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Public Health Service

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OMB NO. 68-R1452

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
PUBLIC HEALTH SERVICE  
NATIONAL INSTITUTE OF MENTAL HEALTH  
Division of Special Mental Health Programs  
FINAL REPORT GUIDELINES

Month		Year			
1	2	8	5		
(01)	(02)	(03)	(04)		

INSTRUCTIONS

PHS policy requires that grantees submit a "terminal progress report" (final report) within 90 days after completion of the grant.

Please complete this series of items as this final report. The report will be filed with your applications, reports and other grant business in NIMH's central files. It will be read by staff in research program areas, and may be read by other Institute staff concerned with program analysis, communication, evaluation and planning. The report will be used for information about your research, i.e., to describe and summarize the information (procedural as well as substantive) resulting from NIMH support, and to relate that information to mental health problems and research. Your report will often be used apart from your application; however, other documents, such as publications and applications, will be available from the project file if needed.

These guidelines have been designed with relatively small response spaces to encourage brevity. However, do not restrict your response if more space is needed: be complete, using additional labeled pages inserted where necessary (sample page included). Extensive descriptions and discussions, if desired, should be made in addition to your summary response to the item, and should be placed as appendices. Discussions of issues not covered by these guidelines are also welcome as appendices. Use clear, concise language, avoiding highly technical language where practicable (this will vary for different types of research); appendices could be more technical than responses to the items.

All publications resulting from this project, and not previously submitted, should be submitted with this report (or as soon as available); see the section on Dissemination. Publications should not be used in lieu of responses to particular items.

Send copies of this report and all appendices as indicated below.

3 copies

Grants Closeout Unit  
Grants Management Branch  
Office of Program Support  
National Institute of Mental Health  
5600 Fishers Lane, Room 7C-24  
Rockville, MD 20857

NCJRS

JUL 20 1988

3 copies of any books

FOR NIMH USE ONLY	
Branch/Section: <u>AV-B</u>	

ACQUISITIONS

ADMINISTRATIVE DATA:  (NOTE: If items 1-4 have changed, give the latest information)  (Please sign: X	1. GRANT NUMBER  R 0 1 M H 3 1 6 1 8 <small>(05) (06) (07) (08) (09) (10) (11) (12) (13) (14)</small>	2. TITLE OF GRANT  HIDDEN RAPE: SURVEY OF PSYCHOPATHOLOGICAL CONSEQUENCE
	3. NAME OF PRINCIPAL INVESTIGATOR  Mary P. Koss	4. SPONSORING INSTITUTION  Research and Sponsored Program Kent State University
	SIGNATURE OF PRINCIPAL INVESTIGATOR  <i>Mary P Koss</i>	5. NAME AND POSITION OF PERSON WRITING THIS REPORT IF OTHER THAN ITEM 3  ---

ADM 442  
Rev. 2-75

Received Dec. 85

6. Describe briefly the *specific aims* of your project, indicating major changes in direction from the original aims:

Previous studies of the 18-22 year old group have revealed cases of overt rape as well as high rates of occurrence of other forms of sexual aggression. Also, a phenomena known as date rape has been identified in this population which has been linked clinically to significant short-term and possibly long-term psychopathological consequences. Thus, epidemiological studies are needed to estimate the risk status of college students for sexual aggression.

Much rape research has inherent limitations on generalizability since typically it is based on samples of participants who are identified through the criminal justice system or rape crisis centers. Yet, conservative estimates suggest that only 40-50% of rapes are reported to police and as few as 4% of rape victims utilize assistance services. These figures suggest the existence of many "hidden rape victims" and "undetected offenders" among the general population. There is a need for research methods that do not involve reliance on justice system contact or victim assistance service utilization for recruitment of participants.

The specific aims of the present study included:

(1) To establish that college students are a high risk population for rape and other forms of sexual aggression through collection of prevalence and incidence data in a nationally representative sample;

(2) To develop a descriptive data base containing both hidden and identified subjects that includes background variables, experiences with sexual aggression and victimization, psychological characteristics, current behavior, and assault impact;

(3) To determine whether sexually aggressive men and sexually victimized women can be differentiated from comparison samples of nonsexually aggressive men and nonsexually victimized women; and,

(4) To describe the emotional impact of acquaintance rape upon the victim.

These goals were addressed through administration of a self-report questionnaire to a nationally representative sample of 6,104 students in U.S. institutions of higher education.

AIMS OF THE PROJECT:

(PROBLEM STUDIED)

7. Were the aims pursued as *originally formulated*?

- 1  Yes (15)  
2  No

In the original proposal, the specific aims included dissemination of the results of the study. However, this aim was eliminated by the review committee. Otherwise, the aims were pursued as originally formulated.

8. In general, how would you *characterize* your research?  
(Rank any multiple answers, using "1" as most appropriate)

- |   |  |
|---|--|
| (16) <input checked="" type="checkbox"/> Hypothesis development                   | (19) <input type="checkbox"/> Gathering of data; e.g., surveys |
| (17) <input checked="" type="checkbox"/> Hypothesis testing                       | (20) <input type="checkbox"/> Other <i>(Specify):</i>          |
| (18) <input checked="" type="checkbox"/> Development or refinement of methodology |  |

TYPE OF RESEARCH:

CONDUCT  
OF  
RESEARCH:9. Describe the *methodology* used in your research, including characteristics of any sample used:

A comprehensive review of the methods and procedures used in the study is presented in the attached continuation pages titled, "Method." The documentation from the United States Department of Education, "Fall Enrollment and Compliance Report of Institutions of Higher Education, 1980 (FECR Survey, HEGIS XV), that was used to develop the sample is included as Appendix A.

10. Did you have significant *technical methodological* difficulties?  
(Examples: *necessary measurement tools undeveloped; unexpected inadequate data base*)  
If yes, describe, and explain how you dealt with them.

1  Yes  
2  No (21)

11. Did you have significant *practical operational* difficulties?  
(Examples: *trouble with equipment; loss of sample or data; difficulties with cooperating units*)  
If yes, describe, and explain how you dealt with them.

1  Yes  
2  No (22)

The primary difficulty encountered was resistance to participation in the study. The use of the Ms. identification and members of the Ms. Foundation Board as personal contacts were insufficient to counter the degree of resistance encountered. Personal campus visits, letters of support from nationally known clergy, and calls to local colleagues, friends, and women's studies personnel were used to deal with the resistance. Eventually, 33 schools were recruited for participation, somewhat short of the 50 that were proposed. However, time and financial limitations precluded continued efforts to secure research access.

12. Describe (a) your *conclusions or results* as they relate to your specific aims (*please include negative results*), and (b) their *significance* in relation to the field. Avoid highly technical language where practicable.

RESULTS:

The results of the study and their significance are presented in the attached continuation pages titled, "Results" and "Discussion."

RESULTS  
(Continued)13. Did you have *other findings* not directly related to the specific aims ("*serendipitous findings*")?*If yes, describe:*

- 1
- 
- Yes (23)
- 
- 2
- 
- No

14. How do the *overall results* of your project fit into these descriptions?  
(*If you had multiple expectations or hypotheses, base your response on the predominant trend of the results.*)

- Confirming your hypotheses or expectations (24)
- Disproving your hypotheses or expectations (25)
- Inconclusive (26)

15. Did your research result in significant *methodological developments*?*If yes, describe:*

- 1
- 
- Yes (27)
- 
- 2
- 
- No

Subjects for participation in rape research are usually obtained from court, prison, and crisis center records; or they may be recruited from the general public through newspaper advertising. For a number of reasons, all of these recruitment techniques result in samples of rape victims and offenders that are restricted in their generalizability. Rape is both underreported and underconvicted. In addition, women who have had an assault that meets a legal definition of rape frequently fail to conceptualize themselves as rape victims or to utilize victim services. Therefore, the most representative group of victims and offenders are not found in jails, courts, and crisis centers but rather are found in the general population. This project has led to the development of the Sexual Experiences Survey, a standardized survey with known properties of reliability and validity that has demonstrated its utility in the selection of subjects for participation in rape research. Thus, the Sexual Experiences Survey offers a viable alternative to sample selection through newspaper advertisement, judicial identification, and utilization of victim services. It is the only approach that has demonstrated the ability to identify unacknowledged victims of rape.

IMPLICATIONS:

16. How would you describe the *impact* of your project?  
(Rank any multiple answers, using "1" as most appropriate)

- (28)  Opening up a new line of research  
 (29)  Contributing to the knowledge base of the field  
 (30)  Providing facts ready for application in a field  
 (31)  Indicative of a "dead-end" line of pursuit

17. Do you have immediate plans for *further research* in this area?

1  Yes (32)2  No

If yes, describe:

Currently, I am working on a project funded by the National Institute of Justice called, "Criminal Victimization: The Somatic Impact of Psychological Stress. Six questions on the prevalence and somatic impact of criminal victimization are being studied by self-report questionnaire, interview, and medical chart review in 5,500 members of a prepaid health plan.

In addition, I would like to pursue funding to undertake further analyses of the data set that is described in this report.

18. Beyond your own plans, what is your opinion of the future directions this research area should take?

Because college students represent approximately 35% of the population aged 18-25, they were an important group to study. However, the next step is to extend the research into the general population. Such studies would include a greater age range of subjects and would allow conclusions regarding the incidence of sexual aggression throughout the life span. Knowing whether or not sexual aggression lessens as people mature and gain experience has important preventive implications. Secondly, the results of the present study raise questions regarding the course of spontaneous resolution of rape among hidden victims. Currently, little is known regarding the immediate and long-term cognitive impact of sexual assault, nor the spontaneous processes of cognitive re-appraisal and coping through which the trauma is eventually dissipated. Research on this topic would have important therapeutic implications.

19. Do you have *specific suggestions (experiments, cautions, etc.)* for other research in this area?

1  Yes (33)2  No

If yes, describe:

In all my research to date, I have failed to anticipate the degree of resistance to be encountered. Obtaining access to 33 higher education institutions required 15 months while obtaining access to a medical population required 8 months. The topic of sexual victimization is deeply emotional and difficult for many people to discuss. Administrators who control research access often feel that the persons under their charge must be protected from the traumatic impact of a rape study. Future researchers must be aware that research access may not be achieved easily. Ample time must be anticipated to allow initial anxiety to dissipate among potential institutional participants. In addition, the researcher must be prepared to submit more thorough documentation than is usually necessary, and to be flexible regarding changes in procedures so that fears about the study impact may be allayed.

**IMPLICATIONS**  
(Continued)

20. Are you aware of other researchers using your techniques, or planning to replicate your study, or of some individual or organization continuing your work? If yes, describe, and check the type of impact which best characterizes the impact of your research at this time.

1  Yes (34)  
2  No

Specific utilization (35)  
 General field impact (36)

First, some of the concepts developed in research on college students (e.g., acknowledged and unacknowledged rape) are being incorporated into research by other investigators. Second, the specific methods developed in the study are being applied on numerous campuses. I have received over 150 requests for publications and copies of the survey. The goal of many of these requests is to conduct studies to establish the local extent of sexual aggression in order to raise consciousness and document the need for prevention and assistance services.

**DISSEMINATION:**

21. As an appendix, list all publications (and articles accepted for publication) resulting from this project. Send any publications which have not already been submitted as appendices, with grant number indicated on each. (See instructions, page 1, regarding submission of books)

22. Do you have any plans for future publications, papers, and/or demonstrations dealing with the results of this project? If so, describe briefly. Send in any future publications based on this project as per instructions on page one.

1  Yes (37)  
2  No

I plan to disseminate the results through professional journals. As time allows, the data set will support at least the following publications:

- (1) a summary of the incidence and prevalence data for both men and women
- (2) a report of the variables that differentiate sexually aggressive men from nonsexually aggressive men
- (3) a description of the variables that differentiate sexually victimized women from nonsexually victimized women
- (4) an account of the variables that predict those women who label a victimization as rape
- (5) a statement of the role of child sexual abuse in the prediction of adult sexual aggression and adult sexual victimization
- (6) a review of the childhood, psychological, and assault variables that predict the traumatic impact of sexual victimization

23. (7) The results of this avoidance strategies research, from both the victim's and offender's perspective, have been submitted for publication but not yet published. Contents of the report will, as far as possible, be held as restricted information for six months unless the investigator agrees to an earlier release. Do you request this restriction?

1  Yes (38)  
2  No

**APPENDICES:**

See instructions, page 1, paragraph 3.

**LIST OF APPENDICES**

**APPENDIX A:** Documentation From U.S. Department of Education on which sampling plan was based.

**APPENDIX B:** Copy of the Questionnaire used in the project

**APPENDIX C:** Publications by the Principal Investigator

**APPENDIX D:** Dissemination of the research in the popular media

Item No. 9. (Methods)

## METHOD

The specific aims of the present study were the following:

(1) To establish that college students are a high risk population for rape and other forms of sexual aggression through collection of prevalence and incidence data in a nationally representative sample;

(2) To develop a descriptive data base obtained from both hidden and identified subjects that included background variables, experiences with sexual aggression and victimization, psychological characteristics, current behavior, and assault impact;

(3) To determine whether sexually aggressive men and sexually victimized women can be differentiated from comparison samples of nonsexually aggressive men and nonsexually victimized women; and,

(4) To describe the emotional impact of acquaintance rape upon the victim.

These goals were addressed through administration of a self-report questionnaire to a national sample of 6,104 students in U.S. institutions of higher education. The methods of sample design, institutional recruitment, questionnaire construction, validity and reliability checks, administration procedures, variable scoring, data reduction and data analysis through which these goals were addressed are described in the following sections.

### Sampling Plan

The sampling goals of the project were to represent the universe of the higher education student population in the United States in all its diversity-- males, females, technical schools, community colleges, Ivy League schools, state universities, and so forth. Since it appeared possible that experiences of sexual assault, both among perpetrators and victims, would vary among schools located in SMSA's or rural areas, or between sex-balanced schools and predominately women's colleges, it would have been a mistake to recruit a sample of only those schools at which "network" contacts could be helpful in gaining access. It was unlikely that this procedure would have resulted in a sample that reflected the desired institutional diversity.

No sample design could be expected to result in a purely random or representative sample, however, because the subject matter is sufficiently controversial that some schools targeted by a systematic sampling method can be expected to refuse to participate. For example, both small privately funded religious schools or schools where political reactions among students are encountered might be predicted to refuse participation. Thus, the object of the sampling procedure was to produce a final sample that would be as representative as possible and free from "distortions introduced by selective recruitment by the project directors or selective participation by institutions.

### Initial Decisions

Several decisions were made that governed subsequent decisions. First, the commitment to replicability and representativeness meant using as a sample frame all of the institutions of academic post-secondary education in the United States. Second, it was concluded that

Item No. 9. (Methods)

administration of the instrument had to be conducted on-site and not by mail. The latter would have produced a strong self-selectivity bias. On-site administration in classrooms was considered to produce a more reliable representation of those asked to complete the survey. Of course, completion of the form was voluntary. However, administration in the classroom with a project representative present rendered participation convenient, controlled, and as safe as possible. Third, it was determined that on-campus administration should not be conducted only in those classes in which the instructor would be most likely to cooperate (i.e., psychology, sociology) since this procedure could result in an unknown bias toward certain kinds of students. Instead, the sample had to be drawn from the diversity of offerings within each institution. These requirements dictated that the sample be selected in stages. The first stage was the selection of institutions. The second stage was the selection of classes within institutions.

#### Selection of Institutions

The United States Department of Education (Office of Civil Rights) maintains records of the enrollment characteristics from 3,269 institutions of higher education in the United States. This office provided a copy of their information for 1980 (the latest available) on data tape to the survey consultants, Clark/Jones, Inc. of Columbus, Ohio. The documentation for the data tape is found in Appendix A.

The information includes extensive profile data on institutions of higher education. Using this file, homogeneous clusters of institutions were developed according to six criteria:

- (1) location in or outside of an SMSA of certain sizes
- (2) enrollment above or below the national mean percentage enrollment of minority students
- (3) control of the institution by private secular, private religious or public authority
- (4) type of institution including university, other 4 year college, and two year institutions
- (5) location in the 10 United States Department of Education regions of the United States
- (6) total enrollment within five levels of approximately equal numbers of students

Using these criteria, the institutions of the entire nation were divided into homogeneous clusters within regions. For example, all four year institutions located in New England, having below average minority enrollment, controlled privately, and located outside of an SMSA constituted a homogeneous cluster. Two sampling rules to select the schools to be recruited into the sample were developed. First, the largest institution in each region was always included. Without this rule, it would have been possible to omit the "Big Ten" or other major schools from the sample entirely. Second, every xth cluster was sampled in proportion to the enrollment of the region. The number of institutions that were proposed from each cluster are presented in Table 1. From the homogeneous cluster, replacements were sought if the original target school proved uncooperative. The final sample was the result of an interplay of scientific selection and head-to-head negotiation but within the limits of substitution rules requiring replacement within homogeneous clusters. Of the 50 schools originally contacted, 30 refused to participate and were replaced by other schools within the cluster. Thus, the integrity of the sample was maintained.

TABLE 1

**DESCRIPTIVE CHARACTERISTICS:  
HIGHER EDUCATION INSTITUTIONS IN THE UNITED STATES, 1980**

Variable	Number of Institutions	Percent of Total	Number in Proposed Sample <sup>1,2</sup>
<b>I. Location</b>			
Not in SMSA	643	32.18	16
SMSA < 1,000,000	706	35.34	18
SMSA > 1,000,000	649	32.4	16
<b>II. Region</b>			
New England	140	7.01	5
Mideast	374	18.72	9
Great Lakes	334	16.72	8
Plains	172	8.61	4
Southeast	442	22.12	11
Southwest	183	9.16	5
Rocky Mountain	60	3.00	2
West	259	12.96	6
<b>III. Minority Tally</b>			
Below mean	1451	72.62	36
Above mean	547	27.38	14
<b>IV. Governance</b>			
Public	1307	65.42	33
Private	392	19.62	10
Religious	299	14.97	7
<b>V. Type</b>			
University	156	7.80	10
Other 4 year	1013	50.70	21
2 year	829	41.49	19
<b>VI. Size</b>			
1,000-2,499	843	42.19	20
2,500-9,999	820	41.04	20
>9,999	335	16.77	10

<sup>1</sup>Numbers are based on an originally proposed sample of 50 institutions. Time and budgetary limitations required the final sample goal to be reduced to 35 institutions.

<sup>2</sup>Minimum number of units in a cluster will be set to 10 except for region.

Item No. 9. (Methods)

Several exceptions to the sampling rules were made for the sake of reasonableness and cost constraint. First, military schools were omitted because it was felt that the type of information sought would place students in conflict with their military code. Also, previous experience had suggested that military permissions are very difficult to obtain. Second, schools with enrollments under 1,000 were eliminated. There are approximately 1,000 such schools. Travel to them for exceptionally small sample numbers was not cost effective. Third, schools not in the contiguous United States were eliminated because travel funds were not sufficient. Finally, graduate schools were eliminated because post-graduate students were not intended as part of the sampled universe.

#### Institutional Recruitment

The procedures for obtaining institutional cooperation began by identifying the responsible individual in the central administration. This individual was first contacted by telephone by an assistant selected from among applicants with professional experience in public relations. The initial telephone contact was followed up with a mailing of information. A copy of the information package is found in Appendix B. If the administrator needed further information, he or she was contacted by the Principal Investigator. Most administrators were unwilling to make a personal decision about participation. In virtually every case, the proposed project was placed before a committee for decision. To enhance institutional cooperation, letters of support were obtained from the directors of education of the major religious denominations and from women clergy who work in the area of sexual abuse. In addition, personal campus visits were made by the staff of Ms. Magazine, and members of the Ms. Board of Consultants intervened personally when possible. When a campus had a Woman's Studies Program, the assistance of the director was solicited.

If administrative clearance was obtained to pursue the research, a signed "Permission for Institutional Access" form was obtained from every participant institution. Documents were then submitted to the institution's Human Subjects Review Board. While the project technically qualified for expedited review because respondents were completely anonymous, most institutions felt that the project was sufficiently controversial to require a full review. In many instances, two or more meetings of the institutional review boards were required to satisfy all objections. Because of the large number of vacation breaks in the academic calendar, the amount of time required to obtain a decision from the institutions became very extended. Some schools required 15 months to arrive at a final decision. During that period, 93 schools were contacted and 33 institutional participants were obtained. Twenty of the institutions were first choices, the remaining 13 were solicited from among 43 replacements. A signed "Human Subjects Review" was obtained from every participant institution. The institutional participants are listed in Table 2. (Note: This table is not for public distribution. Institutions were guaranteed anonymity).

It might be argued that the resulting sample would be biased toward those schools with a "liberal" administration. However, this did not prove to be the case. Perusal of Table 3 which lists the institutions who refused to participate and their reasons reveals that some schools with the most liberal reputations in the nation refused while others with a presumed conservative bias cooperative. It should be noted that the reasons for nonparticipation given by prestigious institutions were no more sophisticated than the reasons given by less elite institutions and in some cases were less informed. The final sample of institutions was as

**TABLE 2**

**PARTICIPANT INSTITUTIONS OF HIGHER EDUCATION**

**I. New England**

1. University of New Hampshire
2. Northeastern University
3. Boston University

**II. Mideast**

4. City College of New York
5. Cornell University
6. LaSalle College
7. University of Maryland
8. University of Pittsburgh

**III. Great Lakes**

9. Alma College
10. Illinois State University
11. Lake Superior State College
12. Lima Technical College
13. Madison Area Technical College
14. Ohio State University
15. DeVry's Technical Institute

**IV. Plains**

16. University of Minnesota
17. Grinnell College

**V. Southeast**

19. Davidson County College
20. Emory University
21. Gadsen State Community College
22. University of Georgia
23. University of Mississippi
24. Morehouse College
25. University of New Orleans

**VI. Southwest**

26. University of Arizona-Tucson
27. University of New Mexico-Albuquerque
28. Texas A & M
29. Texas Women's University

**VII. Rocky Mountain**

30. Montana State University

**VIII. West**

31. Clatsop Community College
32. University of Portland
33. Stanford University

TABLE 3

**Institutions that Declined Participation and their Reasons**

1. Atlantic Christian College It is a religious school and the president doesn't want to begin his term with a controversial study.
2. Berea College It was felt that the responses from students could be identified and studied.
3. Belmont College It is a Baptist school which receives many requests for surveys. They say no to all.
4. Blue Mountain Community College College Affairs Committee questioned the need for the study.
5. Brandeis The study would be taken out of context and was of a sensational nature. There was no one on campus to provide continuity weeks after the survey was administered. Brandeis students are highly intelligent and therefore are less likely to do behavior of this sort than students of lesser ability like they have at places like University of New Hampshire.
6. Brigham Young No reasons.
7. Bunker Hill Community College The study is an invasion of privacy, it will cause bad publicity, it requires too much faculty time, and they have not had any episodes of rape on their campus.
8. University of California, Berkeley The purpose of the study and the hypotheses are not clear, the methodology is bad, the survey would cause bad publicity, and the survey is misleading and slanted. The questionnaire itself is sexist, racist, homophobic, misogynistic, and anti-men. No foreseeable benefit to Berkeley students.
9. California State University The survey doesn't provide the information necessary for informed consent, there is a risk to offenders and victims because the follow-up counseling is inadequate, no local personnel are involved, and there is a lack of full disclosure.
10. Cape Fear Technical Institute They are involved in other studies and are busy with re-accreditation.
11. Chattahoochee Valley Community College No reasons.
12. Coe College They can't invest the time.

13. University of Colorado Research not allowed in classrooms.
14. Dillard University Religious objections.
15. East Carolina University No reasons.
16. Eastern Kentucky University University of Kentucky does all the research allowed on their campus.
17. Feather River College No reasons.
18. Florida Institute of Technology Administration opposed.
19. Framingham State No reasons.
20. Gardner-Webb No reasons.
21. Greater Hartford Community They don't want to get involved in surveys.
22. Harvard University While they found the study fascinating, they must protect Harvard students because "everyone wants to survey Harvard students and that is not what they are here to do."
23. Hampton Institute Black schools could be too easily identified.
24. Hopkinsville Community College It's in the Bible belt and they have ongoing studies that duplicate the survey.
25. University of Houston Human Subjects Committee denial.
26. Jefferson Technical Institute Religious students, parents, and taxpayers might object and the school is operated by tax levy. Thus the study could affect voters.
27. Joliet Junior College Human Subject Committee denial.
28. Junior College of Albany No reasons.
29. Lee College Conservative and they have had no problems.
30. Marygrove College They have had 12 current cases of date rape and the study could be confused as a betrayal of victims' confidence in the faculty members who were told.
31. Mass. Bay Community College New president is busy with other things.
32. McHenry County College Survey overly intrusive, biased, and based on preconceptions.

33. Miami-Dade Community College - Survey is too complicated for the ability level of their students and the college is already participating in another similar study.
34. MIT They recently did a sexual harassment survey. Two surveys is so short a time would be against the student's welfare. Also, MIT students work hard and the survey would add to their stress. Finally, they have only 20% female students so the survey isn't that relevant to the school.
35. Monroe County College Survey too long.
36. Montclair State College Can only be done in psychology classes--registrar has been ordered not to cooperate.
37. Morris Brown College Don't want to get involved.
38. Northern Nevada Community Lack of interest in the topic.
39. Northwood Institute They are too young a school.
40. Parsons School of Design They are doing their own studies.
41. Pepperdine University Anything connected with sex is unChristian in many minds.
42. University of Puget Sound The survey lacks sophistication. The post-masters level experimenters should give counseling. They won't put students into a situation where painful feelings are elicited but not dealt with therapeutically. Also, the use of terms like "sexual misunderstanding" perpetuate the norm that rape shouldn't be discussed. The study is based on an inadequate understanding of the research on acquaintance rape.
43. Ogelthorpe University They are conservative and do not want the survey on campus. Ms. is not a good magazine.
44. Oklahoma City University No reasons.
45. Southern Ohio College Students are "traditional, unsophisticated, and emotionally insecure enough to find the questionnaire offensive and invasive of their privacy."
46. Seattle University No survey allowed in classes.
47. Spokane Falls Community College Human Subjects disapproval.
48. Taylor University They are "evangelical" and the subject is disturbing.

- |  |  |
|--|--|
| 49. University of Tulsa                  | Human Subjects disapproval.  |
| 50. University of Texas, Austin          | No research allowed in classrooms.   |
| 51. Victoria College                     | They are "in the Bible belt and are conservative."   |
| 52. University of Washington             | No research allowed in classrooms.   |
| 53. Western Connecticut State University | Financial difficulties.  |
| 54. Western Kentucky University          | They emphasized that the reason they were saying no was NOT because they are a religious school.   |
| 55. Wilkes Barre Community College       | Other commitments.   |
| 56. Yale                                 | No surveys allowed in classes and no other viable alternative to administration. Stated that Yale is so unique that procedures developed elsewhere would not work.   |
| 57. University of Kansas                 | No reasons.  |
| 58. Wellesley College                    | Administrative changes and changes in membership of Human Subjects Committee. Three different statements to the Human Subjects Committee and modifications in procedures still resulted in Human Subjects disapproval. |
| 59. Harrisburg Area Community College    | Withdrew at last minute. No reasons.   |
| 60. University of New Mexico, Gallup     | Faculty opposed.   |

TABLE 4

MS. PROJECT: PARTICIPANT DEMOGRAPHICS  
WOMEN STUDENTS (3,187)

VARIABLE	RESPONSES
Age	M= 21.4 S.D.= 5.25
Residence	Dorm: 39% Apt: 40% Home: 19% Sorority: 3%
Marital status	Single: 85% Married: 11% Divorced: 4%
Ethnicity	White: 86% Black: 7% Hispanic: 3% Asian: 3% Native American: 1%
Religion	Catholic: 39% Protestant: 38% Jewish: 4% Other: 14% None: 6%
Family income	M= 4.2 (4=25-35,000 5=35-50,000)
Sexual orientation	Heterosexual: 96% Homosexual: 2% Bisexual: 3%

MS. PROJECT: PARTICIPANT DEMOGRAPHICS  
MEN STUDENTS (2,971)

VARIABLE	RESPONSES
Age	M= 21.0 S.D.= 3.85
Residence	Dorm: 32% Apt: 43% Home: 21% Frat: 5%
Marital status	Single: 87% Married: 9% Divorced: 1%
Ethnicity	White: 86% Black: 6% Hispanic: 3% Asian: 4% Native American: 1%
Religion	Catholic: 40% Protestant: 34% Jewish: 5% Other: 15% None: 7%
Family income	M= 4.3 (4=25-35,000 5=35-50,000)
Sexual orientation	Heterosexual: 96% Homosexual: 2% Bisexual: 3%

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replicable and representative a sample of of postsecondary institutions in the United States as it was possible to obtain within time and budgetary limitations and given the nature of the inquiry. While sampling error cannot be measured precisely with a sample of this type, representativeness can be tested by reference to other data sources.

#### Selection of Classes

From each participant institution a class schedule was obtained. From that class schedule, a random selection process was used to choose subject classes and alternates in the case of schedule conflicts or refusals. The only limitations on class selection were that classes under 30 students and large lecture sections were eliminated. These limitations were necessary to insure that one experimenter's time on a campus was used efficiently while avoiding classes that were too large for one person to handle. The target number of classes was 4 in smaller schools and 16 in larger schools. The actual number of classes visited was 7 at smaller and medium sized schools and 12 at major universities. Instructors of the targeted classes were contacted by telephone by a research assistant. The telephone call was followed up by a mailing of information regarding the study if the instructor requested. Instructors were asked for permission to administer the survey during a specific class period. They were further requested to tell the students nothing about the project and not to be present during the administration. It was felt that greater standardization of testing conditions could be achieved if the project personnel presented the description of the survey to students. Furthermore, it was felt that the instructor's presence could be coercive upon students to participate.

#### Subjects

The final sample consisted of 6,104 persons including 3,187 women and 2,971 men students. The specific demographic characteristics of the participants are summarized in Table 4. The 3,187 woman participants were characterized as follows: M age = 21.4; 85% single, 11% married, and 4% divorced; 86% White, 7% Black, 3% Hispanic, 3% Asian, and 1% Native American; and 39% Catholic, 39% Protestant, 4% Jewish, and 20% other or none. The 2,971 male participants were characterized as follows: M age = 21.0; 87% single, 9% married, 1% divorced; 86% White, 6% Black, 3% Hispanic, 4% Asian, and 1% Native American; and 40% Catholic, 34% Protestant, 5% Jewish, and 22% other or none.

#### Comparisons with National Enrollment Data

Four variables were considered to determine the extent to which this sample was representative of U.S. higher education enrollment: institution location and region, subject ethnicity and income. A comparison of the present sample and the U.S. higher education enrollment is presented in Table 5. Whereas the data on the present sample were collected in 1984-85, the most recent information available on institution location and region is 1980 (U.S. Department of Education, Fall Enrollment and Compliance Report of Institutions of Higher Education, 1980). The most recent information on the ethnicity and income of students is 1982-1983 (Statistical Abstracts of the United States, 1985, p. 152, Tables # 252 and #254). These latter data, particularly, could be expected to have changed somewhat as a result of recent changes in federal policies governing student financial assistance. Nevertheless, the present sample is a very close approximation of the higher education enrollment in terms of institution location, student ethnicity, and student family income.

TABLE 5

SAMPLE CHARACTERISTICS COMPARED TO U.S. STATISTICS

Control Variable	Present Sample 1984-1985	U.S. Higher Ed. Enrollment 1980-1983 <sup>1,2</sup>
<b>I. Location</b>		
Not in SMSA	33.0	32.0
SMSA < 1,000,000	24.0	21.0
SMSA > 1,000,000	42.0	47.0
<b>II. Ethnicity</b>		
White	86.0	82.4
Black	7.4	9.6
Hispanic	3.4	4.4
Asian	2.8	2.7
Native American	.7	.7
<b>III. Income</b>		
\$0-15,000	13.4	16.7
\$15,000-25,000	17.2	16.2
\$25,000-35,000	22.5	19.8
>\$35,000	45.7	46.3
<b>IV. Region by Number of Institutions</b>		
New England	6.1	7.7
Mideast	15.2	19.4
Great Lakes	21.2	15.9
Plains	9.1	10.2
Southeast	24.2	22.7
Southwest	12.1	7.5
Rocky Mountain	3.0	2.8
West	9.1	12.1
<b>V. Region by Percent of Enrollment</b>		
New England	10.4	6.3
Mideast	18.7	18.0
Great Lakes	17.4	18.3
Plains	14.7	7.4
Southeast	14.6	18.8
Southwest	18.6	9.8
Rocky Mountain	2.1	4.0
West	3.5	18.3

*Student pop*

<sup>1</sup> United States Department of Education. Fall enrollment and Compliance Report of Institutions of Higher Education, 1980.

<sup>2</sup> Statistical Abstracts of the United States, 1985, p. 152, Table #252 (ethnicity based on data from 1982) and #254 (income based on data from 1983). All data used for comparisons were the latest available.

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The only variable on which significant discrepancy is noted is region of the country. The present sample somewhat overrepresents the Plains States and greatly underrepresents the West. These discrepancies reflect irremediable difficulties in obtaining institutional access to some locations. For example, in the West a personal visit was made by a member of the Ms. staff to an institution, the efforts of the Affirmative Action Director of the California State University System were enlisted, a prominent member of the clergy made personal calls to several private schools, calls were made by the Principal Investigator to the Women's Studies directors at target schools, and special re-reviews were obtained at two major California universities. A total of 12 schools in the West were solicited and each was given extensive personal attention. In spite of these efforts, after 15 months of time only 3 institutions had agreed to allow data collection. In order that the success of the entire project not be jeopardized, it was decided to proceed with data collection without full representation from western schools.

### Weighting the Data

The regional disproportion is unimportant in many respects since even without extensive sampling in the West, the individual participants in the sample were still reflective of national enrollment in terms of ethnicity and family income. Nevertheless, for purposes of calculating the incidence and prevalence data, weighting factors were used. The two major disproportions are the inclusion in the final sample of more than the desired numbers of students from Plains States schools and fewer than the desired number from the West. The present sample was weighted using the proportions of enrollment in each of the federal regions. These data are found at the bottom of Table 5. Whereas 14.4% of the present sample came from the Plains states, only 7.4% of the national enrollment is represented by that region. Thus, the responses from students in the Plains region were weighted to be equivalent to 7.4% of the present sample. Likewise, only 4% of the subjects in the present sample were attending western schools whereas 18% of the nationwide enrollment is in the west. Therefore, the responses from subjects in the west were weighted to be equivalent to 18% of the present sample. Later, both weighted and unweighted prevalence figures will be presented. The effect of weighting was very small and was in the direction of rendering the final estimate of prevalence more conservative.

### Questionnaire Construction

All data were obtained via a self-report questionnaire titled, "National Survey of Inter-Gender Relationships. This title was selected to be neutral and to avoid the word "sex" so that participants didn't prejudge the content of the survey before explanations were given. However, the inside coversheet of the questionnaire described the content explicitly. A copy of the questionnaire and coversheet is found in Appendix B. The questionnaire consists of approximately 330 questions divided into seven sections and has a branching format. Those subjects who have not been involved in sexual aggression are instructed to skip the sections relevant to those experiences. The specific content of the questionnaire was as follows:

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This section contains 7 questions regarding the participant's demographic characteristics.

Section B

This section contains 26 questions regarding the participants social history and current behavior. Included are questions regarding early family stability, parental strictness, family violence, delinquent involvements, history of psychological disturbance as reflected by suicide attempts and psychotherapeutic treatment, drinking habits, use of pornographic magazines, participation in sexual oriented discussions of women, sexual values, number of sexual partners, sexual satisfaction, and quality of relationships. The selection of background questions was guided by a review of relevant literature on the etiology of sexual assault (e.g., Ageton, 1983; Amir, 1971; Check & Malamuth, 1983; Finkelhor, 1979, 1984; Koss, Leonard, Beezley, & Oros, 1985; Tsai, Feldman-Summers, & Edgar, 1979).

Section C

This section contains the 10 items that compose the Sexual Experiences Survey (Koss & Oros, 1982; Koss & Gidycz, 1985). This survey has been described as a self-report instrument that is designed to reflect various degrees of sexual aggression and victimization and is capable of identifying hidden rape victims and undetected offenders. Internal consistency reliabilities of .74 (women) and .89 (men) have been reported (Koss & Gidycz, 1985). The test-retest agreement rates between administrations one week apart was 93% (Koss & Gidycz, 1985).

Validity has also been studied. The Sexual Experiences Survey was administered in university classes and 1-4 months later the items were re-administered privately by a trained interviewer to explore the accuracy and truthfulness of self-reported sexual experiences. The Pearson correlation between a woman's level of victimization based on self-report and her level of victimization based on responses as related to an interviewer was .73 ( $p < .001$ ). The Pearson correlation between a man's level of aggression as described on self-reports and as given in the presence of an interviewer was .61 ( $p < .001$ ). However, the authors noted that these figures may underestimate the validity of the Sexual Experiences Survey since the correlations were calculated between two different administration formats (self-report and interview) on two occasions separated by several months. They noted the need for a study in which the survey is administered in both formats on the same occasion. This study was performed as part of the present project and is discussed in a forthcoming section.

Section D

This section contains 26 questions (male version) or 35 questions (female version) that explore the the most serious level of sexual aggression the individual reported. If more than one instance of that level of aggression has occurred, the respondent is asked to focus on the experience that is best remembered. Questions involve the context of the assault (number of perpetrators, relationship of victim and offender, degree of acquaintance, prior intimacy), situational characteristics of the assault (man's or woman's "turf," on or off campus, drinking or drugs involved, social situation surrounding the event, emotions experienced at the time), severity of the assault (types of force used by the man, forms of resistance used by the

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woman), and post-assault behavior (who was told, how they reacted, how they labeled the experience, whether it is expected to happen again). The content of this section was guided by a review of the clinical literature on the impact of rape (e.g., Atkeson, Calhoun Reskick, & Ellis, 1982; Davis & Friedman, 1985; Ellis, 1983; Frank & Stewart, 1983; Holmes & Lawrence, 1983; Kilpatrick, Yeronen & Resick, 1979; Koss, 1985; McCahill, Meyer, & Fischman, 1979; Notman & Nadelson, 1976; Ruch & Chandler, 1980; Russell, 1984; Sales, Baum, & Shore, 1984).

### Section E

This section was contained different psychological measures for men and for women. For men, the primary goal was to include psychological measures relevant to the major theoretical models of rape including the psychopathology model (Groth & Birnbaum, 1979) and the social control model (Weis & Borges, 1973; Feild, 1978; Koss et al., 1985). Thus, male respondents were administered the 28 items of the short form MMPI Psychopathic Deviate Scale (Graham, 1977, p. 247). This scale has been shown in previous research to be elevated among incarcerated rapists and other criminals (e.g., Radar, 1977). In addition, male respondents were asked to answer the 30 item Hostility toward Woman Scale (Check, 1984; Check & Malamuth, 1983).

For female participants, the major goal towards which standardized psychological tests were directed was to examine the impact of sexual victimization. Because depression and rape related anxiety are two major aftereffects of sexual victimization (e.g. Frank & Stewart, 1983, Kilpatrick & Yeronen, 1979), women were asked to respond to the Beck Depression Inventory (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) and the State-Trait Anxiety Inventory (Spielberger, Gorsuch, & Lushene, 1970).

The Beck Depression Inventory consists of 21 items which are believed to reflect symptoms and attitudes of depression. Reliability data have been reported in several studies (e.g., Beck et al., 1961; Beck, 1967, Gould, 1982). The Spearman-Brown split-half reliability was .93. Internal consistency reliability was .82. Test-re-test reliability has ranged from .60-.83 (Hatzenbuehler, Parpal, & Matthews, 1983). Correlations of .65-.67 have been reported in studies of the relationship of the score on the Beck Depression Inventory and clinical ratings of depression (Beck, 1967).

The State-Trait Anxiety Inventory contains both a trait and a state scale of anxiety. Only the trait scale was used in the questionnaire. Trait anxiety refers to relatively stable individual differences in anxiety proneness. The Trait Scale is considered to be useful as a screening device for students to determine the extent to which they are chronically troubled by anxiety. The Trait Anxiety Scale consists of 20 items. Internal consistency of the scale is supported by alpha-coefficient that range from .86-.92 among several different normative groups (Spielberger et al., 1970). Test-retest correlations ranged from .73-.86. Correlations among the Trait Anxiety Scale, the Taylor Manifest Anxiety Scale, and the IPAT Anxiety Scale range from .75-.83 for both college students and patients (Spielberger et al., 1970). The State-Trait Anxiety Inventory has been shown to distinguish rape victims from nonvictims for at least one year postrape (Kilpatrick & Yeronen, 1984).

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This section contains items about sexually abusive experiences before the age of 14. Item 1a-h contains the screening questions used by Finkelhor (1979) in his survey research on early sexual abusive experiences of college students. The remaining items in the section request more detailed information about the abusive experience. Respondents are asked to refer to the highest severity experience in answering the questions. If they have been victimized more than once at that level of severity, they are asked to think of the most significant experience. The questions cover the context and severity of the child abuse (age of victim, age of perpetrator, relationship to perpetrator, how many times the abuse occurred, reason the victim participated), and post-abuse behavior (who was told, how they reacted, negative emotions at the time, victim label for the experience).

Section G

This section contains the 36 items developed by Burt (1980) to measure the extent to which an individual endorses a set of rape supportive beliefs. Previous research has indicated that incarcerated offenders (Feild, 1978) as well as undetected sexually aggressive men (Koss et al., 1985) are differentiated from nonsexually aggressive men by the intensity with which they endorse these beliefs. In addition, sexual arousal to depictions of rape can be predicted by an individual's degree of endorsement of rape supportive beliefs (Check & Malamuth, 1983).

Section H

Section H contains two standardized psychological measures. The first is the Extended Personal Attributes Scale (Spence, Helmreich, & Holahan, 1979) from which measures of positively valued masculinity, positively valued femininity, and androgyny can be obtained. The social control model of rape implies that individual differences in sex role stereotyping may affect behavior both before and after a rape has occurred (Check & Malamuth, 1983; Koss et al., 1985). Test-retest reliability is reported to be .80 after a 13 week interval. Internal consistency reliability was .73 for men and .91 for women (Spence, Helmreich, & Stapp, 1974). Correlations between the Extended Personal Attributes Scale and measures of sex-role stereotyping, self-esteem, neuroticism, and acting out have been reported (Spence, Helmreich, & Holahan, 1979). The correlations with the Bem Sex Role Inventory were .75 for males and .73 for females on the masculinity subscale and .57 for males and .59 for females on the femininity subscale (Spence & Helmreich, 1978). Correlations with social desirability are low with coefficients ranging from .08 to .36.

Finally, this section contains the Conflict Tactics Scale (Straus, 1979). This scale contains items that describe various strategies that can be used to express anger and resolve arguments with significant others. The items include verbal behaviors (calm discussion, yelling or insults), withdrawal, noncontact physical aggression and physical aggression. However, most respondents did not have time to finish the Conflict Tactics Scale. Because of a significant amount of missing data, the data from this scale were not analyzed.

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### Validity of the Questionnaire

Many investigators have questioned the veracity of self-reported sexual behavior. Concerns have been expressed that subjects will exaggerate their sexual experience and enjoy a "fantasy trip" or they may deny socially unacceptable acts. Thus, it has been suggested that subjects both overstate and understate their true behavior. A major alternative to self-report is the private interview. However, serious problems with sample attrition and selective participation have been encountered in studies that have employed an interview format (Ageton, 1978; Koss et al., 1985). Interview studies of sexual behavior usually employ a two-stage sampling procedure where a self-report survey is used to identify persons with extreme experiences with sexual aggression. Then, these individuals are re-contacted to participate in an interview. Koss et al., (1985) reported that only 25% of male subjects who responded to a survey gave their permission even to be contacted for an interview. Of those men who presented themselves for interview, 37% denied having engaged in any sexually aggressive behavior whatsoever although they had admitted such acts on self-report.

Koss and Gidycz (1985) suggest that to answer questions regarding the validity of male's self-reported sexual behavior, a study was needed in which a questionnaire was administered both by self-report and by one-to-one interview on the same occasion. This validity study was carried out during the present project. Subjects were 15 volunteers recruited through newspaper advertisements in a major university newspaper. The study took two hours of time and subjects were paid \$10 for participation. All subjects were juniors or seniors and psychology majors were eliminated from consideration. The demographic characteristics of the participants were as follows: M age = 21.3; 100% single; 87% white, 13% minority; 27% Catholic, 27% Protestant, 27% none or other, 20% Jewish; 40% family incomes > \$35,000. These demographic characteristics closely parallel those of the men in the national sample.

All participants received gave their self-reports on the the "Survey of Inter-Gender Relationships" first. Then, they were interviewed individually by a fully trained, licensed, and experienced male Ph.D. clinical psychologist. The interview questions included items pertaining with participants' sexual history both before and after the age of 14. The intent of these questions was to match the participants verbal responses with their survey responses. Then subjects feelings and evaluations of the survey were elicited including comments regarding: (a) the content of the survey, (b) feelings about the survey, (c) validity of responses, and (d) confidentiality and purpose of the survey.

The results indicated that 14 of the participants (93%) gave the same responses to the Sexual Experiences Survey items on self-report and in interview. The one inconsistency involved an individual who admitted a behavior on self-report which he later denied to the interviewer. The same rate of agreement (93%) was found between interview and self-report of sexual experiences before the age of 14. The one instance of inconsistency involved a different subject who indicated on self-report that he had had intercourse before the age of 14 whereas in his conversations with the interviewer indicated that he had not achieved full penetration. On average subjects rated their honesty as 95% and indicated that the reason for lack of full honesty was time pressures getting through the questionnaire. While half of the respondents indicated that they had no emotional reaction to the survey, 27% of participants stated that they felt embarrassed or nervous, 13% felt the items stimulated hurtful or sad

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memories and 13% felt that they experienced positive, pleasant feelings while taking the questionnaire. However, 14 or 15 respondents (93%) indicated that their feelings had not interfered with their ability to answer the questions.

### Administration Procedures

The questionnaire was administered in classroom settings by 1 of 7 post-master's level clinical psychologists who participated in the project including 2 men and 5 women. All experimenters were trained personally by the Principal Investigator. The class instructor was not present during the administration. Questionnaires were distributed to students who were asked not to open them until directions were given. Experimenters read from a prepared script. The survey was accompanied by a coversheet that contained all the elements of informed consent. These forms as well as a copy of the questionnaire can be found in Appendix B.

Students were not asked to sign their names on the consent form because the survey was completely anonymous. Students who did not wish to participate in the survey were asked to remain in their seats and do other work. This step was taken so that persons who objected to the survey would not be stigmatized. The rate of refusal to complete the survey was negligible. Only 91 persons (1.5%) indicated that they did not wish to fill it out. After all students had completed the survey, the group was debriefed by the experimenter according to a prepared script. In addition, all students received a printed debriefing sheet that indicated where the proctor would be available for a private conference and contained phone numbers of local agencies who had agreed to answer questions or to offer services to participants. The college counseling center of every campus visited was informed of the project and invited to list a sexual assault specialist on the debriefing sheet and/or to send observers to the survey administration if desired.

### Variable Scoring and Data Reduction

*where* → For purposes of data analysis, a categorical scoring system was derived to classify respondents in terms of their sexual experiences. Five classes of sexual aggression/sexual victimization were developed including: no sexual aggression or victimization, sexual contact, sexual coercion, attempted rape, and rape. On the basis of their responses to the Sexual Experiences Survey in Section C, all respondents were classified into one of these groups. Details of the scoring system are summarized at the top of Table 6 (Women) and Table 7 (Men). The groups labeled rape and attempted rape include individuals whose experiences meet legal definitions of these crimes. The group labeled "sexual coercion" included subjects who engaged in/experienced sexual intercourse subsequent to the use of menacing verbal pressure or misuse of authority over the victim. No threats of force or direct physical force was used. The group labeled "sexual contact" consisted of individuals who had engaged in/experienced sexual play such as fondling or kissing subsequent to the use of menacing verbal pressure, misuse of authority, threats of physical force, or actual physical force. The possibility was considered of separating from this latter group those persons whose experiences involved force. However, this option was rejected because forceful instances of sexual contact represented only a small portion of the experiences (3% of women; 1% of men). These classes of sexual aggression/sexual victimization were used as independent variables in many of the analyses that will be discussed later.

TABLE 6

DESCRIPTIVE VARIABLES: WOMEN

- I. **Victimization Groups**
- A. **Nonvictimized**  
No to all items 1-10 in Section C, pages 31-40.
  - B. **Sexual Contact**  
Yes to items 1, 2, or 3; no to all other items in Section C, pages 31-40.
  - C. **Sexual Coercion**  
Yes to items 6 or 7; no to all other items except 1,2, or 3 in Section C, pages 31-40.
  - D. **Attempted Rape**  
Yes to items 4 or 5; no to all other items except 1,2,3, 6, or 7 in Section C, pages 31-40.
  - E. **Rape**  
Yes to items 8, 9, or 10 in Section C, pages 31-40.
- II. **Background Characteristics**
- A. **Demographics**
    - 1. Age  
Item 2, page 1; actual age in years.
    - 2. Income  
Item 7, page 2; range 1 (\$7,500 or less) to 6 (>\$50,000).
  - B. **Family background**
    - 1. Family Strength  
Items 1,2, and 3, page 3; range 3 (no to all) to 6 (yes to all).
    - 2. Parental Strictness  
Item 4, page 3; range 1 (not at all strict) to 5 (extremely strict).
    - 3. Physical Punishment  
Items 15a + 15b, page 6; range 2 (never to both questions) to 12 (over 20 times a month for each type of violence).
    - 4. Encouragement of Nonviolence  
Item 14, page 6; range 1 (never) to 6 (over 20 times per month).
    - 5. Self-Defense Training  
Item 16, page 7; range 1 (no) to 2 (yes).
  - C. **Psychosocial history**
    - 1. Sexual Abuse  
Section F, page 59, items a-h. No to all items = 1; Yes to items a,b, or c and no others = 2; yes to items d,e, or f and none higher = 3; yes to items g or h = 4.
    - 2. Delinquent Associations  
Items 5,6, & 7, pages 3-4; range 3 (no to all questions) to 9 (extremely uncomfortable for fear friends would get in trouble with law).
    - 3. Suicide History  
Item 25, page 10; range 1 (no) to 2 (yes).
    - 4. Psychotherapy history  
Item 26, page 10; range 1 (no) to 2 (yes).
    - 5. Intoxicant Use

- Items 9, 10, & 11, pages 4-5; range 3 (do not drink) to 15 (drunk more than twice per week, typically drinking > 6 cans of beer or equivalent).
6. Sexual Values  
Item 8, page 8; range 1 (approve intercourse under any circumstances) to 6 (do not approve of intercourse before marriage).
  7. Number of Partners  
Item 23, page 10; range 1 (none) to 9 (> 50 people).
  8. Age at first intercourse  
Item 24b, page 10; actual age in years.
  9. Sexual Orientation  
Item 22, page 9; range 1 (heterosexual) to 3 (homosexual).

### III. Assault Characteristics

#### A. Assault Context

1. Relationship Type  
Item 2, page 41; range 1 (stranger) to 6 (relative).
2. Degree of Acquaintance  
Item 3, page 41; range 1 (didn't know at all) to 5 (extremely well acquainted).
3. Prior Intimacy  
Item 13, page 44; range 1 (none at all) to 6 (sexual intercourse).
4. Age at Assault  
Item 5, page 42; actual age in years.
5. Alcohol/Drugs Involved  
Items 9, 10, pages 42-43; range 2 (neither man or woman using alcohol/drugs) to 6 (both parties using alcohol and drugs).
6. Prior Intercourse  
Item 14, page 44; range 1 (no) to 2 (yes).

#### B. Location

1. Social Context  
Item 12, page 43; range 1 (none) to 4 (spontaneous date).
2. Turf  
Item 7, page 42; range 1 (his home) to 4 (her home).
3. Campus Location  
Item 8, page 42; range 1 (on campus) to 2 (off campus).

#### C. Assault Severity

1. Number of Perpetrators  
Item 1, page 41; range 1 (one man) to 3 (three or more men).
2. Number of Assaults by this Man  
Item 4, page 41, range 1 (1 time) to 5 (5 or more times).
3. Types of Force  
Item 11, page 43; no to all items a-e = 1, yes to a = 2, yes to b or c = 3, and yes to d or e = 5.
4. Perceived Violence  
Item 23a, page 47; range 1 (not at all) to 5 (very much).
5. Negative Emotions  
Items 24a-c, page 47; range 3 (not at all) to 15 (very much).

**D. Resistance**

1. Clarity of Nonconsent  
Item 23b, page 47; range 1 (not at all) to 5 (very much).
2. Types of Resistance  
Item 15a-f, page 44; no to all items a-f = 1, yes to a,b, or c (cognitive strategies) = 2, yes to d or e (escape strategies) = 3, and yes to f (physical resistance) = 4.
3. Degree of resistance  
Item 23d, page 47; range 1 (none) to 5 (very much).
4. Impact of resistance  
Item 16, page 44; range 1 (he stopped) to 4 (he became even more aggressive).
5. Self-Defense Training  
Item 17a, page 44; range 1 (no) to 2 (yes).
6. Woman's Responsibility  
Item 23c, page 47; range 1 (not at all) to 5 (very much).
7. Man's Responsibility  
Item 23e, page 47; range 1 (not at all) to 5 (very much).

**IV. Post-Assault Characteristics**

**A. Psychological Symptoms**

1. Beck Depression Inventory  
Items A - U, pages 52-26; range 1 (no depression) to 30 (severe depression). Scores of 16 and above suggest moderate to severe clinical depression.
2. State-Trait Anxiety Scale  
Items 1-13, page 57. Item choices range from 1 (almost never) to 4 (almost always) and contains 7 reversed items; scale scores range from 20-80. Scores of 38.3 are the female undergraduate mean whereas scores of 46.6 are the psychiatric patient mean.
3. Quality of Relationships  
Item 17 a-d, page 7; range 1 (not at all) to 5 (very much).
4. Sexual Satisfaction: Affectional  
Item 21 a & b, page 9; range 2 (don't do it) to 10 (very satisfying).
5. Sexual Satisfaction: Intercourse  
Item 21 c, page 9; range 1 (don't do it) to 5 (very satisfying).
6. Number of Partners After  
Item 25, page 48; range 1 (none) to 9 (> 50 people).
7. Changes in Feelings  
Item 34, page 51; range 1 (no) to 2 (yes).

**B. Victim Conceptualization**

1. Label for the Experience  
Item 35, page 51; range 1 (I don't feel I was victimized) to 4 (I believe I was a victim of rape).
2. Likelihood of Repetition  
Item 26 a + b, page 48; range 2 (no to both) to 4 (yes to both).

**C. Coincident Stressors**

1. Time Since Assault  
Item 6, page 42; range 1 (< 3 months) to 6 (over 5 years).
2. Other Stressors Since  
Items 31 + 32 a-c, page 50; range 4 (no stressors) to 8 (illness, death, and breakup since assault).

**D. Use of Services**

1. Psychotherapy Postassault  
Item 29, page 49; range 1 (no) to 2 (yes).
2. Used Crisis Services  
Item 20 + 22, pages 45-46; range 2 (no services) to 4 (emergency and campus services used).
3. Reported to Police  
Item 21, page 45; range 1 (no) to 2 (yes).
4. Self-Defense Since  
Item 17b, page 44; range 1 (no) to 2 (yes).

**E. Social Support**

1. Told No One  
Item 18, page 45; range 1 (no) to 2 (yes).
2. Supportive Reactions  
Items 19a, 20a, 21a, 22a, pages 45-46; range 3 (not at all supportive) to 15 (very much supportive).

**Y. Psychological Characteristics**

**A. Rape Supportive Beliefs**

Items 1-36, pages 66-68. Items scored 1 (strongly disagree) to 5 (strongly agree). Possible range 36-180.

**B. Positively Valued Femininity**

Items 1-40, pages 69-70. Femininity score from the Extended Personal Attributes Scale. Items scored 1 (not at all like me) to 5 (very much like me). Items are scored 0-4. Possible range 0-32. College female mean is 24.54.

**C. Androgyny**

Items 1-40, pages 60-70. Androgyny score from the Extended Personal Attributes Scale. Items scored 1 (not at all like me) to 5 (very much like me). Items are scored 0-4. Possible range 0-32. College male mean is 16.61, college female mean is 13.22.

**TABLE 7**  
**DESCRIPTIVE VARIABLES: MEN**

**I. Aggression Groups**

- A. Nonsexually Aggressive**  
No to all items 1-10 in Section C, pages 11-20.
- B. Sexual Contact**  
Yes to items 1, 2, or 3; no to all other items in Section C, pages 11-20.
- C. Sexual Coercion**  
Yes to items 6 or 7; no to all other items except 1, 2, or 3 in Section C, pages 11-20.
- D. Attempted Rape**  
Yes to items 4 or 5; no to all other items except 1, 2, 3, 6, or 7 in Section C, pages 11-20.
- E. Rape**  
Yes to items 8, 9, or 10 in Section C, pages 11-20.

**II. Pre-Assault Characteristics**

- A. Demographics**
  - 1. Age  
Item 2, page 1; actual age in years.
  - 2. Income  
Item 7, page 2; range 1 (\$7,500 or less) to 6 (>\$50,000).
- B. Family background**
  - 1. Family Strength  
Items 1, 2, and 3, page 3; range 3 (no to all) to 6 (yes to all).
  - 2. Parental Strictness  
Item 4, page 3; range 1 (not at all strict) to 5 (extremely strict).
  - 3. Modeling of Aggression  
Items 15a + 15b, page 6; range 2 (never to both questions) to 12 (over 20 times a month for each type of violence).
  - 4. Encouragement of Nonviolence  
Item 14, page 6; range 1 (never) to 6 (over 20 times per month).
  - 5. Self-Defense Training  
Item 16, page 7; range 1 (no) to 2 (yes).
- C. Psychosocial history**
  - 1. Sexual Abuse  
Section F, page 59, items a-h. No to all items = 1; Yes to items a, b, or c and no others = 2; yes to items d, e, or f and none higher = 3; yes to items g or h = 4.
  - 2. Delinquent Associations  
Items 5, 6, & 7, pages 3-4; range 3 (no to all questions) to 9 (extremely uncomfortable for fear friends would get in trouble with law).
  - 3. Suicide History  
Item 25, page 10; range 1 (no) to 2 (yes).
  - 4. Psychotherapy History  
Item 26, page 10; range 1 (no) to 2 (yes).
  - 5. Alcohol and Drug Use

- Items 9, 10, & 11, pages 4-5; range 3 (do not drink) to 15 (drunk more than twice per week, typically drinking > 6 cans of beer or equivalent).
6. Sexual Values  
Item 8, - page 8; range 1 (approve intercourse under any circumstances) to 6 (do not approve of intercourse before marriage).
  7. Number of Partners  
Item 23, page 10; range 1 (none) to 9 (> 50 people).
  8. Age at First Intercourse  
Item 24b, page 10; actual age in years.
  9. Sexual Orientation  
Item 22, page 9; range 1 (heterosexual) to 3 (homosexual).
  10. Discuss Women as Sex Objects  
Item 8, page 4; range 1 (never) to 5 (daily).
  11. Read Pornography  
Item 12, page 5; range 1 (never) to 4 (very frequently).

### III. Assault Characteristics

#### A. Assault Context

1. Relationship Type  
Item 2, page 21; range 1 (stranger) to 6 (relative).
2. Degree of Acquaintance  
Item 3, page 21; range 1 (didn't know at all) to 5 (extremely well acquainted).
3. Prior Intimacy  
Item 13, page 24; range 1 (none at all) to 6 (sexual intercourse).
4. Age at Attack  
Item 5, page 22; actual age in years.
5. Alcohol/Drugs Involved  
Items 9, 10, pages 22-23; range 2 (neither man or woman using alcohol/drugs) to 6 (both parties using alcohol and drugs).
6. Prior Intercourse  
Item 14, page 24; range 1 (no) to 2 (yes).

#### B. Location

1. Social Context  
Item 12, page 23; range 1 (none) to 4 (spontaneous date).
2. Turf  
Item 7, page 22; range 1 (his home) to 4 (her home).
3. Campus Location  
Item 8, page 22; range 1 (on campus) to 2 (off campus).

#### C. Assault Severity

1. Number of Perpetrators  
Item 1, page 21; range 1 (one man) to 3 (three or more men).
2. Number of Assaults by this Offender  
Item 4, page 21, range 1 (1 time) to 5 (5 or more times).
3. Types of Force  
Item 11, page 23; no to all items a-e = 1, yes to a = 2, yes to b or c = 3, and yes to d or e = 5.

4. Perceived Violence  
Item 23a, page 26; range 1 (not at all) to 5 (very much).
5. Negative Emotions  
Items 24 a-c, page 26; range 3 (not at all) to 15 (very much).
6. Positive Emotions  
Item 23e, page 26; range 1 (not at all) to 5 (very much).

**D. Resistance**

1. Perceived Nonconsent  
Item 22b, page 26; range 1 (not at all) to 5 (very much).
2. Types of Resistance  
Item 15a-f, page 24; no to all items a-f = 1, yes to a, b, or c (cognitive strategies) = 2, yes to d or e (escape strategies) = 3, and yes to f (physical resistance) = 4.
3. Degree of resistance  
Item 22d, page 26; range 1 (none) to 5 (very much).
4. Impact of resistance  
Item 16, page 24; range 1 (he stopped) to 4 (he became even more aggressive).
5. Woman's Responsibility  
Item 22c, page 26; range 1 (not at all) to 5 (very much).
6. Man's Responsibility  
Item 22e, page 26; range 1 (not at all) to 5 (very much).

**E. Reactions to Assault**

1. Reported to Police  
Item 17, page 24; range 1 (no) to 2 (yes).
2. Told Anyone  
Item 18, page 25; range 1 (no) to 2 (yes).
3. Rape Supportive Reactions  
Items 19a, 20a, 21a, pages 25-26; range 3 (reacted negatively) to 15 (reacted positively).
4. Label for the Experience  
Item 26, page 27; range 1 (It was definitely not rape) to 4 (It definitely was rape).
5. Likelihood of Repetition  
Item 25 b, page 27; range 1 (no) to 2 (yes).
6. Number of Partners After  
Item 24, page 27; range 1 (none) to 9 (> 50 people).

**IV. Psychological Characteristics**

**A. Rape Supportive Beliefs**

Items 1-36, pages 66-68. Items scored 1 (strongly disagree) to 5 (strongly agree). Possible range 36-180.

**B. Masculinity**

Items 1-40, pages 69-70. Masculinity score from the Extended Personal Attributes Scale. Items scored 1 (not at all like me) to 5 (very much like me). Possible range is 0-32. Male college student mean is 22.31.

**C. Androgeny**

Items 10-40, pages 69-70. Androgeny score from the Extended Personal Attributes Scale. Item choices 1 (not at all like me) to 5 (very much like me). Items scored 0-4. Possible range 0-32. Male college student mean is 16.61.

Item No. 9. (Methods)

The full sets of dependent variables that were derived from the questionnaire are listed in the lower sections of Table 6 (Women) and Table 7 (Men). These full sets of variables were used to obtain descriptive data only. Later, it will be demonstrated that most of the variables resulted in significant differences between groups. Yet, due to the extremely large sample size, the magnitude of the differences was often not of practical significance.

Therefore, inferential analyses were based on reduced sets of variables that were constructed by a combination of rational and empirical procedures. First, the full sets of dependent variables were intercorrelated separately for each sex. The intercorrelations of dependent variables are found in Table 8 (Women) and Table 9 (Men). Because some subjects had not had any experience with sexual aggression/victimization, they did not complete the situational items. The intercorrelations of variables pertaining to early life experience, psychological, and current behaviors could be examined however. These correlations are found in Table 10 (Women) and Table 11 (Men). Items that failed to demonstrate meaningful differences between groups were eliminated. Then, the correlation matrices were used to identify homogeneous subsets of variables that were highly intercorrelated. Variables that were found to be of similar content and to be highly intercorrelated were aggregated to produce a reduced number of variables. Standardized scales were not tampered with as this would obviate the advantages of an objectively scored and normed instrument. Through these procedures, a small number of variables each with a relatively large variance range resulted. Specifically, 13 variables resulted from reduction of the women's data and 11 variables resulted from the reduction of the men's data.

These reduced variables have been arranged into sets according to the point in time to which they refer and each set of variables has been given a rationally determined name. The reduced variables are listed in Table 12 (Women) and Table 13 (Men). For example, the male variables have been arranged into four sets. The first set, named early experiences, refers to historical information about the subject's background. The second set, named psychological characteristics, refer to measures of psychological adjustment and beliefs. These characteristics are assumed to have been influenced by the subject's early experiences and to have developed in the years that have intervened between early experiences and the present. The third set, named current behavior, is a current time measure reflecting the subject's behaviors and practices at the time the questions were answered. These behaviors are assumed to be influenced by all the earlier sets of variables. Finally, the fourth set, named assault characteristics, is also a current time measure and is assumed to be influenced by all the preceding sets of variables.

Although the number of persons who refused to answer the questionnaire at all was small, many subjects took advantage of their right to refuse to answer any questions if they chose to skip them. Therefore, the problem with missing data had to be addressed in the scoring procedures. If the amount of data missing on a variable did not exceed 20% of the total sample, the group mean was substituted. When the individual was a member of the nonvictimized or nonsexually aggressive group, the mean of the of that group was used. When the individual was sexually aggressive or victimized to some degree, the offender mean or the victim mean was used. Items on standard scales were replaced by the appropriate mean only if the percentage of missing data was minimal. For example, persons who left more than 7 items blank on a 40

TABLE 8

## CORRELATION MATRIX: ALL SEXUALLY VICTIMIZED WOMEN

WITHIN CELLS CORRELATIONS WITH STD. DEVS. ON DIAGONAL

	age now	family income	family strength	parent strictness	physical punishment	encourage nonviolence	self-defense
age now	.498441						
family income	-.19807	1.43422					
family strength	.04937	-.14624	.83399				
parent strictness	.06699	-.03100	-.03538	.88580			
physical punishment	.16505	-.14791	.22933	.16906	1.45088		
encourage nonviolence	-.01007	-.01377	.00293	.17598	.25982	.95597	
self-defense	.10883	-.05448	.04012	.00197	.08123	.00866	.43857
sexual abuse	.13298	-.10619	.14298	.00522	.15223	.06005	.08607
delinquent assoc.	.02987	-.01706	.08021	.01461	.14781	.08612	.01530
suicide over	.14777	-.07293	.08043	.05776	.20507	.08894	.08137
therapy over	.23481	-.05864	.12779	.04824	.18269	.03800	.12773
intoxicant use	-.19807	.17605	-.03910	-.08795	-.03740	.01154	-.06785
sexual values	-.17469	-.04274	-.08468	.09101	-.09307	.10505	-.05499
number partners	.31593	-.02970	.13265	.00130	.10764	-.01570	.10451
age first sex	.09069	.00483	-.08481	-.00056	-.07938	-.01240	.02660
sex orientation	.07393	-.00654	.01978	.01772	.06469	.00027	.04084
rape beliefs	-.18746	-.04842	-.01390	.07395	-.00052	.18533	-.09045
beck depression	.00599	-.04641	.09249	.04818	.11566	.12330	-.00349
trait anxiety	-.04317	-.06160	.06988	.07015	.10713	.14160	-.05389
quality relations	-.08249	.10460	-.07321	.02573	-.10557	-.04984	.00057
sex satisfaction	.13146	.05486	.07143	-.02753	-.00741	-.08193	.05454
relationship type	.02849	-.00211	-.03963	-.01565	-.03780	.02839	.01046
degree acquaintance	-.00710	.00926	-.02060	.04322	-.00283	.05514	-.00199
prior intimacy	.00999	.02910	-.02489	-.01531	-.00025	.01667	-.03819
age at assault	.45556	-.05495	-.08395	.04718	-.00765	.00620	.07738
alcohol/drug	-.04188	.07804	-.01310	-.06861	-.03436	-.04266	-.00110
prior intercourse	.15094	.02216	.01362	-.00571	.02151	-.04807	.04301
social context	-.11768	.07248	-.04402	-.01556	-.03503	.00919	-.07962
lurf	.03277	.05566	.00410	.01703	-.03397	-.01776	-.00068
campus location	.13053	-.07724	.08220	.02534	.07388	.00591	.04496
number of offenders	.05557	-.00509	-.01943	.02927	-.00230	-.01276	.04922
how many times	.14702	-.06835	.00406	.03249	.07159	.03756	-.00117
types of force	.03624	-.01331	.01517	.04453	.05813	-.00348	.02503
perceived violence	.08155	-.02968	.01995	.08335	.04233	-.00394	.01812
negative emotions	.03571	.04885	.00794	.12584	.04657	-.00144	-.01416
clarity nonconsent	.02906	-.03748	-.00923	.05985	.01921	-.00153	-.07496
types of resistance	-.00322	-.00217	.05842	.03804	.02718	-.01203	.00241
self-defense before	-.00443	.01735	-.00950	-.02756	.03269	.02669	.58240
degree of resistance	.01670	-.01746	.01797	.07800	.04069	.00324	-.03225
effect of resistance	.12979	-.00392	.06577	.01123	.05487	-.04629	.03260
responsibility, woman	-.04341	.01568	.01823	.01224	-.00010	.06437	-.00966
responsibility, man	.03718	-.03203	.01713	.03870	.05906	-.04543	.02906
was it rape	.18053	-.08570	.08293	.04438	.12934	-.04122	.19793
coincident stress	.24355	-.07350	.11688	-.00915	.13230	.02087	.14301
how long ago	.35308	-.08439	.10656	.02475	.09343	-.03803	.03498
intercourse since	.09499	-.00575	.03886	.01516	.01340	.03846	.00549
expect again	.06882	-.04397	.06026	-.00527	-.03807	-.01657	.02795
therapy after	.27627	-.03405	.08004	.05183	.17260	.01759	.10094
used crisis service	-.03778	.02728	.02679	-.01476	-.01756	-.02364	.04090
told police	-.01967	.03542	.02705	-.02954	-.02524	-.04067	.03835
self-defense after	.15495	-.05184	.02367	.02781	.08534	-.00029	.55321
told anyone	-.07705	.03550	.03605	-.01486	-.02791	-.02250	.03110
discuss in therapy	.25751	-.03538	.07834	.05795	.18917	.06068	.10973

**CORRELATION MATRIX: ALL SEXUALLY VICTIMIZED WOMEN**

	sexual abuse	delinquent assoc.	suicide ever	therapy ever	intoxicant use	sexual values	number partners
sexual abuse	2.30944						
delinquent assoc.	.13826	1.12957					
suicide ever	.14546	.07342	.44912				
therapy ever	.14755	.10960	.28818	.45081			
intoxicant use	-.03350	.05426	-.04395	-.04778	2.49143		
sexual values	-.11627	-.04942	-.07724	-.13229	-.21127	1.49085	
number partners	.21478	.11067	.13028	.21191	.07411	-.46985	1.49869
age first sex	-.21367	-.07135	-.04123	-.03857	-.03366	.03370	-.14896
sex orientation	.10367	.08659	.07754	.08422	.01807	-.07042	.05299
rape beliefs	.00502	.05593	-.03463	-.09209	-.01765	.28946	-.20715
back depression	.11314	.13736	.31955	.19895	.04366	-.00832	.01608
trait anxiety	.04929	.13155	.26392	.14711	.04336	.00974	-.03226
quality relations	-.07295	-.11762	-.16901	-.10111	.04276	.03992	-.02320
sex satisfaction	-.04797	-.01695	-.01842	.02523	.11447	-.38685	.45214
relationship type	-.09814	-.00831	-.03482	-.06204	-.00528	.03636	-.07601
degree acquaintance	-.01956	.01805	-.01619	-.10103	-.02429	.10354	-.12324
prior intimacy	-.01325	.03028	.00150	.00098	.10082	-.07840	.09743
age at assault	-.03369	-.04471	.09815	.10575	-.03522	-.09627	.16354
alcohol/drug	.02698	.11485	.01002	.04625	.25472	-.08237	.16058
prior intercourse	.04455	.04418	.05637	.10733	.09849	-.25992	.43963
social context	-.07313	.04775	-.01930	-.00741	.11400	.02443	-.00934
turf	.02904	.04169	-.00398	.04207	-.03669	.00127	-.02800
campus location	.03479	.07348	.01726	.04764	-.05608	-.04092	.09699
number of offenders	.11502	.04393	.04283	.07311	.00073	-.04068	.10995
how many times	.06425	-.02533	.08073	.03016	-.09202	.04555	.01460
types of force	-.00562	.02772	.05594	.04668	-.09354	.02292	.00631
perceived violence	.01338	.03116	.06691	.06287	-.02702	.01469	.03829
negative emotions	.01166	.04581	.09069	.09736	-.09622	.09887	-.01397
clearly nonconsent	-.00922	-.01402	.00975	.00250	-.07492	.08881	-.07440
types of resistance	.01388	-.00498	.04771	.05941	-.04753	.05022	-.01748
self-defense before	.03653	-.00863	.06919	.03576	-.00848	-.01918	.03053
degree of resistance	-.02986	-.00084	.00968	.00188	-.04855	.07190	-.04453
effect of resistance	.11202	.03588	.08184	.12191	-.06524	-.07792	.16603
responsibility, woman	-.00079	.03718	.01690	.02234	.02664	.05025	-.03784
responsibility, man	.04398	.00289	.02164	.04355	-.04678	.05347	-.01927
was it rape	.11835	.03989	.11103	.12039	-.11650	-.00787	.11834
coincident stress	.15098	.08884	.19778	.25595	-.09363	-.05297	.11370
how long ago	.08284	.05040	.01904	.11463	-.15535	-.10557	.15724
intercourse since	.06493	-.01017	.03143	.10492	-.03330	-.05315	.09839
expect again	.05134	-.07486	.00530	.06771	-.13261	-.00663	.00460
therapy after	.10184	.10299	.22510	.67910	-.10833	-.10773	.22579
used crisis service	.07048	.05203	.06381	.10273	-.00422	-.02407	.03684
told police	.05687	.03899	.05995	.07856	.00255	-.02071	.02409
self-defense after	.07911	.02913	.09147	.11873	-.09253	-.06140	.09744
told anyone	.05385	.03907	.05232	.06777	.01786	-.01551	.00425
discuss in therapy	.11835	.11721	.22670	.62222	-.10532	-.09448	.20768

**CORRELATION MATRIX: ALL SEXUALLY VICTIMIZED WOMEN**

	age first sex	sex orientation	Rape Beliefs	Beck depression	Trait Anxiety	quality relations	sex satisfaction
age first sex	2.09690						
sex orientation	-.01287	.28798					
rape beliefs	-.00732	-.00489	16.71082				
beck depression	-.00940	.06455	.19075	7.30543			
trait anxiety	.00113	.04626	.21590	.77448	10.71715		
quality relations	.00367	-.11204	-.11255	-.34402	-.36239	2.96592	
sex satisfaction	.04122	-.07370	-.27512	-.12157	-.11331	.20862	2.22686
relationship type	.07492	-.08222	.03156	-.01741	-.01373	.01852	.06334
degree acquaintance	-.01828	-.05509	.04752	.01842	-.01174	.04953	.02255
prior intimacy	.04948	.01002	.02931	.01614	-.02105	.02162	.13524
age at assault	.30713	.00335	-.08938	-.00133	-.03164	-.04811	.04903
alcohol/drug	.00044	.01909	-.02174	-.00246	-.00995	.02828	.05956
prior intercourse	-.03796	-.00273	-.08432	.00424	-.01761	-.03649	.27336
social context	.03592	-.01958	.02904	-.04337	-.00304	.01460	-.01823
turf	-.01333	.02943	.00371	-.00336	-.01929	-.01095	-.02740
campus location	-.05822	.03580	-.00216	-.03706	-.04357	.00179	.04475
number of offenders	-.07676	.13836	-.05347	.02356	-.02710	-.06302	-.01033
how many times	-.04201	-.00939	.04782	.10846	.04784	-.04145	.00778
types of force	-.06625	-.02049	-.00283	.01955	.00196	-.05185	-.05828
perceived violence	-.05249	-.04641	-.04303	.04340	.03343	-.00452	-.00276
negative emotions	-.09678	-.02607	.01577	.12876	.11984	-.04980	-.05412
clarity nonconsent	-.05541	-.03947	-.00925	-.01506	-.02943	.03272	-.05610
types of resistance	-.05691	-.01391	-.00644	.03189	.00876	-.01839	-.03219
self-defense before	.02782	.01222	-.00106	.00909	-.00630	.01382	.02973
degree of resistance	-.07135	-.03591	.00808	-.02429	-.03414	.04844	-.02134
effect of resistance	-.08042	-.02175	-.04013	.09028	.05407	-.08974	.07791
responsibility, woman	.04415	.01089	.05468	.08161	.10103	-.04254	-.03395
responsibility, man	-.04929	.01930	-.04476	.00248	-.02991	.03994	-.00726
was it rape	-.07878	.04090	-.13238	.08626	.03380	-.06485	.01090
coincident stress	-.05350	.06296	-.02529	.17643	.11417	-.05358	-.01013
how long ago	-.08621	.06197	-.13496	-.05292	-.03850	-.04213	.12238
intercourse since	-.03967	-.00115	.01120	.01692	-.01328	.01986	.07562
expect again	-.03008	-.01765	.00517	-.01175	-.03555	-.03505	-.02774
therapy after	-.05691	.11472	-.10199	.15384	.11309	-.11820	.03279
used crisis service	-.01641	.01905	-.01575	.05550	.03507	.05115	.02177
told police	-.00496	.02354	-.03213	.03349	.02098	.06998	.03459
self-defense after	-.01900	.03460	-.07621	.00735	-.05427	-.01751	.02214
told anyone	-.01142	.01925	-.01940	.02934	.02853	.06086	.01265
discuss in therapy	-.05835	.10891	-.09059	.17257	.12349	-.12688	.00468

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**CORRELATION MATRIX: ALL SEXUALLY VICTIMIZED WOMEN**

	relationship type	degree acquaintance	prior intimacy	age at assault	alcohol/drug	prior intercourse	social context
relationship type	1.13249						
degree acquaintance	.51024	1.09956					
prior intimacy	.41309	.31487	1.81455				
age at assault	.18442	.01283	.23920	3.15393			
alcohol/drug	-.15526	-.19171	-.06456	.05311	1.38883		
prior intercourse	.03946	-.06152	.30115	.39769	.15218	.46116	
social context	.11479	-.11933	-.02021	-.00946	.13131	.04491	.93731
lurj	-.13955	-.12440	-.06747	-.01100	.00496	-.02907	-.14086
campus location	.02547	.09219	-.01404	-.03928	-.06329	-.03781	-.00291
number of offenders	.21524	-.14797	-.06021	-.01288	.05327	.02119	-.05305
how many times	.29343	.38954	.26136	.05305	.23853	-.03004	-.13013
types of force	-.13380	-.09499	-.07637	-.05006	-.08982	-.02249	-.14383
perceived violence	-.11239	-.12503	-.05816	.00786	-.02505	.03058	-.01331
negative emotions	-.13138	-.05595	-.15823	-.07987	-.05721	-.07246	-.13658
clarity nonconsent	-.05822	-.02373	-.11665	-.02509	-.06650	-.05988	-.06770
types of resistance	-.10314	-.06960	-.05453	-.05728	-.01785	.01485	-.06180
self-defense before	.06292	.01481	.02035	.12276	-.00286	.10065	.00167
degree of resistance	-.06803	-.02674	-.11817	-.05902	-.05642	-.02818	-.06228
effect of resistance	-.05571	-.03468	.03772	.03309	-.05783	.09895	-.06673
responsibility, women	.05909	.00288	.06214	.03098	.05482	-.01315	.16416
responsibility, man	-.06707	-.01365	-.08804	-.02484	-.05737	.01344	-.08487
was it rape	.22782	-.13840	-.16393	-.03944	-.04819	-.04131	.21374
coincident stress	-.07011	-.05558	-.10241	-.02314	-.00909	-.06224	-.08344
how long ago	-.09401	-.02494	-.18166	.21051	-.08957	-.17728	-.12505
intercourse since	.08558	.07993	.05731	.04394	-.05470	.09177	.02005
expect again	.00853	-.00650	-.01009	.03702	-.02436	.00789	.00173
therapy after	-.11483	-.12103	-.05133	.06462	.03909	.05902	-.03950
used crisis service	.21832	-.10824	-.10615	-.04797	.06134	-.01636	-.08989
told police	.21156	-.12885	-.10165	-.02943	.05825	-.01750	-.10125
self-defense after	-.05536	-.02621	-.06488	.00072	.01667	-.02527	-.11953
told anyone	-.18029	-.10665	-.10630	-.06422	.06749	-.04681	-.06447
discuss in therapy	-.09944	-.08987	-.06554	.05938	.00669	.02879	-.07082

**CORRELATION MATRIX: ALL SEXUALLY VICTIMIZED WOMEN**

	lur/	campus location	number of offenders	how many times	types of force	perceived violence	negative emotions
lur/	1.47687						
campus location	-.06776	.35337					
number of offenders	.05645	.02686	.24277				
how many times	-.06520	.08441	-.02464	1.35447			
types of force	.08861	.08249	.08425	-.06518	.83427		
perceived violence	.04240	.02541	.03218	-.01714	.32715	.97986	
negative emotions	.02971	.03357	.04345	.00612	.32104	.38737	2.97841
clarity nonconsent	.03551	.06065	-.03151	-.04727	.33364	.30473	.1542
types of resistance	.03907	.00710	.02547	-.08212	.45872	.42002	.5235
self-defense before	-.01156	-.00468	-.01165	.00917	-.05454	-.00525	-.07777
degree of resistance	-.00011	.02870	-.00024	-.07162	.38862	.36835	.15075
effect of resistance	.02017	.05258	.04727	.11185	.14798	.07391	.18282
responsibility, woman	-.03031	-.03935	-.02161	.02335	.27283	-.15982	-.13829
responsibility, man	.01106	.07214	-.01804	.01623	.19222	.24535	.2142
was it rape	.06967	.07520	.11110	.00931	.17480	.33188	.42887
coincident stress	.06281	.08025	.06880	.03114	.14443	.11019	.15123
how long ago	.08783	.07127	.07620	.02876	.11330	.08554	.16073
intercourse since	-.05055	.06565	.03206	.10480	-.00259	.01816	-.04529
expect again	.01585	.01177	.00217	.00093	.03594	.01143	-.01135
therapy after	.07886	.08803	.12981	.04401	.10994	.10194	.13880
used crisis service	.04120	-.01138	.08207	-.06274	.13925	.11669	.15048
told police	.04995	-.00974	.08389	-.07063	.14930	.12273	.13442
self-defense after	.04737	.06633	.09623	.03056	.07999	.03872	.06313
told anyone	.01948	-.01952	.02331	-.06962	.11571	.11372	.14233
discuss in therapy	.06560	.08565	.14764	.07653	.12464	.11328	.16401

	clarity nonconsent	types of resistance	self-defense before	degree of resistance	effect of resistance	responsibility, woman	responsibility, man
clarity nonconsent	1.09977						
types of resistance	.43900	.95495					
self-defense before	-.11370	-.02980	.31190				
degree of resistance	.71521	.50002	-.06350	1.01178			
effect of resistance	.00188	.11104	-.03408	-.01339	.87287		
responsibility, woman	-.32547	-.19555	.05793	-.37292	.06267	1.08352	
responsibility, man	.27720	.20593	.00021	.29231	.09585	-.16117	.91235
was it rape	.28563	.30940	-.03119	.28824	.23871	-.20062	.25909
coincident stress	.09072	.11811	.01284	.08385	.06802	-.09732	.11136
how long ago	.06544	.06342	-.16124	.08263	.10493	-.09269	.07649
intercourse since	-.04835	-.04281	-.01373	-.08381	.05451	.01000	-.03058
expect again	.04343	-.04056	-.01401	-.00945	.05960	-.00579	-.00848
therapy after	.01695	.05878	-.05100	.03688	.15124	-.02264	.06224
used crisis service	.09121	.09346	-.02154	.09082	.00082	-.07004	.11934
told police	.10153	.09309	-.02676	.10116	-.00703	-.08500	.12038
self-defense after	.01852	.03515	.13218	.04335	.08269	-.06554	.07154
told anyone	.09847	.09279	-.01798	.10884	-.03350	-.04259	.10379
discuss in therapy	.03934	.07860	-.03720	.06072	-.15164	-.03927	.07220

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**CORRELATION MATRIX: ALL SEXUALLY VICTIMIZED WOMEN**

	was it rape	coincident stress	how long ago	intercourse since	expect again	therapy after	used crisis service
was it rape	.73537						
coincident stress	.21855	2.19705					
how long ago	.26785	.28097	1.42787				
intercourse since	-.07702	.02440	.02877	.46207			
expect again	-.03257	.04198	.01458	.33876	.44197		
therapy after	.2051	.33373	.25729	.07795	.04901	.37978	
used crisis service	.19920	.08888	.01855	.01492	.01579	.12446	.49959
told police	.19395	.07858	.01863	.00548	.02430	.10455	.73147
self-defense after	.19352	.21137	.15596	.00790	.02798	.17951	.08458
told anyone	.15843	.08341	.00957	-.02183	.00566	.08168	.81658
discuss in therapy	.25554	.59388	.22355	.06588	.05390	.89531	.17391
	told police	self-defense after	told anyone	discuss in therapy			
told police	.48193						
self-defense after	.08701	.33437					
told anyone	.83359	.07290	.46054				
discuss in therapy	.13437	.19809	.10313	.55924			

TABLE 9

## CORRELATION MATRIX: ALL SEXUALLY AGGRESSIVE MEN

WITHIN CELLS CORRELATIONS WITH STD. DEVS. ON DIAGONAL

	age now	family income	family strength	parent strictness	physical punishment	encourage nonviolence	self-defense training
age now	.81293						
family income	-.19043	1.45138					
family strength	.06974	-.15601	.83368				
parent strictness	.01673	.06542	-.04732	.79995			
physical punishment	-.04813	-.12566	.19017	.10568	1.59087		
encourage nonviolence	-.04183	-.02624	.06118	.14608	.33553	1.16691	
self-defense training	.03368	-.03223	.06063	-.03677	.07476	.04200	.47893
sexual abuse	.00691	-.06058	.20005	-.03938	.18724	-.01664	.09373
delinquent assoc.	.05345	-.03764	.04335	.07628	.12981	.06917	.14579
suicide ever	-.01697	-.00342	.08290	.00295	.08484	.03960	.05911
therapy ever	.12328	.01874	.12764	-.00584	.08627	.06274	.04968
intoxicants	-.11709	.18348	-.05316	.06188	.12768	.03255	-.12763
sex values	-.02679	-.07289	-.07972	.05375	-.02513	.02496	-.07383
number partners	.33209	-.10201	.15348	.03332	.13249	.02982	.12646
age 1st sex	.11988	.03350	-.10295	.02877	-.15529	-.04762	-.07599
sex orientation	-.06585	-.02776	.01409	-.07990	.01025	-.04851	-.00741
women as sex	-.22480	.04719	-.00170	-.04143	.03176	.05424	.00643
pronography use	.03635	.10133	.00733	-.06204	.01079	-.01100	.09638
MMPI Scale 4	-.03439	-.03715	.09041	-.04238	.17277	.09179	.10025
Hostility to Women	-.15764	-.05210	-.02021	-.08901	.10179	.11179	.07894
Rape Beliefs	-.17415	-.06011	-.00878	-.03586	.08819	.12682	.01502
relationship type	.03054	.05252	-.06184	.10803	-.10741	-.07949	-.01861
degree acquaintance	.00850	.02312	.02955	.06526	-.03145	-.08511	-.01282
prior intimacy	.02920	-.00254	.00712	.04238	.03850	-.02560	.04576
age at assault	.00355	-.07793	-.02490	-.03426	-.06080	-.08319	-.07650
alcohol/drug involved	.05586	.02328	-.03230	-.05626	.11411	.04199	-.01099
prior intercourse	.07580	.04598	.01055	.01364	.00089	-.04464	.02068
social context	.02316	.01151	.01696	-.03417	-.02618	-.01836	-.03267
surf	-.05241	.00316	-.00253	.05843	.07694	.07053	-.02376
campus location	.10534	-.12201	.03929	-.02828	.02186	.05276	.06849
number officers	-.01259	-.01876	.08381	-.01378	.20374	.11966	.06509
how many times	-.02367	-.03168	-.00154	.00058	.15775	.04671	.09509
types of force	.01888	.05491	-.04179	.03980	.02214	.03062	-.10906
perceived violence	-.02431	.02333	-.07465	.06427	-.03137	-.00814	-.00293
negative emotions	-.05869	-.06736	-.07284	-.02164	.02178	.04084	-.02739
positive emotions	-.02999	.00403	.09331	-.08404	.11757	.02262	.09347
clarity of nonconsent	.04768	-.01858	-.06646	.12309	-.04370	.01904	-.07787
perceived resistance	.06395	.01917	-.02144	.06191	.01359	.08652	-.03566
effect of resistance	.06482	-.01861	-.09354	.01511	-.05117	-.01739	-.08262
responsibility, woman	-.05393	-.01827	.09855	.00384	.07879	.05334	.01895
responsibility, man	-.00833	-.02185	.01774	-.03856	.06242	.01686	.08906
expect it again	-.01638	-.03434	-.07451	.03963	-.06395	.00446	.01631
was it rape	.04329	-.00331	-.07254	.00953	-.02590	.05921	-.02262
reli anyone	-.11065	.06691	-.03400	.00026	.04901	.09321	.00489
reported to police	-.02416	.02818	-.05054	.01285	.07185	.13144	.03389
how long ago	.53458	-.05351	.07057	.04393	-.06041	-.00835	.00549
partners since	.32847	-.12486	.16215	.00389	.09377	.03904	.09835
intercourse since	.03355	.03601	.00180	.07051	.01999	-.02315	-.00091

**CORRELATION MATRIX: ALL SEXUALLY AGGRESSIVE MEN**

	sexual abuse	delinquent assoc.	suicide ever	therapy ever	intoxicants	sex values	number partners
sexual abuse	2.65038						
delinquent assoc.	.13398	1.22885					
suicide ever	.05354	.10669	.39549				
therapy ever	.03874	.06554	.20090	.36318			
intoxicants	.00395	.06624	.02703	-.04959	2.67722		
sex values	-.11724	.01719	-.04731	.00000	-.22908	1.39279	
number partners	.24878	.08046	-.01464	.05770	.12913	.40299	1.92702
age 1st sex	-.26303	-.11332	-.07361	-.10475	.02088	.13637	-.21511
sex orientation	.09879	.06573	-.02073	.02244	-.04305	-.03811	-.05011
women as sex	.06978	.03378	-.01720	-.08990	.20451	-.17027	.09047
pornography use	.13452	.07059	.03742	-.01342	.10541	-.19340	.11634
F&PI Scale 4	.11540	.21440	.28187	.18413	.05129	.00232	-.01867
Hostility to Women	.06288	.11053	.11778	.02548	.03501	.01385	-.03050
Rape Beliefs	-.01217	.05719	-.08814	-.07988	-.01789	.09597	.02286
relationship type	-.11546	-.05708	.00573	-.04332	-.03461	.09218	-.19428
degree acquaintance	-.03317	-.07551	-.00288	-.08303	-.00239	.10081	-.20011
prior intimacy	.05918	.01093	-.01167	-.03797	.02250	-.04471	.03204
age at assault	-.02561	-.02070	-.05119	.09574	-.00977	.01142	.13513
alcohol/drug involved	.02953	.09302	.04217	.00229	.25397	-.17439	.19845
prior intercourse	.12094	-.01446	-.04743	.00620	.15304	-.20992	.38192
social context	-.01178	.03646	.00039	.05854	.08097	.03301	.00677
lurk	-.05344	-.03273	-.00892	-.04731	.07910	.02515	.03156
campus location	.03446	.10460	.01363	.02429	-.11621	.09033	.01963
number offenders	.12385	.00315	-.03791	-.04508	.00283	-.07559	.19566
how many times	.09209	.08670	-.00256	-.00269	.01986	-.00333	.01303
types of force	.09689	.01386	.02903	.00675	-.01043	.00289	.05819
perceived violence	.01567	.03740	-.01740	-.09974	.01375	-.04052	.03642
negative emotions	-.05829	.00269	.02709	.01476	-.08564	.18840	-.18478
positive emotions	.09771	.09421	.07667	.06007	.05548	-.13304	.09913
clarity of nonconsent	-.01243	-.02927	.00719	.02235	-.03604	.05314	-.06676
perceived resistance	-.00974	.05240	.02665	.04740	-.05189	.07667	-.00034
effect of resistance	.00625	.01784	-.02229	-.01709	-.02640	.04594	-.02475
responsibility, woman	.11062	.01754	-.00909	-.05766	.01237	-.11050	.09337
responsibility, man	.13008	.05954	.01028	.00801	.03191	-.03167	.06620
expect it again	-.04164	-.02561	.04916	.03735	-.05795	.08459	-.10735
was it rape	-.05139	.04096	-.04570	-.01618	.03593	.02733	-.04057
call anyone	.07286	.05752	.05266	.00648	.07303	-.05438	.01516
reported to police	.01629	.06627	.02847	.01352	.04074	-.02601	-.02881
how long ago	.07988	.04554	-.03157	.03267	-.14171	-.01486	.11645
partners since	.17931	.08994	-.03016	.03521	.07939	-.29644	.72119
intercourse since	.09853	.00470	-.04318	-.03758	.04258	-.08620	.10672

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CORRELATION MATRIX: ALL SEXUALLY AGGRESSIVE MEN

	age 1st sex	sex orientation	women as sex	pornography use	MMPI Scale 4	Hostility to Women	Rape Beliefs
age 1st sex	2.21554						
sex orientation	-.13375	.25283					
women as sex	-.04616	-.00631	1.04710				
pornography use	-.01081	-.03622	.09398	.72804			
MMPI Scale 4	-.11178	.03842	.04893	.08734	3.51807		
Hostility to Women	-.07873	-.01735	.10889	.08657	45731	5.29646	
Rape Beliefs	-.08999	-.04943	.01564	.04223	.16875	43597	17.66616
relationship type	.07970	-.00706	-.07450	-.02220	-.07802	-.05747	-.03739
degree acquaintance	.01111	.03109	-.06932	-.01989	-.01352	-.08784	-.06526
prior intimacy	-.00663	-.01267	.03810	.03898	-.03284	-.05381	-.04341
age at assault	-.25010	-.03848	-.16369	-.05291	-.01679	-.03767	-.12859
alcohol/drug involved	-.02001	-.02686	.00873	.03268	.06555	.02331	.01019
prior intercourse	-.07283	-.01987	.08981	.08290	-.06042	-.03658	-.01397
social context	.00562	-.00512	.04114	.00189	-.02365	.04549	.02141
turf	.01122	-.04470	-.06370	-.04468	-.00518	-.07562	.00630
campus location	-.06034	-.01378	-.00839	-.04567	.00812	-.05278	-.02389
number officers	-.10930	.01683	.10984	.02824	.04102	.05092	.12306
how many times	-.03633	-.01152	-.00724	.02052	.05749	.06329	.06758
types of force	-.05512	.02605	.00882	.07422	.06609	-.03897	.01584
perceived violence	.01302	-.02776	.08689	.07424	-.01427	-.03808	-.04557
negative emotions	.09467	-.01313	-.12161	-.08401	.06752	.06123	.01106
positive emotions	-.09293	-.02198	.14959	.07719	.15583	.16063	.19142
clarity of nonconsent	-.02146	-.00737	-.07098	-.06485	-.00864	-.00767	-.04646
perceived resistance	-.04203	.00103	-.02790	.01205	.03617	.00017	-.00840
effect of resistance	.04594	-.02053	-.00326	.01721	-.01319	.02295	-.01853
responsibility, woman	-.06791	.05020	.06167	.06178	.06400	.04366	.07285
responsibility, man	-.04812	-.01335	.07851	.03072	.10129	.09829	.11827
expect it again	.06121	-.05355	-.04671	-.07097	.00810	-.07136	-.15196
was it rape	.04471	-.01658	.01626	-.00076	.01303	.01479	-.04779
call anyone	-.03013	-.02222	.14984	-.01373	.09460	.09466	.05598
reported to police	-.01417	-.03011	.11827	-.00690	.05844	.07763	.02521
how long ago	-.04457	.06094	-.09513	.00946	-.02855	-.13538	-.14832
partners since	-.19772	.01711	.05063	.11077	-.00949	-.05575	.01206
intercourse since	-.05886	-.01262	.05444	.07024	-.04724	-.01827	-.00582

**CORRELATION MATRIX: ALL SEXUALLY AGGRESSIVE MEN**

	relationship type	degree acquaintance	prior intimacy	age at assault	alcohol/drug involved	prior intercourse	social context
relationship type	1.11510						
degree acquaintance	.64134	1.05873					
prior intimacy	.15487	.34246	1.44805				
age at assault	.08381	-.00315	.07552	2.65678			
alcohol/drug involved	-.25400	-.27402	-.02104	.10858	1.39529		
prior intercourse	-.03639	-.12101	-.22883	.21862	.15020	.41814	
social context	-.01833	-.11850	-.08853	.04969	.04656	.02493	.85866
turf	-.10145	-.09828	-.07578	-.15689	.09089	-.03216	-.00097
campus location	.14742	.18091	.03199	-.03161	-.01464	-.15760	.09431
number offenders	-.31698	-.17667	-.08761	-.16817	.09737	-.01334	-.07879
how many times	.17512	.22399	.13388	-.04908	-.05024	-.12493	-.03156
types of force	-.01395	.03209	-.03983	.00366	.03752	-.02758	-.07010
perceived violence	.06407	.05080	.01783	-.01800	-.00933	.06392	-.07848
negative emotions	.13581	.10102	.01009	-.06123	-.08753	-.12406	.01232
positive emotions	-.08218	-.10710	-.00806	-.04596	.14163	-.01845	.02222
clarity of nonconsent	-.11436	.10854	.00383	.04457	.01979	-.06371	-.04370
perceived resistance	.05837	.08868	-.05134	.00797	-.05532	-.06245	.02552
effect of resistance	.14843	.06422	.02178	.06747	-.05042	.03348	-.00521
responsibility, woman	-.07745	-.09948	-.03422	-.02381	.02310	.04036	-.03098
responsibility, man	-.03779	-.07487	-.05099	.09742	.06417	.08787	.01431
expect it again	.18358	.17215	.07791	.03669	-.06473	-.04282	-.08310
was it rape	.00529	-.00589	-.02054	.08096	.04161	.00021	-.01781
tell anyone	-.15396	-.17070	-.04573	-.06025	.03138	.00038	.02719
reported to police	-.08540	-.11299	-.04729	-.01570	-.01356	-.00712	.00842
how long ago	.02792	.04539	-.00345	-.15575	-.06814	-.12132	.02775
partners since	-.20248	-.17017	.03439	-.03643	.15861	.23641	-.00077
intercourse since	.28646	.26751	.36146	.08423	-.06645	.19665	-.06760

  

	turf	campus location	number offenders	how many times	types of force	perceived violence	negative emotions
turf	1.38816						
campus location	-.07751	.33537					
number offenders	.09055	-.00268	.51846				
how many times	-.07027	.01463	.05595	1.33074			
types of force	-.01825	.02770	.13497	-.02510	.50347		
perceived violence	-.04515	-.00892	-.02775	.01314	.20843	.93535	
negative emotions	-.00590	.09270	-.06609	-.04175	.11829	.09235	2.53157
positive emotions	-.00144	-.00084	.10839	.23253	.02981	.14718	.16702
clarity of nonconsent	-.02291	.06874	-.10706	-.17398	.15970	.08445	.25161
perceived resistance	-.00513	-.04915	.01011	-.05437	.36908	.12165	.20958
effect of resistance	-.03590	.03689	-.10406	-.17136	.24437	.20035	.31480
responsibility, woman	-.04364	.02165	.11163	.21186	-.02592	.14373	.27751
responsibility, man	-.03825	-.02718	.09964	.05954	-.01835	.10154	.00251
expect it again	-.01606	.03556	-.12453	.00411	.10301	.09401	.22491
was it rape	-.06093	-.06448	-.02241	-.04989	.13769	.07221	.06175
tell anyone	.02017	-.00265	.12663	.03280	.02136	.01029	-.02183
reported to police	.02718	-.00882	.08005	.04041	-.01210	-.01380	.00806
how long ago	.07440	.22237	.00539	-.07946	-.00437	.05065	.07270
partners since	.10531	.07527	.00045	-.00927	.04259	-.02527	-.15233
intercourse since	-.13105	.08720	-.08215	.24430	-.00572	.06493	-.05222

**CORRELATION MATRIX: ALL SEXUALLY AGGRESSIVE MEN**

	positive emotions	clarity nonconsent	perceived resistance	effect of resistance	responsibility, woman	responsibility, man	expect it again
positive emotions	1.12013						
clarity of nonconsent	<u>-.29182</u>	.95830					
perceived resistance	-.16551	<u>.32248</u>	.66363				
effect of resistance	-.13888	<u>.59378</u>	<u>.45465</u>	.76248			
responsibility, woman	<u>.6210</u>	-.23825	<u>-.26223</u>	<u>-.30923</u>	.83332		
responsibility, man	<u>.4317</u>	-.14421	-.05856	-.05211	.08920	1.04700	
expect it again	<u>.03880</u>	<u>.29500</u>	.04054	.21619	-.05870	.15748	1.07956
was it rape	-.02307	.12258	.03627	.07875	-.00805	-.02467	.12383
tell anyone	<u>.23261</u>	-.12382	-.07473	-.09154	.14227	.13848	-.01505
reported to police	.16504	-.13592	-.06524	-.10081	.10405	.08241	-.00504
how long ago	-.08742	.09079	.01549	.08782	-.11549	-.11732	-.03496
partners since	.09186	-.03445	-.00211	-.02215	.06379	-.03783	-.10062
intercourse since	-.00745	.00394	-.02422	.00118	.04709	-.09155	.02455

  

	was it rape	tell anyone	reported to police	how long ago	partners since	intercourse since
was it rape	.37622					
tell anyone	.00633	1.64838				
reported to police	.03765	<u>.83169</u>	.17082			
how long ago	-.03809	-.07304	-.10416	1.40739		
partners since	-.03718	-.03793	-.07592	<u>.31767</u>	1.56389	
intercourse since	-.02679	-.04303	-.01601	-.00526	.10961	.44489

TABLE 10

CORRELATION MATRIX: ALL WOMEN

WITHIN CELLS CORRELATIONS WITH STD. DEVS. ON DIAGONAL

	AGEHOW	FAMINC	STABILE	STRICT	VIOLENCE	PHYSFUN	SELDEF
age now	5.02523						
family income	-.16917	1.40183					
family strength	.03010	-.13526	.01276				
parent strictness	.03913	.00761	-.04837	.85862			
physical punishment	.10795	-.14376	.21644	.13189	1.30574		
encourage nonviolence	-.04685	.00003	-.00165	.13665	.24762	.90627	
self-defense	.08710	-.02338	.03521	.02087	.06243	.00247	.41670
sexual abuse	.10197	-.09197	.11542	.01811	.14154	.05911	.08209
delinquent assoc.	-.02075	-.01480	.08091	.02287	.13268	.09632	.01394
suicide ever	.08903	-.05844	.07363	.04747	.16603	.07558	.07111
therapy ever	.21108	-.05115	.11913	.02574	.16256	.03202	.11341
intoxicant use	-.16852	.19221	-.03082	-.07036	-.03138	.01544	-.04919
sexual values	-.12874	-.06134	-.11793	.10400	-.08963	.02120	-.05028
number partners	.28107	-.01741	.14319	-.01637	.08821	-.02529	.08992
age first sex	.15948	.00136	-.08434	.00307	-.07736	-.02357	.00032
sex orientation	.06982	-.00462	.02601	.00069	.04320	-.00085	.02666
rape beliefs	-.16545	-.07063	-.02065	.05553	-.00893	.15315	-.05750
beck depression	-.03615	-.05784	.05419	.04538	.10449	.12795	-.00164
trait anxiety	-.06893	-.07341	.02883	.02069	.10275	.14403	-.04551
quality relations	-.05889	.15006	-.02654	.02997	-.09477	-.07071	.00822
sex satisfaction	.14767	.08988	.07940	-.02212	.01145	-.05326	.04711
	SEXABUSE	DELASSU	SUICIDE1	THERAPY	ALCOHOL	APPROV	PARTNERS
sexual abuse	2.11906						
delinquent assoc.	.10977	1.06203					
suicide ever	.12388	.08045	.41065				
therapy ever	.13383	.09810	.26743	.39785			
intoxicant use	-.01252	.04937	-.03529	-.04070	2.47018		
sexual values	-.11828	-.05193	-.07124	-.12757	-.25744	1.46794	
number partners	.17501	.07942	.10751	.19622	.12914	-.47471	1.32423
age first sex	-.19387	-.07937	-.04829	-.03729	-.04192	.03186	-.13514
sex orientation	.09224	.06418	.06235	.05350	.01623	-.07895	.04031
rape beliefs	-.02645	.06969	-.02868	-.10953	-.07217	.27782	-.19317
beck depression	.10267	.14459	.32422	.18177	.04246	-.02247	.00777
trait anxiety	.04484	.13418	.27478	.14276	.02331	.00447	-.05189
quality relations	-.05568	-.07748	-.17585	-.09276	.08618	.01051	.02299
sex satisfaction	.07143	-.00460	-.02194	.04039	.20788	-.40441	.48717
	AGE1STSX	SEXORIE	TOTALATT	BDI	ANXIETY	QUALITY	SEXSAT
age first sex	1.84510						
sex orientation	-.03649	.31046					
rape beliefs	-.01511	-.00498	16.61262				
beck depression	-.03790	.06932	.16331	6.74645			
trait anxiety	-.01683	.04261	.21154	.75886	10.15992		
quality relations	.02246	-.10637	-.12061	-.32125	-.35253	2.96092	
sex satisfaction	.05376	-.02631	-.24513	-.09602	-.11576	.25458	2.64392

TABLE 11  
CORRELATION MATRIX: ALL MEN

WITHIN CELLS CORRELATIONS WITH STD. DEVS. ON DIAGONAL

	AGENUW	FAMINC	STABILE	STRICT	VIOLENCE	PHYSFUN	SELFDEF
age now	3.80948						
family income	-.13821	1.42415					
family strength	.01431	-.13191	.81806				
parent strictness	.01477	.07461	-.09881	.81116			
physical punishment	.01510	-.08271	.14462	.10008	1.22499		
encourage nonviolence	-.03396	-.01833	.01247	.14959	.25612	1.10591	
self-defense training	.06815	-.02404	.04838	.00688	.02558	-.00503	.46423
sexual abuse	.02454	-.04264	.13661	-.01715	.12403	.03270	.06824
delinquent assoc.	.05151	-.08156	.06243	.03138	.13116	.08843	.05093
suicide ever	.01187	-.00571	.10784	-.00207	.11024	.00885	.04593
therapy ever	.10074	.02598	.12580	-.01842	.10447	.00568	.06413
intoxicants	-.09403	.18310	-.05224	-.00299	.04009	.06492	-.08356
sex values	-.03970	-.06718	-.08074	.10623	-.01316	-.00052	-.03129
number partners	.32307	-.00028	.08283	-.03033	.05949	.01718	.10265
age 1st sex	.17151	-.02238	-.01647	.00880	-.07029	-.04039	-.00537
sex orientation	.03278	-.05372	.07981	-.02853	.04695	-.01266	.02726
women as sex	-.23054	.07940	.03532	.00613	.03107	.07291	.01479
pronography use	.00908	.05951	.00657	-.00939	.01467	.05097	.01394
MMPI Scale 4	-.04027	-.05459	.09806	-.02152	.18476	.05132	.05425
Hostility to Women	-.12483	-.02559	.00317	-.00737	.09324	.09111	.00969
Rape Beliefs	-.12809	-.09062	-.03284	.01934	.03403	.12401	.00110
	SEXABUSE	DELIASSO	SUICIDE1	THERAPY	ALCOHOL	APPROV	PARTNERS
sexual abuse	2.39257						
delinquent assoc.	.08591	1.15641					
suicide ever	.07147	.09151	.36288				
therapy ever	.06755	.06641	.29130	.32707			
intoxicants	.07289	.04010	.03112	-.02129	2.83940		
sex values	-.13232	.00814	-.05144	-.03474	.31259	1.60486	
number partners	.20951	.05045	.00801	.05879	.22357	-.20341	1.70737
age 1st sex	-.18661	-.02643	.07326	-.01261	-.01711	.10920	-.18444
sex orientation	.11671	.03390	.09532	.05823	-.01780	-.05169	-.03458
women as sex	.08190	.05024	-.00287	-.05561	.33453	-.23048	.14704
pronography use	.10341	.03008	.02450	-.03238	.18628	-.23430	.14079
MMPI Scale 4	.10466	.17999	.27888	.18401	.03539	-.04765	-.01393
Hostility to Women	.06775	.16755	.13332	.00972	.05756	-.02764	-.03108
Rape Beliefs	-.03136	.12865	-.04439	-.08143	-.01721	.13348	-.08192
	AGE1STX	SEXORIE	SEXTALK	PORN	TOTALPD	TOTALHOS	TOTALATT
age 1st sex	2.27387						
sex orientation	.07226	.34825					
women as sex	-.09601	-.09883	1.17585				
pronography use	-.00670	-.04925	.23736	.68063			
MMPI Scale 4	-.04052	.06024	.04891	.05916	3.39082		
Hostility to Women	-.05447	-.00857	.14387	.11925	.41618	4.74973	
Rape Beliefs	-.05574	-.06796	.09071	.02224	.18243	.44672	17.91734

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**TABLE 12**

**REDUCED VARIABLES: WOMEN**

- I. EARLY EXPERIENCES**
  - A. Family Stability**  
Items 1,2,3,4, page 3; range 4 -11.
  - B. Family Violence**  
Items 14, 15a, 15b, page 6; range 3 -18 .
  - C. Early Sexual Experience and Abuse**  
Items 24b, page 10, range 1= sexual initiation at 17.1 or older, 2 = sexual initiation at 17.0 or less; and item 1a- 1h, page 59, range 1= no to all, 2 = yes to a,b, or c, 3 = yes to d,e, or f, and 4 = yes to g or h; range 2 - 6.
  - D. Suicide History**  
Item 25, page 10, range 1= no or yes if answer to 27a is no; 2 = yes to item 25 and yes to item 27a.
  - E. Treatment History**  
Item 26, page 10, range 1=no or yes if answer to 28 is no; 2 = yes to item 25 and yes to item 29.
- II. PSYCHOLOGICAL CHARACTERISTICS**
  - A. Rape Supportive Beliefs**  
Items 1-36, pages 66-68; range 36 -180.
  - B. Femininity**  
Items 1-40, pages 69-70; range 0 -32.
  - C. Androgeny**  
Items 1-40, pages 69-70, range 0 -32.
- III. CURRENT BEHAVIOR**
  - A. Alcohol/Drug Use**  
Items 9, 10, 11, pages 4-5; range 3 -15.
  - B. Sexual Behavior**  
Items 18, 21a -c, 23, pages 8-10; range 5 - 30.
- IV. ASSAULT CHARACTERISTICS**
  - A. Context**  
Items 1, 2, 3, 4, 9, 10, 13, pages 41-43; range 7- 29.
  - B. Severity**  
Items 11, 15, 16, 23, 24 pages 43-47 and items 1-10 pages 31-40; range 30 - 86.
  - C. Support**  
Items 18, 19a, 20a, 21a, 22a, 27b, 29, 31, 32a, 32b, 32c, pages 45-50; range 13 - 26.

**TABLE 13**

**REDUCED VARIABLES: MEN**

- I. EARLY EXPERIENCES**
  - A. Family Violence**  
Items 14, 15a, 15b, pages 6; range 3-18.
  - B. Early Sexual Experience and Abuse**  
Items 24b, page 10, range 1 = sexual initiation at 17.1 or older, 2 = sexual initiation at 17.0 or less; and item 1a- 1h, page 59, range 1 = no to all, 2 = yes to a,b, or c, 3 = yes to d,e, or f, and 4 = yes to g or h; range 2 - 6.
- II. PSYCHOLOGICAL CHARACTERISTICS**
  - A. Psychopathy**  
Items 1-28, pages 28-29; range 1-28.
  - B. Hostility Toward Women**  
Items 1-30, pages 29-30; range 1-30.
  - C. Rape Supportive Beliefs**  
Items 1-36, pages 66-68; range 36 - 180.
  - D. Masculinity**  
Items 1-40, pages 69-70, range 0 - 32.
  - E. Androgyny**  
Items 1-40, pages 69-70, range 0 - 32.
- III. CURRENT BEHAVIOR**
  - A. Releasers**  
Items 8, 9, 10, 11, 12, pages 4-5; range 5 - 24.
  - B. Sexual Behavior**  
Items 18, 21a -c, 23, pages 8-10; range 5 - 30.
- IV. ASSAULT CHARACTERISTICS**
  - A. Context**  
Items 1, 2, 3, 4, 9, 10, pages 21-23, and items 23e, 24; 25a, 25b, pages 26-27; range 9 - 37.
  - B. Severity**  
Items 16, 22a-e, pages 24-26, and total of items 1-10, pages 11-20; range 16 - 49.

Item No. 9. (Methods)

item scale were eliminated from data analysis. Persons who skipped 6 or fewer items were used in analyses with their missing data replaced by the appropriate group mean.

### Data Analysis

The project had four specific aims including (1) determining incidence and prevalence rates for sexual aggression among college students (2) developing a descriptive data base on sexual aggression among college students (3) examining whether sexually aggressive men and sexually victimized women could be differentiated from comparison samples of nonsexually aggressive men and nonsexually victimized women, and (4) describing the traumatic impact of sexual aggression among college students.

The first aim was addressed through calculation of frequencies of subjects who responded to individual items of the Sexual Experiences Survey. Then, the proportion of subjects who qualified for each class of sexual aggression/victimization was determined using both weighted and unweighted data. Finally, the relationships between prevalence and the control variables used to develop the sample and the demographic characteristics of the subject sample was examined through chi-square analysis.

The second aim was addressed through the use of descriptive statistical procedures (ANOVA and chi-square as appropriate) on the full set of dependent variables.

The third aim was addressed through the use of MANOVA/MANCOVA on the reduced sets of variables with planned comparisons between sexually nonaggressive/victimized subjects with each of the other groups. The analyses were accomplished by entering variables in stages with those that operate earliest in time entering first. With men, for example, in the first step the early experience variables were subjected to MANOVA (2 background variables by 5 levels of sexual aggression). Then, the ability of the early experience variables to predict psychological characteristics was examined. Those variables that significantly predicted psychological characteristics were used as covariates in step two. Therefore, in the second step, the psychopathology variables were subjected to MANCOVA, using early background variables as covariates. In the third step, current behaviors were subjected to MANCOVA using background variables and psychological characteristics as covariates. This procedure was carried out until all sets of variables had been entered. The sexually nonaggressive and sexually nonvictimized comparison samples were substantially larger than the aggressive and victimized groups. Therefore, the comparison samples were weighted to approximate equal N's. For example, the sexually nonvictimized comparison sample actually contained 46% of the total number of women in the sample. However, in the analyses the sexually nonvictimized sample was weighted to be equivalent to 20% of the total sample. Because of the large sample size and number of comparisons, this analysis plan was chosen because it is powerful yet conservative. The analysis allows the role of each set of variables to be examined with the effect of earlier variables controlled. In addition, the analysis adjusts the means for the nonindependence of multiple comparisons.

The fourth aim was addressed through the use of hierarchical multiple regression. Using the measures of psychological impact as the independent variables, the reduced sets of variables were entered in steps. Those variables that operate earliest in time were entered first. For depression, for example, in the first step the early experience variables were entered into a

Item No. 9. (Methods)

*an example for*  
stepwise multiple regression. Those variables that significantly predicted depression were retained. In the second step, the significant background variables were entered first and then the psychological characteristics were stepped in. Those psychological characteristics that significantly predicted depression were retained. In the third step, significant background and psychological variables were entered and then the current behavior variables were stepped in. This procedure was continued until all the sets of reduced variables had been entered.

*Why?  
Doesn't this  
disturb the  
nature of the  
relationships?  
variables?*

Item No. 12. (Results)

## RESULTS

The data analyses addressed four questions:

- (1) the incidence and prevalence of sexual aggression and victimization among college students,
- (2) the descriptive characteristics of the assaults reported by college students, the early experiences and psychological characteristics of sexually aggressive men and sexually victimized women, and the traumatic impact of rape
- (3) the differentiation of sexually victimized women from nonvictimized women and sexually aggressive men from nonsexually aggressive men in terms of early experiences, psychological characteristics, and current behavior, and
- (4) prediction of the emotional impact of rape.

The results that are relevant to each question are presented in the following sections.

### Incidence and Prevalence of Sexual Aggression/Victimization

#### Prevalence by Individual Acts of Sexual Aggression/Victimization

4/18/82  
The unweighted frequencies of response for each item of the Sexual Experiences Survey (Koss & Oros, 1982; Koss & Gidycz, 1985; see section C of questionnaire) are presented in Table 14. The frequency of the various forms of victimization ranged from 44% of women who report having experienced unwanted sexual contact subsequent to coercion to 6% of women who report having experienced unwanted oral or anal penetration by force. Respondents indicated that they have had multiple exposures to each experience. Women who had indicated unwanted, forced intercourse reported that this type of victimization had occurred a mean of 2.2 times to them. The frequency with which men reported various forms of sexual aggression ranged from 19% of men who said that they had obtained sexual contact through the use of coercion to 1% of men who indicated that they had obtained oral or anal penetration through the use of force. Male respondents revealed that they had engaged in each act on multiple occasions. For example, those men who had obtained sexual intercourse through force had done so a mean of 2.3 times.

#### Prevalence by Categories of Sexual Aggression/Victimization

Prevalence figures for individual acts are difficult to interpret since individuals may have had multiple experiences. Thus, the total number of persons who report experiences with the individual acts of sexual aggression totals more than 100% of the population. To determine the proportion of individuals who have engaged in/experienced some form of sexual aggression, respondents were categorized according to the highest degree of sexual victimization/aggression they reported. (The rules on which these categories were based are found in Tables 6 and 7). Using weighted data to correct for regional disproportions, 45.6% of women respondents revealed no experiences whatsoever with sexual victimization whereas 14.5% reported unwanted sexual contact, 11.2% reported sexual coercion, 11.8% reported attempted rape, and 15.3% had been raped. These data are presented in Table 15. Examination of weighted male data indicates that 74.8% of men reported that they had engaged in no forms of sexual aggression whereas 9.8% acknowledge using force or coercion to obtain sexual contact, 6.9% admit to acts of sexual coercion, 3.2% report attempts to rape, and 4.6% report behavior that meets legal definitions of rape. Comparison of weighted and nonweighted data indicate that the differences are small and

~~POST-SCRIPTS~~

TABLE 14

SEXUAL EXPERIENCES OF COLLEGE STUDENTS  
SINCE AGE 14

DEGREE OF SEXUAL AGGRESSION/ VICTIMIZATION	WOMEN N=3187		MEN N=2971	
	% YES	M TIMES	% YES	M TIMES
Unwanted sex play by coercion	44%	3.2	19%	2.9
Unwanted sex play by authority	5%	1.0	1%	2.5
Unwanted sex play by force	13%	2.1	2%	2.3
Attempted unwanted intercourse by force	15%	1.2	2%	2.0
Attempted unwanted intercourse by alcohol	12%	1.1	5%	2.2
Completed unwanted intercourse by coercion	25%	2.0	10%	2.4
Completed unwanted intercourse by authority	2%	2.5	1%	2.0
Completed unwanted intercourse by alcohol	8%	2.2	4%	2.5
Completed unwanted intercourse by force	9%	2.2	1%	2.3
Unwanted oral or anal penetration by force	6%	2.2	1%	2.5

*most COERCIVE*

TABLE 15

SEXUAL EXPERIENCES OF COLLEGE STUDENTS:  
WEIGHTED AND NONWEIGHTED

SEXUAL AGGRESSION VICTIMIZATION	WOMEN N=3187		MEN N=2971	
	% REPORTING		% REPORTING	
HIGHEST LEVEL REPORTED	Weighted	Nonweighted	Weighted	Nonweighted
No Sexual Aggression/ Victimization	45.6	46.3	75.6	74.8
Sexual Contact	14.5	14.4	9.8	10.2
Sexual Coercion	11.2	11.9	6.9	7.2
Attempted Rape	11.8	12.1	3.2	3.3
Rape	15.3	15.4	4.6	4.3

Item No. 12. (Results)

that the effect of weighting is to render the estimates very slightly more conservative.

#### Relationship of Sexual Aggression/Victimization to Control Variables

The relationship of prevalence rates to the levels of sexual victimization and the control variables used to design the sample was examined. No significant differences in the prevalence of sexual victimization were found according to the size of the city where the institution of higher education was located ( $X^2 = 5.55, p = .697$ ), the size of the institution ( $X^2 = 6.35, p = .608$ ), the type of institution ( $X^2 = 10.37, p = .240$ ), or whether the minority enrollment of the institution was above or below the national mean ( $X^2 = 4.03, p = .401$ ). However, rates of sexual victimization did vary by region ( $X^2 = 63.00, p = .001$ ) and by the governance of the institution ( $X^2 = 22.93, p = .003$ ). The rate of rape was twice as high in private colleges (14%) and major universities (17%) as it was at religiously affiliated institutions (7%). Reported victimization rates were slightly higher in the Great Lakes and Plains States than in other regions. These data are summarized in Table 16.

The relationships between prevalence rates of sexual aggression and the control variables were nonsignificant for city size ( $X^2 = 6.41, p = .600$ ), institution size ( $X^2 = 3.76, p = .878$ ), minority enrollment ( $X^2 = 4.84, p = .303$ ), governance ( $X^2 = 13.66, p = .091$ ), and type of institution ( $X^2 = 3.99, p = .858$ ). The only control variable that was related to reported rates of sexual aggression was region of the country ( $X^2 = 56.25, p = .001$ ). The rate at which men admitted rape was twice as high in the Southeast (6%) as the rate in the Plains States (3%) and three times as high as the rate in the West (2%). These data are presented in Table 17.

#### Relationship of Sexual Aggression/Victimization to Demographic Variables

The relationships between the prevalence rates for sexual victimization and subject demographic variables was also studied including income, religion, and ethnicity. Among women, no significant differences were found for income ( $F = .31, p = .871$ ) and religion ( $X^2 = 17.86, p = .332$ ). Differences were found, however, in the rates at which various types of victimization were reported by ethnic groups ( $X^2 = 37.05, p = .002$ ). For example, the prevalence of rape was 16% among White women, 10% among Black women, 12% among Hispanic women, 7% among Asian women, and 40% among Native American women. The prevalence rates for sexual victimization by ethnic group are presented in Table 18.

No significant differences were found between the prevalence rates for sexual aggression and male demographic variables including religion ( $X^2 = 20.98, p = .179$ ) and income ( $F = .08, p = .987$ ). The rates at which various types of sexual aggression were reported differed by ethnic group however ( $X^2 = 55.55, p = .000$ ). For example, the prevalence at which rape was reported by men was 4% among White men, 10% among Black men, 7% among Hispanic men, 2% among Asian men, and 0% among Native American men. The prevalence rates for sexual aggression by ethnic group are presented in Table 19.

TABLE 16

RELATIONSHIP OF CONTROL VARIABLES TO SEXUAL VICTIMIZATION

CONTROL VARIABLE	NONVICTIMIZED	SEXUAL CONTACT	SEXUAL COERCION	ATTEMPTED RAPE	RAPE	$\chi^2$	p
<b>I. City Size</b>							
Not in SMSA	45	14	12	12	16	( )	
SMSA < 1,000,000	44	14	12	12	17	( )	
SMSA > 1,000,000	47	16	11	12	14	( )	
						5.55	.697
<b>II. Institution Size</b>							
1,000-2,499	44	19	11	7	18		
2,500-9,999	47	15	11	13	16		
>9,999	45	15	12	12	15		
						6.35	.608
<b>III. Minority Enrollment</b>							
Below Mean	45	16	12	12	16		
Above Mean	48	14	12	13	14		
						4.03	.401
<b>IV. Governance</b>							
Public	46	14	11	12	17		
Private	40	18	14	14	14		
Religious	56	17	9	11	7		
						22.93	.003
<b>V. Type</b>							
Major University	45	15	12	13	16		
Other 4 year	47	14	11	12	15		
2 year	44	17	8	9	21		
						10.37	.240
<b>VI. Region</b>							
New England	40	(21)	11	14	14		
Mideast	54	14	10	10	13		
Great Lakes	43	17	10	12	19		
Plains	43	14	14	11	19		
Southeast	51	14	9	13	13		
Southwest	51	14	9	13	13		
West	42	11	11	14	15		
	46	14	11	12		63.00	.001

give  
hand

independent  
observations?

TABLE 17

RELATIONSHIP OF CONTROL VARIABLES TO SEXUAL AGGRESSION

CONTROL VARIABLE	NONAGGRESSIVE	SEXUAL CONTACT	SEXUAL COERCION	ATTEMPTED RAPE	RAPE	X <sup>2</sup>	P
<b>I. City Size</b>							
Not in SMSA	78	8	7	3	4		
SMSA < 1,000,000	80	10	7	3	6		
SMSA > 1,000,000	75	11	8	3	5		
						6.41	.600
<b>II. Institution Size</b>							
1,000-2,499	72	11	7	5	5		
2,500-9,999	76	8	8	3	5		
>9,999	75	10	7	3	5		
						3.76	.878
<b>III. Minority Enrollment</b>							
Below Mean	76	9	7	3	5		
Above Mean	72	11	8	4	6		
						4.84	.303
<b>IV. Governance</b>							
Public	76	9	7	3	4		
Private	73	13	6	2	5		
Religious	72	8	11	4	5		
						13.66	.091
<b>V. Type</b>							
Major University	76	10	7	3	4		
Other 4 year	73	13	6	2	5		
2 year	72	8	11	4	5		
						3.99	.658
<b>VI. Region</b>							
New England	71	15	6	3	5		
Mideast	72	10	7	6	5		
Great Lakes	76	10	7	3	5		
Plains	84	5	5	3	3		
Southeast	72	9	9	4	6		
Southwest	78	10	7	2	4		
West	74	14	7	2	2		
						56.25	.001

*base*

*is there  
correlation  
with age, 55?*

*Handwritten annotations in table: 13, 8, 11, 4*

TABLE 18

SEXUAL AGGRESSION REPORTED BY COLLEGE WOMEN BY ETHNICITY

SEXUAL VICTIMIZATION  Level	RACE OR ETHNIC BACKGROUND				
	Percent Reporting				
	WHITE ( )	BLACK ( )	HISPANIC ( )	ASIAN ( )	NATIVE AMERICAN ( )
No Victimization	44	53	57	65	35
Sexual Contact	16	13	11	10	5
Sexual Coercion	12	12	9	8	10
Attempted Rape	12	12	10	10	10
Rape	16	10	12	7	40

*AN*

*ES S*

$\chi^2 = 37.05, p = .002$

TABLE 19

SEXUAL AGGRESSION REPORTED BY COLLEGE MEN BY ETHNICITY

SEXUAL AGGRESSION  Level	RACE OR ETHNIC BACKGROUND				
	Percent Reporting				
	WHITE	BLACK	HISPANIC	ASIAN	NATIVE AMERICAN
No Sexual Aggression	77	58	66	82	94
Sexual Contact	9	11	18	10	0
Sexual Coercion	7	15	5	5	6
Attempted Rape	4	6	4	1	0
Rape	4	10	7	2	0

$\chi^2=55.55, p=.000$

Item No. 12. (Results)Incidence of Sexual Aggression/Victimization

Respondents were asked to indicate how many times during the previous one year they had engaged in/experienced each item in the Sexual Experiences Survey (See questionnaire, section C). These responses were used to calculate one year incidence rates for each item. These data are reported in Table 20. If the incidence figures are condensed into levels of sexual victimization they reveal that in a one year period on 33 campuses, 3,187 women experienced 328 rapes, 543 attempted rapes, 837 episodes of sexual coercion, and 2,024 experiences of unwanted sexual contact. These data are found in Table 21. Dividing these incidents by the number of women in the population gives the following rates per 1,000 college women per year: rape 103/1,000; attempted rape 170/1,000; sexual coercion 263/1,000; and sexual contact 635/1,000. The individual rates were then combined to determine the rate of criminal sexual victimization (rape, attempted rape, and forceful sexual contact) in this population which was 336 per 1,000 college women in a one year period.

Using male responses to the Sexual Experiences Survey, 187 rapes, 157 attempted rapes, 854 episodes of unwanted sexual contact, and 327 situations of sexual coercion occurred in a one year period. Dividing these incidents by the number of men in the population gives the following rates per 1,000 college men per year: rape 63/1,000; attempted rape, 53/1,000, sexual coercion 110/1,000; and sexual contact 287/1,000. The individual rates were then combined to determine the rate of criminal sexual conduct by men (rape, attempted rape, forceful sexual contact) in this population which is 138 per 1,000 men for a one year period. These data are presented in Table 21.

Sexual Aggression/Victimization: Descriptive Characteristics

A second goal of the project was to develop a descriptive picture of the sexual aggression/victimization experiences that are reported by college students, of the early experiences, psychological characteristics, and current behavior of students, and of the traumatic impact of sexual victimization. In the following sections, simple descriptive statistics will be reported to accomplish this goal. It must be noted that due to the large sample size, differences that have no real practical significance can reach statistical significance. In addition, whenever a large number of comparisons are made, the risk increases that some statistically significant differences actually arose by chance. Therefore, the following analyses are presented for descriptive purposes only. For inferential analyses, the large number of variables was reduced, appropriate adjustments in means were made for multiple nonindependent comparisons, and only planned comparisons were made. These analyses are presented later.

Victimizations Reported by Women

The items in section D of the questionnaire request detailed information about the most serious victimization that a woman has experienced since the age of 14. These dependent variables were analyzed by chi-square analysis for dichotomous data and ANOVA for continuous data using the sexual victimization groups as independent variables. The results of the ANOVAs are reported in Table 22 and the results of the Chi-square analyses are reported in Table 23. These analyses demonstrate that rape victims describe their victimizations differently than women who have experienced lesser degrees of sexual victimization.

Point prevalence  
new incidents not  
over 24 periods

adjusted?

all differences  
attributable to  
non-college men

TABLE 20  
SEXUAL EXPERIENCES OF COLLEGE STUDENTS:  
ONE YEAR INCIDENCE

DEGREE OF SEXUAL VICTIMIZATION/ AGGRESSION	WOMEN N=3187 INCIDENTS LAST YEAR	MEN N=2971 INCIDENTS LAST YEAR
1 Unwanted sex play by coercion	1716	732
✓ 2 Unwanted sex play by authority	97	55
3 Unwanted sex play by force	211	67
4 Attempted unwanted intercourse by force	298	52
5 Attempted unwanted intercourse by alcohol	236	105
6 Completed unwanted intercourse by coercion	816	307
7 Completed unwanted intercourse by authority	21	20
8 Completed unwanted intercourse by alcohol	98	103
9 Completed unwanted intercourse by force	159	36
10 Unwanted oral or anal penetration by force	71	48

328 }  
159 }  
71 } 200

298  
159  
71  
-----  
528

TABLE 21

INCIDENCE OF SEXUAL AGGRESSION/VICTIMIZATION BY LEVEL — ONE YEAR

Group	Number of Incidents	Per 1,000 Women	Number of Incidents	Per 1,000 Men
Sexual Contact	2024	635/1,000	854	287/1,000
Sexual Coercion	837	263/1,000	327	110/1,000
Attempted Rape	543	170/1,000	157	53/1,000
Rape	328	103/1,000	187	63/1,000

No. of Multiple Incidents per 1,000

How does this extrapolate to U.S. college age pop? (give reference to study)

*Life-time*

TABLE 22  
SEXUAL VICTIMIZATIONS OF COLLEGE WOMEN:  
ASSAULT CHARACTERISTICS

*sd. 2.7*

Variable	Mean Response				F	p
	Sexual Contact	Sexual Coercion	Attempted Rape	Rape		
1. How well known	3.40a	3.88abc	3.29b	3.19c	25.67	.000
2. How many times it happened	2.05ae	2.50abc	1.70bd	2.02cde	17.49	.000
3. Age at the time	17.27ab	19.00bc	17.92c	18.51a	15.89	.000
4. How long ago	3.79a	3.87b	3.81c	4.28abc	9.66	.000
5. Prior intimacy with man	2.71ade	4.06abc	3.30bd	3.52ce	29.23	.000
6. Clarity of nonconsent	3.93a	3.52abc	4.07b	4.05c	16.15	.000
7. Amount of violence	3.11a	3.10ab	3.31c	3.88abc	48.86	.000
8. Amount of resistance	3.43ab	3.12ace	3.79bc	3.80de	31.49	.000
9. Effect of resistance	2.06ad	2.46bde	1.86ce	2.99abc	108.98	.000
10. Emotions at time: scared	2.80ac	2.73b	2.99c	3.66abc	40.01	.000
11. Emotions at time: angry	3.08ad	3.17abe	3.47cde	3.97abc	36.07	.000
12. Emotions at time: depressed	3.14ad	3.33bd	3.19c	3.93abc	36.49	.000
13. How much woman responsible	2.76	3.27	2.78b	2.80c	14.75	.000
14. How much man responsible	3.86a	3.90b	4.03c	4.29abc	15.51	.000
15. Family reaction	4.09a	4.07	3.97	3.70a	3.84	.010
16. Police reaction	1.02	1.01	1.01	1.02	.37	.776
17. Campus agency reaction	3.60	4.50	3.50	4.00	.34	.777

Means with subscripts in common are significantly different ( $p < .05$ ).

*Can categories be added to variable descriptions*

Item No. 12. (Results)

Using the data in Tables 22 and 23, the following "portrait" can be drawn of the rapes experienced by college women. The rapes happened 1-2 years ago when the victim was 18-19 years old ( $M$  age = 18.51), and 95% involved one offender. Only 12% of the offenders were strangers while 84% were some type of acquaintance including 57% who were "dates." On average, prior mutual intimacy had occurred with the offender to the level of petting above the waist ( $M$  = 3.52). Nevertheless, victims believed that they had made their nonconsent to have sexual intercourse "quite" clear ( $M$  = 4.05). *Ferris*

The rapes happened primarily off campus (86%), equally as often in the man's house or car as in the woman's house or car. Nearly three-quarters of offenders (73%) were thought to be drinking or using drugs while the victim admitted using intoxicants in 55% of the situations. Typically, the amount of force used by the offender was moderate ( $M$  = 3.88) and involved twisting the victim's arm or holding her down. Only 9% of the rapes involved hitting or beating and only 5% involved weapons. The victims rated their amount of resistance as moderate ( $M$  = 3.80). Various forms of resistance were used by most women including reasoning (84%) and physically struggling (70%). Many women had been virgins at the time of their rape (41%). During the rape, victims felt quite scared ( $M$  = 3.66), angry ( $M$  = 3.97), and depressed ( $M$  = 3.93). Victims also felt "somewhat" responsible for what had happened ( $M$  = 2.80) but believed that the men were much more responsible ( $M$  = 4.29). *John*

After the rape, only 5% of victims reported to police and just 5% visited a crisis center. Those who reported to police rated the reaction they received as "not at all supportive" ( $M$  = 1.02). On the other hand, family ( $M$  = 3.70) and campus agency reaction ( $M$  = 4.00) were seen as supportive. Almost half of rape victims (42%) told no one at all about their assault. Surprisingly, 42% of the women indicated that they had had sex again with the offender on a later occasion but it is not known if this was forced or voluntary. Most relationships did break up subsequent to the rape (87%). Only 27% of the women whose experience met legal definitions of rape labeled themselves as rape victims. Most women were more likely to see their experience as "a serious miscommunication" or "a crime other than rape." Many women (41%) expect a similar experience to happen again in the future. *John Board*

#### Assaults Reported by Men

The items in Section D of the questionnaire request detailed information about the most serious sexual assault that a man has engaged in since the age of 14. These dependent variables were analyzed by chi-square analysis for dicotomous data and ANOVA for continuous data using the sexual aggression groups as independent variables. The results of the ANOVAs are reported in Table 24 and the results of the Chi-square analyses are reported in Table 25. These analyses demonstrate that men who report behavior that meets legal definitions of rape describe the episode differently than men who report lesser degrees of sexual aggression.

Using the information contained in these two tables, the following "portrait" can be drawn of the rapes perpetrated by college men. The rapes reported by college men happened 1-2 years ago when the man was 18-19 years old ( $M$  = 18.49) and 84% involved one offender. Only 15% of the victims were strangers while 85% were some kind of acquaintance including 61% who were "dates." On average, men reported consensual intimacy with the victim to the level of petting below the waist before the rape occurred ( $M$  = 4.37). Men felt that the woman had failed to make it clear that she did not want intercourse ( $M$  = 1.80). Furthermore, men indicated that *\**

TABLE 23

SEXUAL VICTIMIZATION OF COLLEGE WOMEN:  
ASSAULT CHARACTERISTICS

*of last? need of period  
over?*

Variable Percent of Women Responding Yes  $\chi^2$   $p$

Variable	Sexual	Sexual	Attempted		$\chi^2$	$p$
	Contact ( )	Coercion ( )	Rape ( )	Rape ( )		
1. One man involved	99	99	97	<u>95</u>	19.95	.003 ←
2. Perpetrator was date	71	86	70	<u>57</u>	132.42	.000 ←
3. Party or group context	42	40	48	<u>55</u>	68.68	.000
4. Happened on male turf	52	52	53	<u>50</u>	35.50	.001
5. Happened off campus	84	86	82	<u>86</u>	3.33	.344
6. Man living in apartment or at home	53	64	54	<u>73</u>	100.59	.000
7. Man using alcohol/drugs	35	64	54	<u>73</u>	138.56	.000
8. Woman using alcohol/drugs	29	31	58	<u>55</u>	100.23	.000
9. Force used: held down	8	9	41	<u>64</u>	292.52	.000
10. Force used: hit	2	1	2	9	88.77	.000
11. Force used: weapon	1	0	1	5	29.56	.000
12. Resistance: reason	65	71	81	<u>84</u>	44.95	.000
13. Resistance: physical struggle	33	26	52	<u>70</u>	162.50	.000
14. Woman was virgin	<u>79</u>	43	<u>60</u>	41	130.95	.000
15. Told anyone	47	42	58	<u>58</u>	28.49	.000
16. Visited a crisis center	1	2	2	5	18.05	.000
17. Reported to police	2	1	2	5	17.68	.000
18. Used a campus agency	2	0	1	2	3.48	.000
19. Had sex with man again later	37	48	35	42	13.77	.003

**SEXUAL VICTIMIZATION OF COLLEGE WOMEN:  
ASSAULT CHARACTERISTICS**

(Continued)

Variable	Percent of Women Responding Yes				x <sup>2</sup>	_p
	Sexual Contact	Sexual Coercion	Attempted Rape	Rape		
20. Ended the relationship	79	73	.82	87	24.87	.000
21. Expect it to happen again	36	33	37	41	5.12	.163
22. Was it definitely rape	1	3	3	27	285.00	.000

Item No. 12. (Results)

they had done the behavior that they describe, which is here labeled rape, a mean of 2.29 times to the woman.

Most of the rapes reported by men happened off campus (86%). Nearly three-quarters of the men (74%) admitted to the use of intoxicants before the rape took place and they stated that three-quarters of the women were using intoxicants also. Typically, the man perceived his amount of force as mild ( $M = 2.85$ ). Only 3% of perpetrators admitted hitting or beating the victim and only 4% stated that they used a weapon. Men perceived the woman's resistance as minimal ( $M = 1.83$ ). Nevertheless, 36% of the offenders noted that the victim tried to reason with them and 12% observed that she physically struggled. Men noted that the resistance had no effect on them ( $M = 2.59$ ). Few men were virgins at the time the rape took place (12%). Men stated that they experienced minimal fear, anger, or depression at the time of the assault but they did experience some pride ( $M = 2.59$ ). Men felt that the woman was more responsible for what happened ( $M = 2.85$ ) than they were ( $M = 2.43$ ).

To the man's knowledge, only 2% of the rapes were ever reported to the police. Many men report that they had sex again with the same woman after the incident occurred (55%) and expect a similar incident to occur again in the future (47%). Only a single man saw his behavior as rape while 84% of the men described their behavior as "definitely not a rape!" In the time since the assault, the men report having had sexual intercourse with approximately 2-5 women.

Background, Psychological Characteristics and Current Behavior

The full set of background and psychological characteristics were analysed by chi-square analysis for dicotomous data and ANOVA for continuous data using sexual aggression/victimization groups as independent variables. The results of these analyses are presented in Tables 26, 27, 28, and 29. While these tables can be used to draw descriptive "portraits" of college students, they will also be used to interpret the results of the planned comparisons that are presented later. The planned comparisons were based on a reduced set of variables. Tables 25, 26, 27, and 28 contain the individual variables that were combined to form the reduced set. Second, the planned comparisons were based on group means that were adjusted for the nonindependence of multiple comparisons. Therefore, the group differences on the adjusted means are smaller than on the raw means. To establish the clinical significance of a standardized test score, raw means are necessary. It can be seen from these tables that the groups of women and the groups of men differ significantly on most variables although the absolute size of the differences on many variables is small.

Using the data in Tables 26 and 27, the following descriptive portrait can be drawn of the background and psychological characteristics of the rape victim: Women who have been raped are somewhat more likely than nonvictimized women to have come from a home where the parents are divorced (31%), to have a step father (12%), and to have lived without their mother for a period of time (18%). The family background is described as "somewht strict" ( $M = 3.21$ ). On the average, aggression was discouraged; victims were punished 1-2 times per months for physical play, roughhousing, or wrestling with siblings and friends ( $M = 1.82$ ). Victims reported that they felt only "a little" uncomfortable with the high school friends they had from fear that they might get in trouble with the law ( $M = 1.77$ ). While just 12% of rape victims stated that they had ever run away from home, they were twice as likely to have run away than nonvictimized women. Victims were 16 years old ( $M = 16.32$ ) when they first had sexual intercourse either

*above?*  
*If you are drawn to the physical aspect of it?*

*?*

*are they should be punished if they are in a...*

Item No. 12. (Results)

forced or voluntarily. Almost half of rape victims have considered suicide at some time in their lives (43%) and have had psychotherapy (43%).

Currently, victims describe their intoxicant use as 1-3 times per month ( $M = 3.19$ ), usually no more than 4 cans of beer or 3 glasses of wine or 3 drinks of distilled spirits ( $M = 2.55$ ). They state that they get drunk less than once a month but at least once per year ( $M = 2.09$ ). Victims believe that sexual intercourse is appropriate if a couple is dating regularly ( $M = 3.12$ ) and 90% of them have had sexual intercourse (Note: "Sexual intercourse" in the Sexual Experiences Survey is defined as "penetration no matter how slight, ejaculation is not necessary." In normal usage, many women do not define an experience as sexual intercourse unless relations were completed.) Most victims have had sexual intercourse with 2-5 different people ( $M = 2.73$ ). Mean scores on the Femininity Scale ( $M = 26.14$ ) and Androgyny Scale ( $M = 12.83$ ) are close to college female means (Femininity = 24.54; Androgyny = 13.22).

The data in Tables 28 and 29 can be used to draw a descriptive portrait of the college men who report behavior that meets legal definitions of rape. These men are no more likely than other men to have divorced parents, to have a step father, or to have lived without their mother for a period of time. They describe their family background as quite strict ( $M = 3.30$ ). Physical aggression was punished once or twice per month ( $M = 2.49$ ). Family violence in the forms of parents hitting the children ( $M = 1.99$ ) or each other ( $M = 1.42$ ) also occurred about 1-2 times per month. One sexually aggressive man in eight stated that he had run away from home at some point while growing up (12%). Nearly half have studied self-defense (44%) and all have had sexual intercourse (99%) which occurred for the first time at approximately 15 years old ( $M = 15.34$ ). These men approve sexual intercourse under any circumstances ( $M = 1.88$ ) and have had 2-5 different partners ( $M = 2.73$ ). Currently, they drink one to two times per week ( $M = 3.94$ ), usually no more than 5 or 6 cans of beer or 4 glasses of wine or 4 drinks of distilled spirits ( $M = 3.69$ ). They report becoming intoxicated 1-3 times per month ( $M = 2.75$ ). When they are with friends, these men hear talk on a daily basis that speculates about "how a particular woman would be in bed" ( $M = 4.25$ ). At least one of the following magazines are read very frequently ( $M = 3.94$ ): Playboy, Penthouse, Chic, Club, Forum, Gallery, Genesis, Qui, or Hustler. The men's mean score on the Masculinity Scale ( $M = 23.11$ ) and Androgyny Scale ( $M = 15.31$ ) are close to the male college student means (Masculinity = 22.31; Androgyny = 16.61).

#### Post-Assault Impact of Sexual Victimization

The full set of postassault variables were analysed by chi-square analysis for dicotomous data and ANOVA for continuous data using sexual victimization groups as independent variables. The results of these analyses are presented in Tables 30 and 31. While these tables can be used to draw a descriptive portraits of the impact of sexual assault, they will also be used to interpret the results of the planned comparisons that are presented later.

Using the data presented in Tables 30 and 31, the following descriptive portrait can be drawn of the impact of rape on college women: Since the rape occurred, nearly one-third of victims have thought about suicide (29%). Of those who have thought about suicide, almost a half indicate that the victimization was the cause of the suicidal thoughts. Approximately one-third (31%) of the victims have sought psychotherapy since their rape and nearly two-thirds of them attribute the need for therapy directly to the rape. One rape victim in five took self-defense training as a response to the assault (22%). When victims were asked to compare their rape to

TABLE 24  
SEXUAL AGGRESSION BY COLLEGE MEN:  
ASSAULT CHARACTERISTICS

Variable	Mean Response				F	p
	Sexual Contact	Sexual Coercion	Attempted Rape	Rape		
1. How well known	3.67a	3.69b	3.27	3.20ab	7.03	.001
2. How many times it happened	2.20	2.29	1.90	2.29	1.54	.203
3. Age at the time	17.87	18.70	18.36	18.49	2.50	.058
4. How long ago	4.06	3.78	3.85	3.69	1.20	.310
5. Prior intimacy with women	3.51a	4.18ab	3.56c	4.37bc	8.15	.000
6. Clarity of nonconsent	2.25a	2.15	2.06	1.80a	4.30	.005
7. Amount of violence	2.45a	2.59	2.84	2.85a	4.52	.004
8. Amount of resistance	2.01	1.87	2.11	1.83	2.17	.091
9. Effect of resistance	2.21b	2.34a	1.92ac	2.59bc	7.94	.000
10. Emotions at time: scared	1.56	1.51	1.44	1.52	.34	.793
11. Emotions at time: angry	1.40	1.39	1.53	1.45	.51	.673
12. Emotions at time: depressed	1.79	1.72	1.71	1.59	.78	.506
13. Emotions at time: proud	1.76a	1.83b	1.97	2.27ab	4.10	.007
14. How much woman responsible	2.56	2.92	3.00	2.85	3.71	.012
15. How much man responsible	2.81	2.94a	2.76	2.43a	3.90	.009
16. Partners since	1.56a	2.32b	2.01	2.53ab	10.24	.000

Means with subscripts in common are significantly different ( $p < .05$ ).

TABLE 25  
SEXUAL AGGRESSION BY COLLEGE MEN:  
ASSAULT CHARACTERISTICS

Variable	Percent of Men Responding Yes				$\chi^2$	p
	Sexual Contact	Sexual Coercion	Attempted Rape	Rape		
1. One man involved	92	95	90	84*	19.43	.022
2. Victim was date	71	77	63*	61*	38.35	.001
3. Party or group context	46*	39	39	49*	68.68	.000
4. Happened on male turf	39	54*	41	41	21.92	.039
5. Happened off campus	86	86	77*	86	4.41	.220
6. Man living in apartment or at home	62	72*	58	69*	26.75	.008
7. Men using alcohol/drugs	33	35	67*	74*	75.64	.000
8. Woman using alcohol/drugs	31	35	65*	75*	82.21	.000
9. Force used: held down	7	1	12	17*	27.86	.000
10. Force used: hit	0	1	0	3	11.26	.000
11. Force used: weapon	0	1	0	4	15.23	.000
12. Resistance: reason	42	35	44	36	2.91	.405
13. Resistance: physical struggle	4	1	15*	12*	23.46	.000
14. Man was virgin	48*	24	33*	12	34.01	.001
15. Told anyone	34	37	47*	46*	6.78	.079
16. Reported to police	2	1	1	2	17.68	.000
17. Had sex with woman again later	37	64*	32	55*	38.64	.000
18. Expect it to happen again	28	29	38*	47*	14.46	.002
19. Definitely was NOT rape	96	94	90	84*	19.43	.022

TABLE 26  
BACKGROUND AND PSYCHOLOGICAL CHARACTERISTICS  
OF COLLEGE WOMEN

Variable	Mean Response					F	p
	Non-Victims	Sexual Contact	Sexual Coercion	Att. Rape	Att. Rape		
1. Parental strictness	3.18	3.16	3.19	3.19	3.21	.29	.985
2. Encourage nonviolence	1.75	1.86	1.78	1.87	1.82	1.25	.284
3. Family violence: me	1.43a	1.50b	1.62	1.57c	1.78abc	9.43	.000
4. Family violence: parents	1.91a	1.26b	1.23c	1.32	1.44abc	7.82	.000
5. Age 1st sex	17.95ae	17.22b	17.06ce	17.12d	16.32abcd	18.62	.000
6. Fear Trouble/Law	1.47	1.64	1.58	1.64	1.77	6.96	.000
7. Sex Values	4.10abc	3.83de	3.19adf	3.61bfg	3.12eg	34.45	.000
8. Number partners	.99aeh	1.03bfg	2.24cefg	1.59dhi	2.73abcd	202.56	.000
9. Intoxicant: Use	2.80abcd	3.02a	3.20b	3.24c	3.19d	12.34	.000
10. Intoxicant: Amount	2.20ab	2.41	2.53	2.43	2.55b	6.82	.000
11. Frequency Intoxication	1.78abcd	1.99a	2.04b	2.04c	2.09d	8.41	.000
12. Rape Supportive Beliefs	77.85ab	76.93c	73.88a	77.10d	72.98bcd	7.00	.000
13. Androgeny	13.43	12.53	12.88	12.79	12.83	2.24	.063
14. Femininity	25.90	26.27	25.65	26.01	26.14	1.23	.295

Means with subscripts in common are significantly different ( $p < .05$ ).

TABLE 27  
BACKGROUND AND PSYCHOLOGICAL CHARACTERISTICS  
OF COLLEGE WOMEN

Variable	Percent Responding Yes					$\chi^2$	p
	Non- Victims	Sexual Contact	Sexual Coercion	Att. Rape	Rape		
1. Parents divorced	23	23	28	27	31	15.91	.003
2. Have step father	10	8	11	12	12	6.03	.196
3. Live w/o mother	10	10	11	13	18	26.45	.000
4. Ever run away	3	3	6	7	12	67.62	.000
5. Studied self-defense	19	19	25	24	29	27.83	.000
6. Had intercourse	57	58	97	71	90	348.34	.000
7. Considered suicide	15	22	29	25	43	169.42	.000
8. Had therapy	12	18	29	28	43	218.58	.005

TABLE 2B  
BACKGROUND AND PSYCHOLOGICAL CHARACTERISTICS  
OF COLLEGE MEN

Variable	Mean Response					F	p
	Non- Aggress.	Sexual Contact	Sexual Coercion	Att. Rape	Rape		
1. Parental strictness	3.12	3.10	3.09	3.08	3.30	1.83	.121
2. Encourage nonviolence	2.05a	2.18	2.20	2.48	2.49a	3.99	.003
3. Family violence: me	1.51a	1.76c	1.62b	1.84	1.99ab	5.36	.001
4. Family violence: parents	1.18	1.29	1.26	1.30	1.42	2.12	.075
5. Age 1st sex	16.99a	16.59b	16.18	15.70	15.34ab	5.70	.001
6. Sex Values	3.03abc	3.67de	2.17ad	2.25b	1.88ce	16.76	.000
7. Frequency read porn.	2.06abc	2.21	2.30a	2.42b	3.94ab	9.02	.000
8. Discuss women/ sex	3.53acd	3.74b	4.05c	4.07d	4.25ab	12.18	.000
9. Intoxicants: Use	3.25acd	3.45b	3.61c	3.75d	3.94ab	9.02	.000
10. Intoxicants: Amount	2.96a	3.25b	3.13c	3.43	3.69abc	7.51	.000
11. Frequency of Intoxication	2.17ac	2.36b	2.41	2.58c	2.75ab	7.41	.000
12. Number partners	.99aeh	1.03bfg	2.24cefg	1.59dhi	2.73abcd	202.56	.000
13. Sex Satis: Intercourse	3.82ace	4.16bde	4.77cd	4.33	4.77ab	28.64	.000
14. Hostility to Women	7.11abcd	9.22a	8.88b	10.05c	10.08d	9.12	.000
15. MMPI Scale 4	7.91a	8.87	8.69	8.91	9.59a	4.07	.003
16. Rape Supportive Beliefs	84.26ad	87.22b	86.21c	91.86d	96.06abc	9.09	.000
17. Masculinity	22.95	22.96	23.55	22.74	23.11	.64	.636
18. Androgyny	15.35	14.57	15.52	14.34	15.31	2.16	.072

Means with subscripts in common are significantly different ( $p < .05$ ).

TABLE 29  
BACKGROUND AND PSYCHOLOGICAL CHARACTERISTICS  
OF COLLEGE MEN

Variable	Percent Responding Yes					$\chi^2$	p
	Non- Aggress.	Sexual Contact	Sexual Coercion	Att. Rape	Rape		
1. Parents divorced	21	24	30	25	29	11.28	.023
2. Have step father	9	14	11	11	10	6.23	.169
3. Live w/o mother	12	13	18	15	13	4.93	.294
4. Ever run away	4	5	7	8	12	26.33	.000
5. Studied self-defense	29	34	35	34	44	19.35	.000
6. Had intercourse	71	83	98	85	99	131.11	.000
7. Considered suicide	14	21	21	17	20	14.98	.000
8. Had therapy	12	17	17	14	13	11.42	.005

TABLE 30  
SEXUAL VICTIMIZATION OF COLLEGE WOMEN:  
POST-ASSAULT IMPACT

Variable	Mean Response				F	p
	Non-Victims	Sexual Contact	Sexual Coercion	Att. Rape		
1. Ability to trust others	3.87ab	3.86e	3.69ac	3.72d	3.44bcde	21.00 .000
2. Ability to get close	3.64a	3.68	3.63	3.67bc	3.46abc	4.06 .003
3. Ability to maintain relat.	3.88ab	3.80c	3.79d	3.69a	3.54bcd	11.19 .000
4. Sex satisfaction: Kiss	4.65ab	4.77a	4.80b	4.73	4.72	3.90 .000
5. Sex satisfaction: Pet	4.07abcd	4.31a	4.49b	4.43c	4.44d	11.49 .000
6. Sex satisfaction: Inter.	3.09bcd	2.97efg	4.26beh	3.55efhi	4.03dgi	53.95 .000
7. Number partners: nce	-	.88adf	1.43de	1.58ef	1.85abc	42.32 .000
8. Beck Depression	6.04eg	6.34bfh	7.50cef	7.63dgh	8.05abcd	28.04 .000
9. State-Trait Anxiety	37.80acde	40.72bc	41.24d	41.48e	43.10ab	15.13 .000

Means with subscripts in common are significantly different (p<.05).

**TABLE 31**  
**SEXUAL VICTIMIZATION OF COLLEGE WOMEN:**  
**POSTASSAULT IMPACT**

Variable	Percent Responding Yes				$\chi^2$	p
	Sexual Contact	Sexual Coercion	Attempted Rape	Rape		
1. Thought about suicide	12	20	15	29	42.33	.000
2. (Victimization the cause)	6	5	5	14 <sup>15</sup>	31.12	.000
3. Felt you should have therapy	10	18	16	41	120.93	.000
4. Sought psychotherapy	14	18	18	31 <sup>12</sup>	41.39	.000
5. (Victimization the cause)	10	6	9	19	10.11	.000
6. Took self-defense after	12	14	13	22	21.85	.000
7. Victimization changed you	57	73	65	82	62.58	.000
8. As bad as other life traumas	22	33	46	64	49.77	.000

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other major life traumas they have experienced such as relationship breakups, illness, and deaths; 64% rated the rape as traumatic as these other life events. Most rape victims (82%) believe that the experience has permanently changed their behavior and feelings. Currently, rape victims indicate that they are "somewhat" able to get close to others ( $M = 3.46$ ), to trust others ( $M = 3.44$ ), and to maintain relationships ( $M = 3.54$ ). They find kissing or hugging very satisfying ( $M = 4.72$ ), and sexual intercourse "somewhat" satisfying ( $M = 4.03$ ). Scores on the Trait Anxiety Scale ( $M = 43.10$ ) are above the college female mean ( $M = 38.30$ ) but below the psychiatric population mean ( $M = 46.60$ ). Scores on the Beck Depression Inventory ( $M = 8.05$ ) are significantly below the cutoff for clinical depression (16).

### Differentiation of Sexual Aggression/Victimization Groups

A third goal of the study was to attempt to differentiate sexually victimized women from nonvictimized women and sexually aggressive men from nonsexually aggressive men in terms of early experiences, psychological characteristics, and current behavior. This goal was addressed through the use of MANOVA/MANCOVA with planned comparisons between the sexual victimization/aggression groups and the nonsexually victimized/aggressive comparison samples.

#### Victimized Versus Nonvictimized Women

The adjusted means for the groups of women on the reduced sets of variables are found in Table 32. The results of planned comparisons of sexually victimized and nonsexually victimized women on early experiences are found in Table 33, the results of planned comparisons on psychological characteristics are found in Table 34, the results of planned comparisons on current behavior are found in Table 35, and the results of planned comparisons on assault characteristics are found in Table 36.

Rape Victims Vs. Nonvictims. Rape victims were significantly differentiated from nonvictimized women by early experience variables (Pillais approximate multivariate  $F = 57.29$ ,  $p = .000$ ). Rape victims were significantly different from nonvictimized women on Family Stability ( $F = 8.09$ ,  $p = .004$ ), Family Violence ( $F = 30.28$ ,  $p = .000$ ), Early Sexual Experience and Abuse ( $F = 268.83$ ,  $p = .047$ ), Suicide History ( $F = 18.4$ ,  $p = .000$ ) and Treatment History ( $F = 3.95$ ,  $p = .047$ ). Controlling for early experiences, rape victims could be differentiated from nonvictimized women by psychological characteristics (Pillais approximate multivariate  $F = 6.35$ ,  $p = .000$ ). The groups differed in Rape Supportive Beliefs ( $F = 9.38$ ,  $p = .002$ ) and in Androgeny ( $F = 6.34$ ,  $p = .012$ ). Whereas, on most variables the rape victims scored significantly higher than nonvictims, on Rape Supportive Beliefs they obtained a lower score. The groups did not differ in Femininity. With early experiences and psychological characteristics controlled, rape victims differed from nonvictimized women in current behavior (Pillais approximate multivariate  $F = 31.48$ ,  $p = .000$ ). The groups differed in Alcohol/Drug Use ( $F = 29.47$ ,  $p = .000$ ) and Sexual Behavior ( $F = 37.19$ ,  $p = .000$ ).

Attempted Rape Victims Vs. Nonvictims. Attempted rape victims could be differentiated from nonsexually victimized women on early experience variables (Pillais Approximate  $F = 11.11$ ,  $p = .000$ ). Attempted rape victims were significantly different on Family Violence ( $F = 9.17$ ,  $p = .002$ ) and Early Sexual Abuse and Experiences ( $F = 50.98$ ,  $p = .000$ ). They did not differ from sexually nonvictimized women on Family Stability, Suicide History, or Treatment History. Controlling for early experiences, attempted rape victims could not be differentiated from

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TABLE 32

ADJUSTED MEANS USED IN PLANNED COMPARISONS OF  
GROUPS OF WOMEN<sup>1</sup>

Variable	Nonvictims	Sexual Contact	Sexual Coercion	Attempted Rape	Rape
Stability	6.61	6.55	6.69	6.72	6.83
Violence	4.37	4.62	4.63	4.77	5.04
Early Sex Abuse	2.47	2.86	3.45	3.15	3.93
Treatment History	1.15	1.12	1.18	1.17	1.25
Suicide History	1.12	1.06	1.15	1.12	1.16
Rape Beliefs	77.77	75.51	75.52	77.05	72.91
Femininity	25.91	26.28	25.66	26.00	26.15
Androgeny	13.40	12.52	12.84	12.81	12.82
Alcohol Use	6.86	7.43	7.90	7.76	7.92
Sex Behavior	16.92	16.93	19.02	17.92	19.12
Context	-	16.70	19.21	16.19	16.13
Severity	-	44.19	44.52	46.61	53.06
Support	-	6.87	6.83	7.16	7.70

<sup>1</sup> These means are adjusted for the nonindependence of multiple comparisons. Group differences in adjusted means are smaller than between the actual means.

TABLE 33

PLANNED COMPARISONS OF THE EARLY EXPERIENCES OF WOMEN

Contrast	Multivariate Test		Univariate Tests		
	Approximate F	p	Variable	F	p
<b>Rape vs. Sexually Nonvictimized</b>	57.29	.000	Family Stability	8.09	.004
			Family Violence	30.28	.000
			Early Sexual Abuse	268.83	.000
			Suicidal Thoughts	18.04	.000
			Treatment History	3.95	.047
<b>Attempted Rape vs. Nonvictimized</b>	11.11	.000	Family Stability	1.67	.196
			Family Violence	9.17	.002
			Early Sexual Abuse	50.98	.000
			Suicidal Thoughts	.59	.441
			Treatment History	.07	.782
<b>Sexually Coercive vs. Nonvictimized</b>	20.81	.000	Family Stability	.91	.341
			Family Violence	3.86	.050
			Early Sexual Abuse	103.47	.000
			Suicidal Thoughts	1.58	.209
			Treatment History	1.44	.231
<b>Sexual Contact vs. Nonvictimized</b>	7.32	.000	Family Stability	.50	.480
			Family Violence	4.33	.038
			Early Sexual Abuse	19.20	.000
			Suicidal Thoughts	1.60	.207
			Treatment History	8.63	.003

PLANNED COMPARISONS OF THE EARLY EXPERIENCES OF WOMEN  
(Continued)

Contrast	Multivariate Test		Univariate Tests		
	Approximate F	p	Variable	F	p
Rape vs. Sexual Coercion	7.09	.000	Family Stability	2.86	.091
			Family Violence	9.43	.002
			Early Sexual Abuse	25.56	.000
			Suicidal Thoughts	7.30	.007
			Treatment History	.43	.512
Attempted Rape vs. Sexual Coercion	2.30	.043	Family Stability	.09	.759
			Family Violence	.90	.342
			Early Sexual Abuse	8.90	.003
			Suicidal Thoughts	.22	.646
			Treatment History	.80	.370
Sexual Contact vs. Sexual Coercion	10.67	.000	Family Stability	2.59	.108
			Family Violence	.01	.987
			Early Sexual Abuse	37.01	.000
			Suicidal Thoughts	5.96	.015
			Treatment History	16.07	.000

TABLE 34

PLANNED COMPARISONS OF THE PSYCHOLOGICAL CHARACTERISTICS  
OF WOMEN

Contrast	Multivariate Test		Univariate Tests		
	Approx. F	p	Variable	F	p
Rape vs. Sexually Nonvictimized	6.35	.000	Rape Supportive Beliefs	9.38	.002
			Femininity	1.90	.168
			Androgeny	6.34	.012
Attempted Rape vs. Nonvictimized	2.02	.109	Rape Supportive Beliefs	.46	.499
			Femininity	.37	.541
			Androgeny	4.90	.027
Sexually Coercive vs. Nonvictimized	4.58	.003	Rape Supportive Beliefs	4.67	.031
			Femininity	.19	.663
			Androgeny	5.13	.024
Sexual Contact vs. Nonvictimized	4.89	.002	Rape Supportive Beliefs	1.23	.267
			Femininity	2.99	.084
			Androgeny	11.23	.001
Rape vs. Sexual Coercion	1.21	.305	Rape Supportive Beliefs	.69	.405
			Femininity	3.10	.079
			Androgeny	.01	.936
Attempted Rape vs. Sexual Coercion	1.28	.278	Rape Supportive Beliefs	2.19	.139
			Femininity	1.02	.314
			Androgeny	.01	.966
Sexual Contact vs. Sexual Coercion	2.09	.100	Rape Supportive Beliefs	1.56	.212
			Femininity	4.25	.039
			Androgeny	.86	.354

TABLE 35

PLANNED COMPARISONS OF THE CURRENT BEHAVIOR OF WOMEN

Contrast	Multivariate Test		Univariate Tests		
	Approximate F	p	Variable	F	p
Rape vs. Sexually Nonvictimized	31.48	.000	Alcohol/Drug Use	29.47	.000
			Sexual Behavior	37.19	.000
Attempted Rape vs. Nonvictimized	14.02	.000	Alcohol/Drug Use	22.00	.000
			Sexual Behavior	7.46	.006
Sexually Coercive vs. Nonvictimized	34.39	.000	Alcohol/Drug Use	26.39	.000
			Sexual Behavior	46.29	.000
Sexual Contact vs. Nonvictimized	5.91	.003	Alcohol/Drug Use	9.27	.002
			Sexual Behavior	2.01	.156
Rape vs. Sexual Coercion	.42	.655	Alcohol/Drug Use	.03	.854
			Sexual Behavior	.81	.368
Attempted Rape vs. Sexual Coercion	9.45	.000	Alcohol/Drug Use	.42	.516
			Sexual Behavior	18.57	.000
Sexual Contact vs. Sexual Coercion	41.15	.000	Alcohol/Drug Use	6.30	.012
			Sexual Behavior	76.61	.000

TABLE 36

PLANNED COMPARISONS OF THE ASSAULT CHARACTERISTICS  
OF SEXUALLY VICTIMIZED WOMEN

Contrast	Multivariate Test		Univariate Tests		
	Approximate F	p	Variable	F	p
Rape vs. Sexual Coercion	116.32	.000	Context	94.78	.000
			Severity	284.87	.000
			Support	28.91	.000
Attempted Rape vs. Sexual Coercion	31.74	.000	Context	89.92	.000
			Severity	16.71	.000
			Support	7.81	.005
Sexual Contact vs. Sexual Coercion	21.09	.000	Context	60.54	.000
			Severity	.15	.703
			Support	2.50	.114

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nonvictimized women by psychological characteristics (Pillais approximate multivariate  $F = 2.02$ ,  $p = .109$ ). With early experience controlled, attempted rape victims could be differentiated from nonsexually victimized women by current behavior variables (Pillais approximate multivariate  $F = 14.02$ ,  $p = .000$ ). The groups differed on Alcohol/Drug Use ( $F = 22.00$ ,  $p = .000$ ) and Sexual Behavior ( $F = 7.46$ ,  $p = .006$ ).

Sexual Coercion Victims Vs. Nonvictims. Victims of sexual coercion could be differentiated from sexually nonvictimized women on early experience variables (Pillais approximate  $F = 20.81$ ,  $p = .000$ ). They differed on Family Violence ( $F = 3.86$ ,  $p = .050$ ) and Early Sexual Abuse and Experiences ( $F = 103.47$ ,  $p = .000$ ). They did not differ on Family Stability, Suicidal Thoughts or Treatment History. Controlling for early experiences, victims of sexual coercion could be differentiated from nonvictimized women on psychological characteristics (Pillais approximate multivariate  $F = 4.58$ ,  $p = .003$ ). The groups differed in Rape Supportive Beliefs ( $F = 4.67$ ,  $p = .031$ ) and Androgeny ( $F = 5.13$ ,  $p = .024$ ). They did not differ in Femininity. With early experiences and psychological characteristics controlled, victims of sexual coercion could be differentiated from nonsexually victimized women on current behavior variables (Pillais approximate multivariate  $F = 34.39$ ,  $p = .000$ ). The groups differed on Alcohol/Drug Use ( $F = 26.39$ ,  $p = .000$ ) and Sexual Behavior ( $F = 46.29$ ,  $p = .000$ ).

Sexual Contact Victims Vs. Nonvictims. Victims of sexual contact could be differentiated from sexually nonvictimized women by early experience variables (Pillais approximate  $F = 7.32$ ,  $p = .000$ ). They differed in Family Violence ( $F = 4.33$ ,  $p = .038$ ), Early Sexual Abuse and Experiences ( $F = 19.20$ ,  $p = .027$ ), and Treatment History ( $F = 8.63$ ,  $p = .003$ ). They did not differ in Family Stability or Suicide History. Controlling for early experiences, victims of sexual contact could be differentiated from nonvictimized women on psychological characteristics (Pillais approximate multivariate  $F = 4.89$ ,  $p = .002$ ). The groups differed in Androgeny ( $F = 11.23$ ,  $p = .001$ ). They did not differ in Rape Supportive Beliefs or Femininity. With early experiences and psychological characteristics controlled, victims of sexual contact could be differentiated from nonsexually victimized women by current behavior variables (Pillais approximate multivariate  $F = 5.91$ ,  $p = .003$ ). The groups differed on Alcohol/Drug Use ( $F = 9.27$ ,  $p = .002$ ). They did not differ in sexual behavior.

Rape Victims Vs. Sexual Coercion Victims. Rape victims could be differentiated from victims of sexual coercion on early experience variables (Pillais approximate multivariate  $F = 7.09$ ,  $p = .000$ ). They differed in Family Violence ( $F = 9.43$ ,  $p = .002$ ), Suicide History ( $F = 7.30$ ,  $p = .007$ ), and Early Sexual Abuse and Experience ( $F = 25.56$ ,  $p = .000$ ). They did not differ in Family Stability or Treatment History. Controlling for early experiences, rape victims were not different from victims of sexual coercion on psychological characteristics. With early experiences controlled, rape victims could not be differentiated from victims of sexual coercion by current behavior variables (Pillais approximate multivariate  $F = .42$ ,  $p = .655$ ). With all earlier variables controlled, rape victims could be differentiated from victims of sexual coercion by assault characteristics (Pillais approximate multivariate  $F = 116.32$ ,  $p = .000$ ). The assaults experienced by each group differed in Context ( $F = 94.78$ ,  $p = .000$ ), in Severity ( $F = 284.87$ ,  $p = .000$ ), and in postassault Support ( $F = 28.91$ ,  $p = .000$ ).

Attempted Rape Victims Vs. Sexual Coercion Victims. Attempted rape victims could be differentiated from victims of sexual coercion on early experience variables (Pillais approximate multivariate  $F = 2.30$ ,  $p = .043$ ). They differed in Early Sexual Abuse and

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Experiences ( $F = 8.90, p = .003$ ). They did not differ in Family Stability, Family Violence, Suicide History or Treatment History. Controlling for early experience, attempted rape victims were not different from victims of sexual coercion on psychological variables. With early experiences controlled, victims of attempted rape could be differentiated from victims of sexual coercion on current behavior variables (Pillais approximate multivariate  $F = 9.45, p = .000$ ). The groups differed on Sexual Behavior ( $F = 18.57, p = .000$ ). They did not differ in Alcohol/Drug Use. With all earlier variables controlled, attempted rape victims could be differentiated from victims of sexual coercion by the characteristics of the assault they experienced (Pillais approximate Multivariate  $F = 31.74, p = .000$ ). The assaults experienced by each group differed in Context ( $F = 89.92, p = .000$ ), Severity ( $F = 16.71, p = .000$ ), and in postassault Support ( $F = 28.91, p = .000$ ).

Sexual Contact Victims Versus Sexual Coercion Victims. Victims of sexual contact could be differentiated from victims of sexual coercion on early experience variables (Pillais approximate multivariate  $F = 10.67, p = .000$ ). They differed in Early Sexual Abuse and Experiences ( $F = 37.01, p = .000$ ), Suicide History ( $F = 5.96, p = .015$ ), and Treatment History ( $F = 16.07, p = .000$ ). They did not differ in Family Stability or Family Violence. Controlling for early experiences, victims of sexual contact could not be differentiated from victims of sexual coercion on psychological variables. With early experiences controlled, victims of sexual contact could be differentiated from victims of sexual coercion on current behavior variables (Pillais approximate multivariate  $F = 41.15, p = .000$ ). The groups differed on Alcohol/Drug Use ( $F = 6.30, p = .012$ ) and Sexual Behavior ( $F = 76.61, p = .000$ ). With all earlier variables controlled, victims of sexual contact could be differentiated from victims of sexual coercion by assault characteristics (Pillais approximate Multivariate  $F = 21.09, p = .000$ ). The assaults experienced by each group differed in Context ( $F = 60.54, p = .000$ ). They did not differ in Severity or in postassault Support.

#### Sexually Aggressive Versus Sexually Nonaggressive Men

The adjusted means for the groups of men on the reduced sets of variables are found in Table 37. The results of planned comparisons of sexually aggressive and nonsexually aggressive men on early experiences are found in Table 38, the results of planned comparisons on psychological characteristics are found in Table 39, the results of planned comparisons on current behavior are found in Table 40, and the results of planned comparisons on assault characteristics are found in Table 41.

Rapists Vs. Sexually Nonaggressive Men. Rapists were significantly differentiated from sexually nonaggressive men by early experience variables (Pillais approximate multivariate  $F = 27.68, p = .000$ ). The groups differed on early experience variables including Family Violence ( $F = 21.86, p = .000$ ), and Early Sexual Experience and Abuse ( $F = 36.63, p = .000$ ). Controlling for early experiences, rapists could be differentiated from sexually nonaggressive men by psychological characteristics (Pillais approximate Multivariate  $F = 5.21, p = .000$ ). The groups differed in Rape Supportive Beliefs ( $F = 20.86, p = .000$ ) and Hostility toward Women ( $F = 14.23, p = .000$ ). They did not differ in MMPI Scale 4, Masculinity, or Androgeny. With early experiences and psychological characteristics controlled, rapists differed from sexually nonaggressive men in current behavior (Pillais approximate multivariate  $F = 25.47, p = .000$ ). The groups differed in Releasers ( $F = 37.88, p = .000$ ) and Sexual Behavior ( $F = 14.65, p = .000$ ).

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Attempted Rapists Vs. Sexually Nonaggressive Men. Attempted rapists were significantly differentiated from sexually nonaggressive men by early experience variables (Pillais approximate multivariate  $F = 13.62$ ,  $p = .000$ ). The groups differed on early experience variables including Family Violence ( $F = 9.95$ ,  $p = .002$ ), and Early Sexual Experience and Abuse ( $F = 18.81$ ,  $p = .000$ ). Controlling for early experiences, rapists could be differentiated from sexually nonaggressive men by psychological characteristics (Pillais approximate Multivariate  $F = 4.43$ ,  $p = .001$ ). The groups differed in Rape Supportive Beliefs ( $F = 10.82$ ,  $p = .001$ ), Hostility toward Women ( $F = 18.18$ ,  $p = .000$ ), MMPI Scale 4 ( $F = 6.04$ ,  $p = .014$ ). They did not differ in Masculinity, or Androgeny. With early experiences and psychological characteristics controlled, attempted rapists differed from sexually nonaggressive men in current behavior (Pillais approximate multivariate  $F = 8.14$ ,  $p = .000$ ). The groups differed in Releasers ( $F = 15.14$ ,  $p = .000$ ) but not in Sexual Behavior.

Sexually Coercive Men Vs. Sexually Nonaggressive Men. Sexually coercive men were significantly differentiated from sexually nonaggressive men (Pillais approximate multivariate  $F = 22.35$ ,  $p = .000$ ) on early experience variables. The groups differed on Early Sexual Experience and Abuse ( $F = 43.28$ ,  $p = .000$ ) but not on Family Violence. Controlling for early experiences, sexually coercive men could be differentiated from sexually nonaggressive men by psychological characteristics (Pillais approximate Multivariate  $F = 2.22$ ,  $p = .050$ ). The groups differed in Hostility to Women ( $F = 7.95$ ,  $p = .000$ ) and MMPI Scale 4 ( $F = 4.20$ ,  $p = .041$ ). They did not differ on Rape Supportive Beliefs, Masculinity, or Androgeny. With early experiences and psychological characteristics controlled, sexually coercive men differed from sexually nonaggressive men in current behavior (Pillais approximate multivariate  $F = 18.84$ ,  $p = .000$ ). The groups differed in Releasers ( $F = 12.26$ ,  $p = .000$ ) and Sexual Behavior ( $F = 26.64$ ,  $p = .000$ ).

Sexual Contact Vs. Sexually Nonaggressive Men. Men who had obtained sexual contact exploitatively could be significantly differentiated from nonsexually aggressive men on early experience variables (Pillais approximate multivariate  $F = 4.96$ ,  $p = .007$ ). The groups differed on early experience variables including Family Violence ( $F = 6.20$ ,  $p = .013$ ), and Early Sexual Experience and Abuse ( $F = 4.30$ ,  $p = .038$ ). Controlling for early experiences, sexual contact could be differentiated from nonaggression by psychological characteristics (Pillais approximate Multivariate  $F = 3.02$ ,  $p = .011$ ). The groups differed in MMPI Scale 4 ( $F = 4.53$ ,  $p = .034$ ) and Hostility toward Women ( $F = 13.21$ ,  $p = .000$ ). They did not differ in Rape Supportive Beliefs, Masculinity, or Androgeny. With early experiences and psychological characteristics controlled, sexual contact differed from nonaggression in current behavior (Pillais approximate multivariate  $F = 4.64$ ,  $p = .010$ ). The groups differed in Releasers ( $F = 4.54$ ,  $p = .001$ ) and Sexual Behavior ( $F = 5.05$ ,  $p = .025$ ).

Rapists Vs. Sexually Coercive Men. Rapists were significantly differentiated from sexually coercive men on early experience variables (Pillais approximate multivariate  $F = 4.60$ ,  $p = .010$ ). The groups differed on Family Violence ( $F = 9.22$ ,  $p = .002$ ) but not on Early Sexual Experience and Abuse. Controlling for early experiences, rapists could be differentiated from

**TABLE 37**  
**ADJUSTED MEANS USED IN PLANNED COMPARISONS OF**  
**GROUPS OF MEN<sup>1</sup>**

Variable	Nonaggressive	Sexual Contact	Sexual Coercion	Attempted Rape	Rape
Violence	4.74	5.23	5.08	5.61	5.88
Early Sex Abuse	2.89	3.15	3.80	3.66	3.83
MMPI Scale 4	7.85	8.76	8.85	9.37	9.17
Hostility/Women	6.97	9.00	8.78	10.41	9.97
Rape Beliefs	83.75	86.68	84.86	92.02	94.70
Masculinity	22.97	22.95	23.55	22.80	23.11
Androgeny	15.37	14.60	15.53	15.24	15.31
Releasers	14.10	15.05	15.89	16.50	17.49
Sex Behavior	17.09	17.72	19.08	17.72	18.77
Context	-	24.92	25.91	23.56	24.85
Severity	-	25.44	26.42	26.37	27.33

<sup>1</sup> These means are adjusted for the nonindependence of multiple comparisons. Group differences in adjusted means are smaller than between the actual means.

TABLE 38

PLANNED COMPARISONS OF THE EARLY EXPERIENCES OF MEN

Contrast	Multivariate Test		Univariate Tests		
	Approximate F	p	Variable	F	p
Rape vs. Sexually Nonaggressive	27.68	.000	Family Violence	21.86	.000
			Early Sexual Abuse	36.63	.000
Attempted Rape vs. Nonaggressive	13.62	.000	Family Violence	9.95	.002
			Early Sexual Abuse	18.81	.000
Sexually Coercive vs. Nonaggressive	22.35	.000	Family Violence	2.52	.113
			Early Sexual Abuse	43.28	.000
Sexual Contact vs. Nonaggressive	4.96	.007	Family Violence	6.20	.013
			Early Sexual Abuse	4.30	.038
Rape vs. Sexual Coercion	4.60	.010	Family Violence	9.22	.002
			Early Sexual Abuse	.05	.831
Attempted Rape vs. Sexual Coercion	2.01	.135	Family Violence	3.17	.076
			Early Sexual Abuse	.68	.412
Sexual Contact vs. Sexual Coercion	12.72	.000	Family Violence	.50	.481
			Early Sexual Abuse	24.51	.000

TABLE 39

PLANNED COMPARISONS: PSYCHOLOGICAL CHARACTERISTICS OF MEN

Contrast	Multivariate Test		Univariate Tests		
	Approximate F	p	Variable	F	p
Rape vs. Sexually Nonaggressive	5.21	.000	MMPI Scale 4	3.78	.052
			Hostility toward Women	14.23	.000
			Rape Supportive Beliefs	20.86	.000
			Masculinity	.01	.933
			Androgeny	.07	.788
Attempted Rape vs. Nonaggressive	4.43	.001	MMPI Scale 4	6.04	.014
			Hostility toward Women	18.18	.000
			Rape Supportive Beliefs	10.82	.001
			Masculinity	.22	.641
			Androgeny	4.44	.036
Sexually Coercive vs. Nonaggressive	2.22	.050	MMPI Scale 4	4.20	.041
			Hostility toward Women	7.95	.005
			Rape Supportive Beliefs	.60	.438
			Masculinity	.76	.382
			Androgeny	.01	.985
Sexual Contact vs. Nonaggressive	3.02	.011	MMPI Scale 4	4.53	.034
			Hostility toward Women	13.21	.000
			Rape Supportive Beliefs	2.23	.135
			Masculinity	.01	.950
			Androgeny	3.68	.056
Rape vs. Sexual Coercion	3.02	.011	MMPI Scale 4	.04	.847
			Hostility toward Women	1.65	.200
			Rape Supportive Beliefs	14.80	.000
			Masculinity	.41	.523
			Androgeny	.07	.801
Attempted Rape vs. Sexual Coercion	2.00	.078	MMPI Scale 4	.69	.408
			Hostility toward Women	3.75	.053
			Rape Supportive Beliefs	6.98	.008
			Masculinity	1.27	.260
			Androgeny	4.12	.002
Sexual Coercion vs. Sexual Contact	.71	.613	MMPI Scale 4	.04	.834
			Hostility toward Women	.11	.745
			Rape Supportive Beliefs	.31	.576
			Masculinity	1.02	.311
			Androgeny	2.86	.091

TABLE 40

PLANNED COMPARISONS OF THE CURRENT BEHAVIOR OF MEN

Contrast	Multivariate Test		Univariate Tests		
	Approximate F	p	Variable	F	p
<b>Rape vs. Sexually Nonaggressive</b>	25.47	.000	Releasers	37.68	.000
			Sexual Behavior	14.65	.000
<b>Attempted Rape vs. Nonaggressive</b>	8.14	.000	Releasers	15.14	.000
			Sexual Behavior	1.47	.226
<b>Sexually Coercive vs. Nonaggressive</b>	18.84	.000	Releasers	12.26	.000
			Sexual Behavior	26.64	.000
<b>Sexual Contact vs. Nonaggressive</b>	4.64	.010	Releasers	4.54	.033
			Sexual Behavior	5.05	.025
<b>Rape vs. Sexual Coercion</b>	5.49	.004	Releasers	10.70	.001
			Sexual Behavior	.41	.521
<b>Attempted Rape vs. Sexual Coercion</b>	5.28	.005	Releasers	1.49	.222
			Sexual Behavior	9.29	.002
<b>Sexual Contact vs. Sexual Coercion</b>	9.73	.000	Releasers	3.96	.047
			Sexual Behavior	15.09	.000

TABLE 41

PLANNED COMPARISONS: ASSAULT CHARACTERISTICS OF  
SEXUALLY AGGRESSIVE MEN

Contrast	Multivariate Test		Univariate Tests	
	Approx. F	p	Variable	F p
Rape vs. Sexual Coercion	5.43	.005	Context	5.67 .016
			Severity	4.05 .045
Attempted Rape vs. Sexual Coercion	6.13	.002	Context	12.29 .000
			Severity	.09 .761
Sexual Contact vs. Sexual Coercion	5.79	.003	Context	4.03 .045
			Severity	8.52 .004

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sexually coercive men by psychological characteristics (Pillais approximate Multivariate  $F = 3.02$ ,  $p = .011$ ). The groups differed in Rape Supportive Beliefs ( $F = 14.80$ ,  $p = .000$ ). They did not differ in MMPI Scale 4, Hostility toward Women, Masculinity, or Androgyny. With early experiences and psychological characteristics controlled, rapists differed from sexually coercive men in current behavior (Pillais approximate multivariate  $F = 5.49$ ,  $p = .004$ ). The groups differed in Releasers ( $F = 10.70$ ,  $p = .001$ ) but not in Sexual Behavior. With all earlier variables controlled, rapists could be differentiated from sexually coercive men by assault characteristics (Pillais approximate Multivariate  $F = 5.43$ ,  $p = .005$ ). The assaults by each group of men differed in Context ( $F = 5.87$ ,  $p = .016$ ) and in the Severity ( $F = 4.05$ ,  $p = .045$ ).

Attempted Rapists Vs. Sexually Coercive Men. Attempted rapists could not be differentiated from sexually coercive men by early experiences (Pillais approximate multivariate  $F = 2.01$ ,  $p = .135$ ). The groups also did not differ in psychological characteristics (Pillais approximate Multivariate  $F = 2.00$ ,  $p = .078$ ). The groups did differ in current behavior however (Pillais approximate multivariate  $F = 5.28$ ,  $p = .005$ ). The groups differed in Sexual Behavior ( $F = 9.29$ ,  $p = .002$ ) but not in releasers. With all earlier variables controlled, attempted rapists could be differentiated from sexually coercive men by assault characteristics (Pillais approximate Multivariate  $F = 6.13$ ,  $p = .002$ ). The assaults by each group of men differed in Context ( $F = 12.29$ ,  $p = .000$ ) but not in Severity.

Sexual Contact Vs. Sexually Coercive Men. Sexual Contact could be significantly differentiated from sexual coercion on the basis of early experiences (Pillais approximate multivariate  $F = 12.72$ ,  $p = .000$ ). The groups differed on Early Sexual Experience and Abuse ( $F = 24.51$ ,  $p = .000$ ). They did not differ on Family Violence. Controlling for early experiences, sexual contact could not be differentiated from sexual coercion by psychological characteristics. With early experiences controlled, sexual contact differed from sexual coercion in current behavior (Pillais approximate multivariate  $F = 9.73$ ,  $p = .000$ ). The groups differed in Releasers ( $F = 3.96$ ,  $p = .000$ ) and Sexual Behavior ( $F = 15.09$ ,  $p = .000$ ). With all earlier variables controlled, men who obtained sexual contact exploitatively could be differentiated from sexually coercive men by assault characteristics (Pillais approximate Multivariate  $F = 5.79$ ,  $p = .003$ ). The assaults by each group of men differed in Context ( $F = 4.03$ ,  $p = .045$ ) and in the Severity ( $F = 8.52$ ,  $p = .004$ ).

### **Sexual Victimization: Predicting its Impact**

The sets of early experience, psychological, current behavior, and assault variables were also used as predictors to study the impact of sexual victimization as reflected by the victim's label for her experience, the Beck Depression Inventory score, and the State-Trait Anxiety score. In the analyses, hierarchical multiple regression was used. Variables were ordered in time and entered in steps. Those that significantly predicted the criterion were entered on the subsequent step before the next set of variables was stepped in. Thus, it was possible to examine the incremental contribution of each set of variables with the effects of earlier variables controlled.

The item that asked victims about their label for the assault was a continuous item. Therefore, it was possible to use multiple regression to predict it. This analysis was confined to the 477 rape victims (of whom 27% considered their experience definitely rape, 16% who

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thought it was a crime but not rape, 28% who thought it was a serious miscommunication, and 14% who did not feel victimized by the experience). There were a small number of women whose experiences did not legally qualify as rape who nevertheless viewed their experience as rape including 1% of the victims of sexual contact, 3% of the victims of sexual coercion, and 3% of the victims of attempted rape. They were not used in the analysis. The analyses to predict Beck Depression score and Trait Anxiety score included all women who had been victimized to any degree (N = 1,721).

#### Victim Conceptualization of the Experience

All early experience variables except Family Violence and Suicide History significantly predict a victim's label for rape ( $F = 12.08, p = .000$ ). Together the early experience variables account for 6.9% of the variance in victim label. With early experiences controlled, the psychological variable Rape Supportive Beliefs significantly predicts a victim's label for rape ( $F = 14.57, p = .000$ ). The psychological variables themselves account for 3.9% of the variance so that together with early experience variables, 10.8% of the variance is accounted for. With earlier variables controlled, current behavior variables significantly predict victim label ( $F = 14.08, p = .000$ ). Current behavior variables add 2% of the variance raising the total variance accounted for to 12.8%. With all earlier variables entered first, assault characteristics significantly predict a victim's label for her rape ( $F = 33.34, p = .000$ ). The assault characteristics account for 23% of the variance which results in a total of 35.8% of the variance accounted for by 8 variables.

#### State Anxiety Score

The State Anxiety score can be significantly predicted by the early experience variables of Family Violence and Suicide History ( $F = 58.55, p = .000$ ). Together these two variables account for 6.5 % of the variance in anxiety. With early experiences controlled, psychological characteristics significantly predict anxiety ( $F = 163.70, p = .000$ ). The psychological variables themselves account for 26.5% of the variance so that together with early experience variables, 33% of the variance in anxiety score is accounted for. With earlier variables controlled, current behavior variables significantly predict anxiety ( $F = 120.18, p = .000$ ). Current behavior variables add 3.1% of the variance raising the total variance accounted for to 33.1%. With all earlier variables entered first, the assault characteristics of Support and Severity significantly predict a victim's label for her rape ( $F = 115.95, p = .000$ ). The assault characteristics account for 2.6% of the variance which results in a total of 35.7% of the variance accounted for by 9 variables.

#### Beck Depression Score

All early experience variables except Treatment History significantly predict a victim's depression score ( $F = 41.21, p = .000$ ). Together the early experience variables account for 8.9% of the variance in victim label. With early experiences controlled, psychological characteristics significantly predict depression score ( $F = 60.26, p = .000$ ). The psychological variables themselves account for 11.2% of the variance so that together with early experience variables, 20.1% of the variance is accounted for. With earlier variables controlled, current behavior variables significantly predict depression ( $F = 55.00, p = .000$ ). Current behavior variables add .07% of the variance raising the total variance accounted for to 20.6%. With all

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earlier variables entered first, assault characteristics significantly predict depression score ( $F = 48.70$ ,  $p = .000$ ). The assault characteristics account for .03% of the variance which results in a total of 21.1% of the variance accounted for by 12 variables.

TABLE 42

PREDICTORS OF THE LABEL CHOSEN FOR A RAPE EXPERIENCE

*Order*

Predictor Variables	Beta	T	p	Multiple R	R <sup>2</sup>
<b>Step One: Early Experiences</b>					
Early Sexual Abuse and Experiences	.176	3.964	.001		
Family Stability	.153	3.459	.001		
Psychotherapy history	-.095	-2.168	.031		
Family Violence	.093	1.921	.055		
Past Suicidal Thoughts	.073	1.628	.104		
				.264	.069
<b>Step Two: Psychological Characteristics</b>					
Rape Supportive Attitudes	-.196	-4.53	.000		
Androgyny	.049	1.146	.253		
Femininity	.028	.663	.508		
				.329	.108
<b>Step Three: Current Behavior</b>					
Alcohol/Drug use	-.142	-3.305	.001		
Sexual Values	.015	.330	.741		
				.357	.128
<b>Step Four: Assault Characteristics</b>					
Context	-.136	-3.66	.000		
Severity	.396	10.02	.000		
Support	.181	4.53	.000		
				.598	.358

TABLE 43

PREDICTORS OF STAIT-TRAIT ANXIETY SCORE

Predictor Variables	Beta	T	p	Multiple R	R <sup>2</sup>
<b>Step One: Early Experiences</b>					
Family Violence	.203	8.46	.000		
Past Suicidal Thoughts	.121	5.08	.000		
Family Stability	.028	1.17	.243		
Early Sexual Abuse and Experience	-.008	-.364	.716		
Psychotherapy History	-.010	-.438	.661		
				.255	.065
<b>Step Two: Psychological Characteristics</b>					
Femininity	-.159	-.767	.000		
Rape Beliefs	.106	5.18	.000		
Androgeny	-.496	-23.52	.000		
				.573	.330
<b>Step Three: Current Behavior</b>					
Alcohol/Drug Use	.062	3.12	.002		
Sexual Values	-.053	-2.60	.009		
				.576	.331
<b>Step Four: Assault Characteristics</b>					
Support	.145	6.86	.000		
Severity	.045	2.15	.000		
Context	-.002	-.117	.906		
				.597	.357

**TABLE 44**

**PREDICTORS OF BECK DEPRESSION INVENTORY SCORE**

Predictor Variables	Beta	T	p	Multiple R	R <sup>2</sup>
<b>Step One: Early Experiences</b>					
Past Suicidal Thoughts	.227	9.54	.000		
Family Stability	.055	2.28	.022		
Early Sexual Abuse and Experience	.066	2.82	.005		
Family Violence	.104	4.20	.000		
Treatment History	.001	.029	.977	.299	.089
<b>Step Two: Psychological Characteristics</b>					
Femininity	.096	4.21	.000		
Rape Beliefs	.117	5.20	.000		
Androgeny	-.302	-13.09	.011	.448	.201
<b>Step Three: Current Behavior</b>					
Alcohol/Drug Use	.056	2.57	.010		
Sexual Values	-.092	-3.96	.000	.459	.208
<b>Step Four: Assault Characteristics</b>					
Context	.054	2.55	.011		
Severity	.094	4.14	.000		
Support	.190	8.27	.000	.509	.211

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## DISCUSSION AND CONCLUSIONS

Although difficulties were encountered with institutional resistance to the study, at the level of individual subjects the participation rate was almost 100%. The sampling procedures used in the study were successful in yielding a selection of subjects who represented quite well the U.S. higher education population. The major deficiency in the sample was the underrepresentation of the West. However, examination of weighted and unweighted data revealed that the impact of the underrepresentation on estimates of prevalence was minimal.

The procedures resulted in extensive data regarding early experiences, sexual experiences, psychological characteristics, and current behavior from 6,104 persons. These data were analysed in an attempt to address the four major goals that the study was funded to accomplish including:

- (1) To establish that college students are a high risk population for rape and other forms of sexual aggression,
- (2) To develop a descriptive picture of sexual aggression and victimization based on both hidden and identified victims and offenders,
- (3) To determine if sexually aggressive men can be differentiated from sexually nonaggressive men and if sexually victimized women can be differentiated from nonvictimized women, and
- (4) To predict the emotional impact of sexual victimization by acquaintances upon the victim.

The analysis of a data set of this magnitude is a lengthy process. It was not possible at this time to present definitive analyses that fully tap the potential of the data set. The analyses that were used were designed to reduce the data as much and as quickly as possible, and to establish the viability of lines of inquiry for future detailed exploration. The analyses that were reported were designed to allow theory testing and hypothesis generating. At a later stage, the broad and extensive data set will support analyses designed to build theory. A discussion of the results and implications of the analyses directed toward each of the study goals is presented in the following sections.

### Hidden Rape: An Epidemic

#### Previous Findings on Unreported Victimization

The FBI defines forcible rape as, "carnal knowledge of a female forcibly and against her will," and reports that 77,763 such occurrences occurred in 1983 (U.S. Department of Justice, Uniform Crime Reports, August, 1984). However, these figures greatly underestimate the true magnitude of rape since they are based only on reported instances. Forcible rape is believed to be one of the most underreported of major crimes against the person (Uniform Crime Reports, 1982, p. 14). Official victimization studies suggest that the number of rapes that go unreported exceeds the number that are reported ( Law Enforcement Assistance Administration, Criminal Victimization in Thirteen American Cities, 1975; United States Department of Justice, Criminal Victimization in the United States, 1982, Table # 90 "Percent distribution of victimizations, by type of crime and whether or not reported to the police," p. 70).

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In the typical victimization study, the residents of a standard sampling area are interviewed in their homes or by telephone and asked to indicate those crimes of which they or anyone else in their household have been victims during the previous year. Positive responses to screening questions result in the administration of detailed incidence questions to obtain depth information about the victimization. The screening question that triggers depth investigation about rape is the following: "Did anyone try to attack you in some other way" (i.e., other than "beat you up, attack you or hit you with something such as a rock or bottle, knifed, shot at, or attacked with some other weapon, threaten to beat you up, threaten you with a knife, gun, or some other weapon," United States Department of Justice, Criminal Victimization in the United States, 1982, "Household Screen Questions," page 82). There are several assumptions in this approach to identifying unreported rapes that should be examined.

A primary difficulty is that rape is placed in a criminal justice context and recall of the experience is assumed to be triggered by the words "attacked in some other way." Requiring the respondent to infer the area of inquiry is problematic. Furthermore, the approach is based on the assumption that raped women conceptualize their experience in the context of other criminal victimizations that have or could have happened to them. Much has been written about the existence of a rape supportive belief system (e.g., Brownmiller, 1978; Burt, 1980; Weis & Borges, 1973). This belief system consists of culturally transmitted ideas about men, women, sexual relationships, and interpersonal violence, as well as widely accepted false beliefs about rape (e.g., rapists are always strangers, you cannot rape an unwilling woman, women are responsible for setting sexual limits). Previous research (Koss, 1985) has demonstrated that there are many women who have had experiences that meet legal definitions of rape who, for various reasons, do not conceptualize their experience as rape or view it in a criminal context.

A second difficulty with victimization studies is that they adhere to legal definitions of rape which are typological. A subject is either a rapist, a rape victim or a comparison subject. While this approach may be logical in the collection of crime statistics, it is less appropriate for studies with a mental health focus. If rape itself has a traumatic emotional impact, lesser degrees of sexual victimization might also be expected to produce some degree of psychic trauma. Recently, several writers have suggested that a dimensional view of rape be adopted (e.g., Weis & Borges, 1973; Koss & Oros, 1982; Koss & Gidycz, 1985). In this framework, rape represents an extreme behavior but one that is on a continuum with normal male behavior within the culture. Sexual aggression is a general term that refers to a continuum of sexual activity including sexual contacts, sexual coercion, and sexual intercourse when obtained through threat or force without consent. Sexual victimization refers to a corresponding continuum of sexual victimization that women experience as a result of male sexual aggression.

A final concern with the definition of rape within victimization studies is the time period that is considered. Official crime statistics and victimization studies report incidence figures that indicate how many women were victimized by rape during the previous 6 months or one year. Incidence figures suggest how many new rapes can be expected to occur in a year and from this rate the need for criminal justice services, hospital emergency, and rape crisis services can be extrapolated. However, for studies with a mental health focus, prevalence figures seem to be more appropriate. Prevalence data reflects the number of women who have ever in their lives been rape victims. They seem more appropriate for clinicians to gauge the scope of the problem

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of rape because long-term emotional aftereffects can be expected to remain mental health concerns beyond a 12 month period. In fact, the discussion of the post-traumatic stress disorder in the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 1980) specifically states, "It is not unusual for symptoms to emerge after a latency period of months or years following the trauma" (p. 237).

There have been several studies that have attempted to estimate the prevalence of rape without incorporation of the limiting assumptions of the criminal victimization study. Kanin and colleagues (e.g., Kirkpatrick & Kanin, 1957) presented survey data that supported the existence of sexual aggression/victimization among "normal" college students. However, their work is subject to methodological problems (i.e., the items are ambiguously worded, the sample was not random) and is over 20 years old. Koss and colleagues (e.g., Koss, 1985; Koss & Oros, 1982; Koss et al., 1985) have presented more recent data derived from behaviorally specific items. They found that 13% of female college students reported an experience that met legal definitions of rape. However, their data are restricted in generalizability since they were based on a sample representative of only one institution of higher education. Russell (1984) studied the prevalence of rape and lesser degrees of sexual victimization among a probability sample of 930 adult women living in San Francisco. Women were interviewed in their homes by trained female interviewers, and were asked to describe any unwanted sexual experiences that they had had. Later, the interview protocols were examined and instances were counted that involved "forced intercourse or intercourse obtained when the woman was drugged, unconscious, asleep, or otherwise totally helpless and unable to consent." Russell (1984) reported that 22% of the women reported such experiences and another 22% reported attempts to obtain unwanted intercourse. In total, 44% of these adult women reported victimizations that could be labeled rape or attempted rape. The major difficulty with Russell's work is that it is restricted in generalizability to a major urban area that may not be reflective of other parts of the country.

Kilpatrick and colleagues (Kilpatrick, Veronen, & Best, 1984) reported the results of a telephone survey of a random sample of 2,004 adult women residents of Charleston County, South Carolina. Although their survey included screening questions that were much more behaviorally specific than those used in the National Crime Survey, the items were still more vague and ambiguous than those used in other studies. In addition, the items regarding sexual assault were placed in the context of questions about other crimes and the entire survey was presented to respondents as an official government study of criminal victimization. Therefore, it is not surprising that the rates of rape and attempted rape found by these researchers were 5% and 4% respectively, considerably less than the rates reported in other recent studies (Koss & Oros, 1982; Koss, 1985; Russell, 1984).

#### The True Scope of Victimization

In the present study, behaviorally specific items regarding rape and lesser degrees of sexual victimization were presented to a nationally representative sample of women in a noncriminal justice context and in a form that allowed determination of both prevalence rates since age 14 and previous year incidence. The results indicated that 15.3% of adult women with an average age of 21 reported an experience since the age of 14 that met legal definitions of rape. An additional 11.8% of the women reported experiences that were equivalent to attempted rape. Thus, a total of 27.1% of college women had been victims of rape or attempted rape. And, it should be noted that these women are far from having lived through the "risk period" for rape which must be

Item No. 12. (Discussion)considered to last throughout life. *Incidence* 9 7

5 2 1

The rate of victimization was highly robust in that it did not vary from large to small schools, across types of institutions, or among urban areas, medium sized cities, and rural areas. The rate of victimization was found to be significantly different among the various ethnic groups and regions of the country. Because ethnicity and region may be correlated in the sample, further study will be required to interpret the finding. At this point, it is safe to conclude only that some ethnic groups appear to be at higher risk for sexual victimization than others. Perhaps even more alarming than the overall prevalence rates was the finding that women were reporting multiple experiences with sexual victimization. Virtually all forms of sexual victimization had occurred, on average, more than twice to victimized women. Only 5% of the rapes that were reported in the study ever came to the attention of criminal justice authorities in spite of the fact that almost half of the victims viewed themselves as victims of some crime (27% viewed their experience as rape, 16% viewed their experience as a crime but not rape). *Convincing arg.*

These findings establish the existence of "hidden rape" and suggest the magnitude of the problem. They transform rape and lesser degrees of sexual victimization from heinous but rare events into normative experiences in the lives of women. At these epidemic proportions, the potential of rape as a tool of social control that can serve to maintain differential power relationships between men and women in our society cannot be ignored.

#### Undetected Rapists: Previous Findings

The detection of sexually aggressive men is a critical methodological issue. Since extreme forms of sexual aggression constitute criminal acts, one cannot simply ask male subjects if they have ever committed rape or attempted rape. Such a question would likely receive an unanimous negative response; even convicted rapists minimize the severity of their sexually assaultive acts or completely deny them. As Weis and Borges (1973) state, "If the man can call the act seduction, he may call himself a winner; if it is rape, he is a loser" (p. 87).

The most common method of selecting a sample has been to utilize males who have been identified as rapists through judicial procedures. Convicted rapists have been studied both prior to sentencing and following incarceration or institutionalization. A primary problem with this sampling procedure is that the subjects may not be representative of the entire population of rapists. It has been estimated that for every rape reported, 3-10 rapes are committed but not reported (Law Enforcement Assistance Administration, 1975). Only a fraction of these reported rapes will eventually result in a conviction. For example, Clark & Lewis (1977) suggested that after allowances are made for nonreporting, the inability by police to acquire evidence, nonapprehension, and failure to convict, the highest justifiable proportion of actual rapists who are ever found guilty is 7%. At each stage of the judicial process, a portion of the potential rapist sample is excluded from systematic study. However, factors other than judicial ones may exclude persons from prosecution or may influence the verdict. For example, it has been argued that a rapist who knows the victim may be at less risk for being reported or convicted of rape than a rapist who is a complete stranger to the victim (e.g., Clark & Lewis, 1977). Similarly, certain demographic or psychological characteristics (e.g., social class, ethnicity, intelligence, presence of mental disorder) may facilitate prosecution and conviction. As a result, psychological characteristics of convicted rapists may reflect as much about the judicial process as about the dynamics of sexual aggression. Brodsky (1976) concluded, "It is not known if nonapprehended

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assailants are like those who make it through the justice system's progressive filtration process" (p. 5).

Two alternative methods to judicial identification have been used in the study of sexual aggression. Malamuth's (1981) approach has been to focus on men who have the potential to commit rape, rather than attempt to identify men who have actually raped. A male subject is asked to rate the likelihood that he would rape a female if he could be assured that he would not be apprehended or punished. Any man who admits to a likelihood above "not at all likely" is assumed to possess a propensity to rape. Approximately 35% of male college students admit to some degree of likelihood of raping. Koss and colleagues (1985) employed a self-report survey that consisted of behavioral descriptions of various acts of sexual aggression that varied in the amount of coercion and force that were present. The term "rape" was not used. They reported that 4.3% of a representative sample of men from one institution of higher education revealed behavior that would legally qualify as rape. Twentyman (1978) studied "undetected rapists" by advertising for subjects who had raped and were willing to discuss their experiences with an interviewer. However, this approach is problematic since it has been demonstrated that a most men who have engaged in rape do not view themselves as rapists. Also, all of the research reviewed above is extremely limited in its generalizability since it is based on small and restricted samples of men.

#### The Scope of Undetected Rape by College Men

In the present study, behaviorally specific items regarding rape and lesser degrees of sexual aggression were presented to a ~~nationally representative sample of men.~~ The items were presented in a noncriminal justice context and in a form that allowed determination of both prevalence rates since age 14 and previous year incidence. The results indicated that 4.6% of adult men with an average age of 21 reported a sexually aggressive act since the age of 14 that met legal definitions of rape. An additional 3.2% of the men reported an act that was equivalent to attempted rape. Thus, a total of 8.9% of college men have perpetrated acts of rape or attempted rape. And, it should be noted that these men are far from having lived through the "risk period" for raping which must be considered to last throughout life.

The rate of sexual aggression was highly robust in that it did not vary from large to small schools, across types of institutions, or among urban areas, medium sized cities, and rural areas. The rate of sexual aggression was found to be significantly different among the various ethnic groups and regions of the country. Because ethnicity and region may be correlated in the sample, further study will be required to interpret the finding fully. At this point, it is safe to conclude only that some ethnic groups appear to be more likely to report sexually aggressive acts than others. Perhaps even more alarming that the overall prevalence rates was the finding that men were reporting multiple acts of sexual aggression. All forms of sexual aggression had been perpetrated between 2-3 times by sexually aggressive men. Only 2% of the perpetrators of rape ever came to the attention of criminal justice authorities and it was very unlikely that they would label their own behavior as rape. In fact, 84% of the rapists indicated that their behavior definitely was not rape.

Review of incidence reports by college men and women indicate that the number of assaults admitted by men isn't sufficient to account for the number of victimizations experienced by women. Validity studies undertaken in the present project suggested that most of the sexually

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aggressive acts reported by men can be substantiated upon interview. However, it was not determined whether detailed interviewing might reveal additional incidents not reported spontaneously by the man. It is possible that exploration of a man's "seductions" would reveal instances where the behavior could have been viewed as "forceful" but the man did not conceptualize his own behavior as forceful. This speculation is supported by anecdotal reports that "date rapists" can almost always pass lie detector tests because they truly do not see the incidents as rape and do not perceive their force as beyond the limits of normal behavior.

In conclusion, college students are intelligent, educated, integrated into the social order, and socially advantaged. Yet, these findings are a sad commentary on the quality of their sexual knowledge and interpersonal relationships. If college men resort to force to obtain sexual relationships, one can only speculate what would be revealed in a study of a national sample of men.

#### Hidden Rape: A Closer Look

A large amount of descriptive data on the early experiences, psychological characteristics, current behavior, and assault characteristics of college students was reported. These data allowed a fascinating look at the group of people who make up the higher education population. These data also allowed the construction of a "portrait" of the typical rape experienced by college women, the typical rape reported by the college man, and the background and personality of the victims and perpetrators. The descriptive data were used for two purposes. First, they were used to estimate the practical significance of statistically significant differences in the development of the reduced set of variables used in later analyses. Second, and perhaps most importantly, the descriptive data allow anecdotal reports of sexual aggression and victimization among college students to be placed in perspective. For example, a recent article on date rape in Newsweek began with a case report in which a woman was repeatedly raped by her boyfriend with a broken coke bottle. Comparison of this case with the present study's descriptive portrait of victimizations reveals that it is exceedingly misleading and misrepresentative. Few date rapes reported by a national sample of 477 rape victims involved weapons or more than moderate force.

The descriptive portraits also allow informal speculation about differing perspectives of men and women in sexually aggressive situations. Of course such comparisons are problematic because the assaults to which the men refer are not entirely the same episodes as the victimizations reported by women. Some rapes occurred before college age and some perpetrators were not college students. However, it can be assumed that there is significant overlap between the rape incidents experienced by college women and perpetrated by college men. There are many dimensions on which the reports are quite consistent such as the relative proportion of single to multiple rapes, the proportion of stranger to acquaintance rapes, the prevalence of date rape, the social context and physical location in which the assault took place, the use of intoxicants by the perpetrator, the age at which the episodes occurred, the obliviousness of the man to the woman's resistance, whether the episodes were reported to police and whether the parties had sex again on a subsequent occasion.

There are also many dimensions on which extreme divergence in the perceptions of the victim and perpetrator are noted. For example, victims viewed their nonconsent as extremely clear, the man's force and their own resistance as moderately intense, their prior intimacy as petting

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only above the waist, and the man's being much more responsible for what happened than they were. Nearly half of the women viewed themselves as the victims of rape or another crime. Perpetrators viewed the victims lack of consent as definitely unclear, their own force and the victim's resistance as minimal, prior intimacy beyond petting below the waist, and the woman as more responsible for what happened than they were. Whereas victims were scared, angry, and depressed; perpetrators' primary emotion was pride. In spite of the fact that one-third of the perpetrators noticed that the victim physically struggled or reasoned and pleaded with them to stop, only 1 man out of 131 perpetrators viewed his behavior as rape.

These findings emphasize that women's views regarding the severity of the problem of sexual assault are not likely to be shared by the men who perpetrate assaults. They suggest that preventative and educational programs on rape cannot begin with the assumption that a shared perception exists of the magnitude of the problem of sexual assault. The findings also highlight the extreme amount of resistance among men to labeling as rape any sexual behavior that occurs within a social relationship.

### **Risk Profiles for Sexual Aggression and Sexual Victimization**

#### Vulnerability to Victimization: Previous Findings

Three theoretical models attempts to explain how women become rape victims. The victim precipitation model suggests that vulnerability to rape can be increased unknowingly by specific behaviors or personality characteristics of a woman such as passivity, oversubmissiveness, or insensitivity to social nuance. The social control model states that women are socialized through sex-role training to accept rape supportive beliefs and attitudes which may increase their likelihood of sexual assault. Finally, the situational blame model suggests that sexual assault is made more likely by certain environmental or structural circumstances surrounding the assault such as the location or social context of the interaction.

Empirical support for all three models is extremely sparse. The victim precipitation model was promulgated by Amir (1971) who based his views on the observation that some police reports on rape noted that the victim "had a bad reputation" in the neighborhood. He reasoned that the victim could be considered to have precipitated her own rape by engaging in behavior that led to a bad reputation. Kanin (1957) used as support for victim precipitation the observation that highly sexually aggressive men sometimes justify their assaultive behavior by blaming the provocativeness of the woman's dress or her flirtaciousness. A variation of victim precipitation, labeled a vulnerability model, has also received empirical study. Selkin (1978) studied personality differences between "rape resisters" and rape victims and found that successful resisters scored significantly higher on several California Psychological Inventory scales including dominance, social presence, sociability, and communality. Myers, Templar and Brown (1984) administered these scales among others to a sample of rape crisis center clients and women matched for demographics who were recruited on college campuses. They concluded that the victims' likelihood of being raped had been increased by personality characteristics including greater passivity and lesser poise in social situations. Koss (1985) noted that these studies are based on small samples of reported rape victims and cannot be viewed as generalizable to all rape victims. She studied the personality characteristics of a sample of 62 rape victims recruited by self-report survey from a college student population and compared them to 87 women who were victimized to lesser degrees and 82 women who had never been sexually victimized. No

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personality differences were found among the groups. All women, including the rape victims, scored above college student means for social poise and dominance.

The social control model of victimization has been explored in a number of studies that have examined the acceptance of rape supportive beliefs among various groups such as citizens (e.g. Burt, 1980), police officers, and rape crisis counselors (e.g., Feild, 1978). Shottland and Goodstein (1983) concluded that one component a rape supportive belief system, attitudes toward women, was a significant predictor of the likelihood a college women would view a scenario portraying sexual aggression among acquaintances as rape. However, Koss (1985) reported no significant differences between raped women, women victimized to lesser degrees, and sexually nonvictimized women on the five components of the rape supportive belief system. Thus, there currently exist insufficient data to conclude that rape victims adhere to extreme rape supportive beliefs that render them uniquely vulnerable to rape.

The situational blame model has been explored in studies of rape avoidance (i.e., Block and Skogan, 1982; Bart & O'Brien, 1981, 1984; Javorek, 1979; McIntyre, 1979; Queen's Bench Foundation, 1976; and Sanders, 1980). In these studies victims of attempted rape are considered to have avoided rape. Their initial response strategies are compared to those of rape victims to determine if any forms of resistance predict rape avoidance. For example, Javorek (1979) found that whether the potential victim screamed for help or not was the most useful predictor of whether a rape attempt was completed. Koss (1985) reported a small cluster of situational variables that differentiated acknowledged rape victims from unacknowledged rape victims (women who had had a sexual assault that met legal definitions of rape but who did not conceptualize their experience as rape). Unacknowledged rape victims were much more likely than acknowledged victims to be closely romantically acquainted with the perpetrator and to have shared extensive prior consensual sexual activity with him.

#### Victimized Versus Nonvictimized Women

In the present study, planned comparisons were conducted between the groups of sexually victimized women and the comparison sample of nonvictimized women. In the analysis, groups of variables were ordered in time and entered in steps. The effects of earlier variables that could significantly predict later variables were controlled in the analysis. The results indicated that all groups of victimized women were significantly different from nonvictimized women on most of the variables that were included in the study with the exception of the psychological variables. Specifically, all groups of victimized women differed from nonvictimized women in early experiences. The most clearcut differences occurred on the variables reflecting family violence, childhood sexual abuse, and early initiation of sexual activity. This finding is consistent with recent theoretical discussions of the link between childhood sexual abuse and increased vulnerability to sexual victimization in adulthood (Finkelhor & Browne, 1985).

All victimized women differed from nonvictimized women in current behavior. Victimized women were characterized by a higher frequency of alcohol use, larger quantities drunk, and more frequent intoxication. In addition, they demonstrated a higher number of sexual partners and required less intimacy between partners before they approved of sexual intercourse than nonvictimized women. The current behavior variables could be viewed as exposure variables. A woman's risk of sexual victimization may rise as her exposure increases to sexual partners and to situations where alcohol is used. These findings support contentions that certain

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situational variables foster the occurrence of sexual assault.

Clear differentiations between the groups failed to occur on the psychological variables. Rape victims and victims of sexual coercion scored differently than nonvictims on Rape Supportive Beliefs. However, the victims were characterized by less acceptance of Rape Supportive Beliefs. Victims did not score in a more feminine direction than nonvictimized women. All victims also differed from nonvictims on the Androgeny measure. However, the victim groups' means were less than one point lower than the college student female mean and only .25 standard deviation from the mean. Thus, the difference may lack practical or clinical significance. These findings are contrary to predictions of the social control model of rape. These findings challenge assertions that traditional socialization of women creates a special vulnerability to rape. The present study failed to support the existence of women rendered "safe victims" by virtue of their belief in stereotypes about rape.

Planned comparisons were also conducted within the victimized women using the victims of sexual coercion as a comparison sample. The pattern of results was consistent with the comparisons reported above. The groups of victims differed on all of the early experience variables, none of the psychological variables, and most of the current behavior variables. It is important to note that victims of sexual coercion did not differ from victims of rape on either current behavior variable: sexual behavior or alcohol/drug use. This finding suggests that while current behavior may increase a woman's exposure to victimizing situations, it does not predict the degree of victimization sustained. Other factors, particularly perpetrator variables must be considered.

Rape victims, attempted rape victims, and sexual contact victims were different from the victims of sexual coercion on the assault variables. Compared to other types of sexual victimization, sexual coercion was characterized by more intimate acquaintanceship between victim and perpetrator, greater number of assaults by the same man, and more consensual intimacy prior to the assault. Sexual contact and sexual coercion did not differ in severity. However, there were large differences on severity and support between sexual coercion, attempted rape, and rape. Rape was characterized by greater force by the perpetrator, more resistance by the victim, less impact of resistance, and more negative emotions at the time of assault, and a less positive, perceived reaction postassault. This pattern of results, especially on the severity variables, is consistent with a dimensional view of sexual victimization and supports the linear ordering of groups that was used in the present study.

#### Theoretical Models of Raping: Previous Findings

There are two general theoretical perspectives on the causality of male sexual aggression. The psychopathology model suggests that emotional maladjustment may lead an individual to commit rape. In contrast, the social control/social conflict model proposes that offenders maintain rape supportive beliefs that are reinforced by the differential power distribution between men and women in our society. These beliefs are hypothesized to allow offenders both to engage in and to justify the crime of rape. In addition to these two general perspectives, research on rapists has also focused on deviant sexual arousal patterns as well as hostility to women as causal factors of rape.

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Psychopathology. Traditionally, it has been assumed that men who rape are psychologically maladjusted individuals. Psychological tests of convicted rapists have provided inconclusive support for this position however. Perdue and Lester (1972) found no differences between the Rorschach records of rapists and prisoners who had committed aggressive but nonsexual offenses. Studies that have utilized the Minnesota Multiphasic Personality Inventory (MMPI) provide no evidence for the presence of neurotic or psychotic psychopathology among rapists but do suggest elevations on scale 4 (Psychopathic Deviate). However, rapists typically do not differ from other criminal populations on this scale (e.g., Rader, 1977). Thus, there is no empirical support for the presence of diagnosable psychopathology among rapists although evidence of personality disorder has been reported consistently. While these studies are methodologically superior to earlier studies (e.g., Cohen, Garofalo, Boucher, & Seghorn, 1971; Groth, Burgess, & Holmstrom, 1977) which were impressionistic and included no measures or statistical treatment of variables, several problems remain including the failure to control for demographic variables that lead to spurious elevation on the MMPI (e.g., age, ethnicity, socioeconomic status). In addition, these studies are plagued by the general problems with the use of judicially selected samples that were detailed in an earlier section. Koss and colleagues (1985) have examined the psychopathology of undetected rapists. They administered two scales sensitive to antisocial tendencies--Scale 4 of the MMPI and the Activity Preference Questionnaire (Lykken, Tellegen & Katzenmeyer, 1973) -- to college males who admitted behavior congruent with legal definitions of rape. The Activity Preference Questionnaire was developed in a state prison setting to differentiate psychopathic from nonpsychopathic prisoners. However, Koss et al. (1985) found it to be unrealistic to the prediction of sexual aggression. The MMPI scale was significantly correlated with sexual aggression ( $r = .28$ ) but it failed to add to the prediction of aggression beyond what could be accomplished through the use of attitude scores.

Attitudes. Several researchers have attempted to examine belief in stereotypes or myths about rape among diverse groups. Burt (1980) defined a rape myth as a "prejudicial, stereotyped, or false belief about rape, rape victims, and rapists" (p. 217). She has reported strong relationships between the acceptance of rape myths and other deeply held beliefs such as sex-role stereotypes, sexual conservatism, adversarial sexual beliefs, and acceptance of interpersonal violence. Feild (1978) administered an Attitudes Toward Rape questionnaire to rapists committed to a state mental hospital. On the basis of a factor analysis of the questionnaire, eight factor scores were computed for the subjects. On every factor, rapists were significantly different from rape crisis counselors. They differed from police officers on four of the factors and from citizens on five of the factors. On the other hand, Scully and Marolla (1982) found no significant differences in attitudes between incarcerated rapists and nonrapist incarcerated offenders. Koss and colleagues (1985) reported that college student rapists could be discriminated from less sexually aggressive men by seven variables including six rape supportive belief factors based on Burt (1980). Several studies have found a relationship between rape supportive beliefs and likelihood of raping (e.g., Briere & Malamuth, 1983; Malamuth, Haber, & Feshbach, 1980; Malamuth, 1981; Malamuth & Check, 1983; Tieger, 1981). Ageton (1984) reported the results of a study of sexually aggressive adolescents who were identified through screening questions on the National Youth Survey. This study began in 1976 and utilized a longitudinal, panel study of a national probability sample of youth aged 11 to 17. During a standardized interview in the context of other crime questions, subjects were asked how many times in the last year they had attempted or had sexual relations with someone against their will. A sample of 68 sexually aggressive adolescents were identified whose assaults had occurred between 1978-1980. Among the data available on the youth were attitude measures. A

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strength of the study is that due to panel design, the attitude measures were administered prior to the reported sexual assaults. Results suggested that four variables correctly classified 77% of the subjects: involvement with delinquent peers, crimes against persons, attitudes toward rape, and family normlessness. However, involvement with delinquent peers alone could correctly classify 76% of the subjects. In general, the results of studies on diverse populations including incarcerated rapists, sexually aggressive youth, sexually aggressive college students, and men likely to rape support the hypothesis that certain attitudes and beliefs about rape are associated with the occurrence of sexual aggression.

Deviant Arousal. Early studies of sexual arousal in sexually aggressive men utilized retrospective self-reports of the individual's response to pornography (e.g., Thorne & Haupt, 1966; Gebhard, Gagnon, Pomeroy & Christensen, 1965) or estimated sex drive (Kanin, 1965). These studies failed to produce a consistent set of differences between rapists and nonrapists. Later studies have utilized more objective measures of sexual arousal and penile erection. Abel, Barlow, Blanchard, and Guild (1977) compared objectively measured sexual arousal in a group of rapists compared to a group of nonrapists (composed primarily of bisexuals and pedophiles) and presented an audiotaped scenario of mutually consenting intercourse and one of forcible rape. The penile enlargement measure indicated that nonrapists were less aroused to the rape depiction than to the mutually consenting intercourse. Rapists, on the other hand, were equally aroused to these two scenarios. In a second study, penile enlargement of rapists was assessed to an aggressive scenario devoid of sexual content. While the degree of erection was considerably less to the aggressive scene than to the rape or mutually consenting scenes, a significant correlation was noted between a rapist's response to the aggressive cues and his response to the rape cues ( $r = .98$ ). These findings led the authors to suggest that the observed level of sexual arousal to rape scenes was the result of an individual's response to mutually consenting intercourse and to aggression. They hypothesized that in the nonrapist the presence of aggressive cues inhibited arousal, while in rapists, there was no appreciable inhibition. Subsequent studies with verbal depictions (Barbaree, Marshal, & Lanther, 1981) and movies (Hinton, O'Neill, & Webster, 1980; Quinsey, Chaplin, & Yarney, 1981) have been generally supportive of these conclusions. Malamuth and Check (1980a, 1980b, 1981) have reported similar findings with group of males with a proclivity to rape. Barbaree et al., (1979) conclude, "...Sexual arousal in these rapists may have been deviant, not necessarily because force and violence and nonconsent of the female evoked their sexual arousal, but perhaps because force, violence, and nonconsent of the female failed to inhibit their sexual arousal" (p. 221).

Hostility toward Women. Less attention has been directed to the study of the hostile motivation of rapists as compared to their sexual arousal. Three studies have compared incarcerated rapists on measures of hostility. Fisher and Rivlin (1971) reported that rapists scored lower on the California Psychological Inventory Aggression scale than did other prisoners or normal controls. Scully and Marolla (1982) found no significant differences between rapist and nonrapist prisoners on a Hostility toward Women scale. In contrast, Rada, Laws, and Kellner (1976) found that rapists scored higher than a normal group or child molesters on the Buss-Durkee Hostility Inventory. Kanin (1965) found that sexually aggressive men scored higher on the Zaks and Walter's Aggression scale. Koss et al., (1985) reported that the total score on the Buss-Durkee Hostility Inventory was correlated with level of aggression ( $r = .17$ ) but did not significantly contribute to the prediction of group membership. These studies all utilized self-report measures of hostility. Actual harming behavior was studied by Malamuth (1981) who assessed the reported likelihood of raping of male college students; then several days

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later a female experimenter insulted them. Subsequently, the men were asked to administer different levels of aversive noise to the female experimenter. The results indicated that men characterized by a high likelihood of raping were more behaviorally aggressive toward the woman, felt more angry at her, and reported a greater desire to hurt her than men characterized by low likelihood of raping.

#### Sexually Aggressive Versus Sexually Nonaggressive Men

In the present study, planned comparisons were conducted between the groups of sexually aggressive men and the comparison sample of sexually nonaggressive men. In the analysis, groups of variables were ordered in time and entered in steps. The effects of earlier variables that could significantly predict later variables were controlled. The results indicated that all groups of sexually aggressive men were significantly different from sexually nonaggressive on all three sets of variables used in the study. Specifically, all groups of sexually aggressive men differed from sexually nonaggressive men in early experiences. Clearcut differences occurred on the variables reflecting family violence and childhood sexual abuse, and early initiation of sexual activity. This finding is consistent with recent theoretical discussions of the link between childhood sexual abuse and adult male sexual aggression (Finkelhor & Browne, 1985). Finkelhor and Browne theorize that one of the effects of child sexual abuse is a sense of powerlessness which is linked to the fear and anxiety engendered by the child's inability to control the noxious events. "In reaction to powerlessness, some sexual abuse victims may have unusual and dysfunctional needs to control or dominate. This would seem particularly to be the case for male victims, for who issues of power and control are made very salient by male sex role socialization" (p. 536).

~~With early experiences controlled, all sexually aggressive men differed from sexually nonaggressive men on psychological characteristics including MMPI Scale 4 and Hostility toward Women. Rapists and attempted rapists differed from sexually nonaggressive men on Rape Supportive Beliefs as well. These results are consistent with previous research on psychopathology, attitudes, and hostility among rapists and other sexually aggressive men. Subsequent analyses will be required to examine the relative predictive power of each of these psychological measures.~~

All sexually aggressive men differed from sexually nonaggressive men in current behavior. Compared to sexually nonaggressive men, sexually aggressive men were characterized by a higher frequency of alcohol use, larger quantities drunk, more frequent intoxication, more frequent reading of male-oriented magazines, associations with men who typically consider women as sex objects, a higher number of sexual partners, and a less intimacy required between partners before they approved of sexual intercourse. The current behavior variables could be viewed as "releasers," that is variables that allow a man to overcome internal inhibitions against sexual aggression (Finkelhor & Browne, 1985). The chances of a man, predisposed to sexual aggression by abusive early experiences and psychological characteristics, assaulting a female partner may be increased by environmental factors such as pornographic magazines which encourage the objectifying of women and reduce inhibitions over sexual violence, associations with peers who encourage viewing and treating women as sex objects, and use of alcohol/drugs which reduce judgement and impulse control.

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Planned comparisons were also conducted within the sexually aggressive men using the sexually coercive men as a comparison sample. The comparison of rapists to sexually coercive men is most informative since these two groups both obtained sexual intercourse but rapists used force to obtain it while sexually coercive men used verbal manipulation and misuse of power. Although both forms of behavior are abhorrent to women, the use of violence clearly sets the rapists' behavior apart. Comparison of the two groups helped to specify what characteristics are associated with sexual violence as opposed to sexual manipulation. Rapists differed from sexually coercive men in early experiences. Specifically, rapists reported being beaten or hit by their parents more often than sexually coercive men. They did not differ in early abuse experiences. Rape versus sexual coercion was the only comparison within sexually aggressive men that revealed significant differences on psychological variables. Rapists were differentiated from sexually coercive men by greater scores on Rape Supportive Beliefs. They did not differ in their scores on MMPI Scale 4, Hostility toward Women, Masculinity, or Androgyny. On the current behavior variables, rapists differed from sexually coercive men in terms of exposure to releasers but not in sexual behavior. Thus, both groups of men had a relatively high number of sexual partners and low standards for required intimacy before they considered sexual intercourse acceptable. However, rapists read male oriented magazines "very frequently" compared to coercive men who read them "seldom." Rapists report drinking a significantly larger amount of alcohol when they drink than sexually coercive men did. Although further analyses will be required to explore the relative predictive power of the variables, these findings suggest that the most important determinants of the use of force in sexual situations may be a background of family violence, a rape supportive belief system, frequent use of reading matter that models and condones violence against women, and ~~the~~ drinking larger quantities of alcohol than other men.

The clear implication of these results is that an integrative model of rape is needed in order to account for the diversity of findings in the present study. Sexually aggressive men were differentiated from sexually nonaggressive men beginning with early family environment and experiences which were associated with later psychological differences. Then, releasing factors appeared to amplify and channel pre-existing predilections to abuse women. Finkelhor's (1984) model of four preconditions for child abuse (i.e., motivation to sexually abuse, overcoming internal inhibitors, overcoming external inhibitors, and overcoming the resistance of the child) may be a prototype for organization of an integrative theory. Further analyses of the present data will allow the development and testing of a theoretical model that integrates early experiences, psychological characteristics and current behavior to explain male sexual aggression.

### The Trauma of Rape

#### Research on Symptomatic Responses: Previous Findings

Most prospective empirical studies of the symptomatic responses to rape have focused on the time period between one month and one year postrape. Extensive reviews of this material are available (e.g., Ellis, 1983; Holmes & Lawrence, 1983). What is known is that most victims experience an immediate postrape distress response, which for some victims fails to resolve and develops into a chronic, through heterogeneous symptom pattern that may persist for a variable length of time (Ellis, 1983). The core features of these long-term symptom patterns appear to be a set of fear/avoidance responses, affective constriction, disturbances of

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self-esteem/self-efficacy, and sexual dysfunction.

A number of factors may modify the intensity of a victim's response to rape including: Characteristics of the crime (McCahill, Meyer, & Fischman, 1979; Frank & Stewart, 1983), locus of control (Janoff-Bulman, 1979), coping ability (Burgess & Holmstrom, 1979), life stress (Ruch, Chandler, & Harter, 1980), personality variables and social network (Atkeson, Calhoun, Resick, & Ellis, 1982), and developmental stage (Notman & Nadelson, 1976). No isomorphic relationship between trauma and symptom has been observed. The nature of the interactive effects and why some victims develop more chronic patterns is not yet understood.

Resick (1983) noted that "Rape victims are frequently unwilling to receive any type of therapeutic intervention within the first few months after the assault. They (and their families) often express the hope that if they don't talk about the assault and try not to think about it, they will forget it and recover" (p. 131). Unfortunately, evidence from long-term follow-up studies with rape victims suggests that spontaneous recovery doesn't characterize the majority of victims. More than 40% of rape victims reported continued sexual difficulties, restricted going out, suspiciousness, fear of being alone, and depression 1 to 1 1/2 years postassault (Nadelson, Notman, Jackson, & Gornick, 1982). Problems in long-term sexual functioning (e.g., Becker, Skinner, Abel, & Treacy, 1982; Burgess & Holmstrom, 1979) and in marital adjustment also have been reported (Miller, Williams, & Bernstein, 1982). Only 25% of rape victims were found to be free of significant symptoms on standard psychological tests one year after the assault (Kilpatrick, Yeronen, & Resick, 1979). One year after the rape, as a group, victims still scored one standard deviation above nonvictimized women on a fear survey. Burgess and Holmstrom (1979) interviewed rape victims four to six years after sexual assault and asked them if they "felt back to normal, that is, the way you felt prior to the rape." The responses indicated that 37% of the victims had felt recovered within months; 37% felt recovered only after several years, and 26% did not feel recovered. Thus, it is not surprising that in one sample of women raped 1-16 years previously, 48% stated that they eventually had to seek psychotherapy (Ellis, Atkeson, & Calhoun, 1979).

A major methodological note which must be sounded regarding the interpretation of the entire body of published literature on the traumatic aftereffects of rape is that all studies employed self-identified rape victims most of whom were seeking service at a rape crisis center. It is very likely that this group of victims differ in important ways from women who do not think of themselves as rape victims and/or do not seek victim assistance services. Specifically, in the present study the 93% of the offenders were acquaintances; 57% were dating the victim. Yet, in the published literature on rape aftereffects stranger rapes are most prevalent. For example, among the victims studied by Resick, Calhoun, Atkeson, and Ellis (1981), 57% were raped by total strangers compared to 2% who were dating the offender. Likewise, in the present study it was found that only 5% of rape victims utilized rape crisis center services whereas 42% of rape victims told no one about their experience. These observations support the need for the present study which extended the study of rape aftereffects to a sample that included victims of acquaintance rape, victims who did not conceptualize their experience as rape, and victims who sought no services and told no one about the rape. In the present study measures of depression, anxiety, sexual satisfaction, and relationship quality were included to examine the traumatic impact of rape.

Item No. 12. (Discussion)The Prediction of Anxiety Among Victimized Women

All groups of sexually victimized women differed from nonvictimized women on the Trait Anxiety Inventory. The nonvictim mean in the present study was the equivalent the 55th percentile in the published norms for college students. The rape victim mean was the equivalent of the 79th percentile. The mean score among rape victims exceeds the mean for hospitalized physically ill persons but does not reach the range of hospitalized psychiatric patients. On average, college student women raped 1-2 years previously are more anxious than 79% of the women enrolled in higher education. The anxiety score could be significantly predicted by all the sets of variables used in the study including early experience, psychological characteristics, current behavior, and assault characteristics. A combination of 9 variables predicted 36% of the variance in anxiety scores. The largest proportion of variance (26.5%) was accounted for the the psychological characteristics, particularly androgyny and femininity. When the influence of psychological characteristics was controlled, assault characteristics contributed only an additional 2.6% of the variance.

The Prediction of Depression Among Victimized Women

Depression scores on the Beck Depression Inventory increased linearly with severity of assault. Rape victims were significantly more depressed than all the other groups of women. Depth of depression categories have been provided to aid in interpretation of the Beck score (Beck et al., 1961, Bumberry, Oliver, & McClure, 1978). Scores of 0-9 indicate minimal or no depression; scores of 10-15 indicate mild depression; scores of 16-19 reflect moderate depression and scores of 20 and above are believed to reflect severe clinical depression. The rape victim mean can at most, be taken to reflect a very slight degree of depression that is far from attaining clinical significance. The depression score could be significantly predicted by all the sets of variables used in the study including early experience, psychological characteristics, current behavior, and assault characteristics. A combination of 12 variables predicted 21.1% of the variance in depression scores. The largest proportion of variance (11.2%) was contributed by psychological characteristics, particularly androgyny and rape supportive beliefs. When psychological characteristics were controlled, assault characteristics accounted for only an additional .3% of the variance.

Sexual Satisfaction and Relationship Quality

Although these measures had been included in the study to reflect rape impact, results on them were not consistent with previous research on victims. For example, rape victims rated themselves as slightly more sexually satisfied than the other groups of women on petting and sexual intercourse. Previous research on sexual satisfaction among rape victims (Orlando & Koss, 1983) has cautioned about the high vulnerability to demand characteristics and expectancy effects of the usual methods of assessing sexual satisfaction in rape victims. Typically, a victim is asked to rate her satisfaction "currently" and "before the victimization." In the present study, the sexual satisfaction items were administered to all subjects and were placed early in the questionnaire before any questions about assaultive sexual experiences had occurred. Subjects were asked only to rate their current satisfaction. They were not asked to recall their sexual satisfaction in the period immediately following the rape. In the present group of women, victimized 1-2 years previously, there was no evidence of lowered sexual satisfaction among victims. All three items that measured relationship quality--the ability to trust others, the

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ability to get close to others, and the ability to maintain relationships revealed significant differences between rape victims and nonvictimized women although the magnitude of differences was not large.

#### Prediction of Label for the Experience

All the sets of variables used in the study including early experiences, psychological characteristics, current behavior, and assault characteristics could significantly predict the label a victim chose for her experience. With a combination of 8 variables it was possible to predict 36% of the variance. The largest contribution to prediction was made by assault characteristics which alone contributed 23% of the variance. Assault severity was particularly powerful in predicting the victim label. The more serious the assault, the more violence and resistance involved, the more likely a victim was to see the incident as rape. The higher the score on assault context which reflects the closeness of the relationship between the victim and offender, the less likely the label rape was to be used.

In summary, study of the impact of acquaintance rape which occurred 1-2 years previously revealed evidence of a long-term impact. ~~The most severe impact was found in anxiety.~~ Even two years after the rape, victims were characterized by a persistent and enduring elevation in anxiety score that approached clinical significance. No evidence was found to support a long-term impact of rape on sexual satisfaction. Elevations on depression and relationship quality suggested slight impacts of rape in these areas. However, more indepth analysis of these data is planned. It was observed that the distributions on these variables were quite skewed. While on average the impact of rape was mild, on an individual basis some victims were having few problems and some victims were quite disturbed. Further analyses will divide victims according to the severity of impact and attempt to determine the set of variables that differentiate victims with severe impact from those with mild impact. It will be particularly important to learn whether victims with minimal impact use coping behaviors such as telling family and friends and seeking help from therapists or counselors. These findings would have practical therapeutic implications.

These findings of slight enduring aftereffects of sexual assault in a population of college students suggest that many women are coping well with the experience. This conclusion is consistent with recent work on cognitive adaptation which highlights the "normal" person's ability to adjust to trauma. Taylor (1983) has observed that people are adaptable, self-protective, and functional in the face of setbacks. "The process of cognitive adaptation to threat, though often time-consuming and not always successful, nonetheless restores many people to their prior level of functioning and inspires others to find new meaning in their lives. For this reason, cognitive adaptation occupies a special place in the roster of human capabilities" (p. 1171).

Item No. 21.**Publications**

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