observations in this area is complicated by different handling of the data. He distinguishes between what he calls nonphysical and physical violence, with the former including everything from threats, armed and unarmed, down to offering a victim money or a ride (1971:151). Two separate breakdowns are presented, each reporting on all incidents in his sample, but the two are never combined in such a way that we can determine the primary mode of coercion employed in each incident. He also never makes clear the relationship of weapons to degrees of coercion, but it appears that in 21.1% of all cases the offender was armed. This is significantly less than the 35.1% of incidents, in this study, in which the offender was in possession of a weapon. As might be expected, this difference in the presence of weapons is reflected in the relative proportion of incidents in which coercion by threat was utilized. Amir reports 24.9% in the category most closely corresponding with reliance on threats, as compared to 34.7% in this data, indicating that increased use of weapons will be accompanied with increased reliance on verbal coercion. A similar comparison regarding physical force, although even more difficult, indicates that it was utilized in at least 70% of the cases, an increase in the

neighborhood of 16% over its use in this study. We can, in sum, notice a definite shift in the utilization of weapons, and the overall methods offenders employ to coerce their victims.

With regard to victim resistance, a comparison of the observations reported herein with those of Amir, in the same area, indicates that victims in this sample are slightly more inclined to resist their attacker (1971:166). Amir reports that in 55.0% of the incidents he surveyed the victim behaved in a "submissive" manner, that category closely approximates a designation of no resistance in this study. A shift in the same direction is noted by comparing the 18.0% of incidents in which Amir categorizes the victim's behavior as "fight", with 24.3% who physically resisted in the above table. Since Amir's categorizations in reporting victim resistance are not as detailed as those employed here, the magnitude of the increase in victim resistance cannot be determined with certainty. It does, however, appear that some change in that direction, although slight, has been observed. Amir does not report at all on the success or failure of victim resistance, and in fact reports on no cases in which the victim was able to thwart the coercive efforts of the offender.

The incidence of any additional sex act is significantly greater in this sample than for the data used by Amir (1971:159). Increases are observed in each category of additional

sex acts reported.

Table A5 Comparison of Additional Sex Acts-by Percent
of Total Incidents

<u>Sex Acts</u>	<u>Philadelphia</u>	<u>Newark</u>	<u>Pct. Change</u>
Fellatio	10.7	13.6	+ 2.9
Cunnilingus	1.9	3.1	+ 1.2
Anal Intercourse	1.7	6.6	+ 4.9
Rep. Intercourse	11.4	17.7	+ 6.3

This is certainly one area in which victim reluctance, embarrassment, or shame may raise questions as to the accuracy of the data. The increases noted may be reflective of actual changes in the sex acts included in the rape interaction, or they may indicate an increased willingness on the part of victims to convey such information to police and hospital personnel.

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