INFORMATION TO USERS

This material was produced from a microfilm copy of the original document. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the original submitted.

The following explanation of techniques is provided to help you understand markings or patterns which may appear on this reproduction.

1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting thru an image and duplicating adjacent pages to insure you complete continuity.

2. When an image on the film is obliterated with a large round black mark, it is an indication that the photographer suspected that the copy may have moved during exposure and thus cause a blurred image. You will find a good image of the page in the adjacent frame.

3. When a map, drawing or chart, etc., was part of the material being photographed the photographer followed a definite method in "sectioning" the material. It is customary to begin photoking at the upper left hand corner of a large sheet and to continue photoking from left to right in equal sections with a small overlap. If necessary, sectioning is continued again — beginning below the first row and continuing on until complete.

4. The majority of users indicate that the textual content is of greatest value, however, a somewhat higher quality reproduction could be made from "photographs" if essential to the understanding of the dissertation. Silver prints of "photographs" may be ordered at additional charge by writing the Order Department, giving the catalog number, title, author and specific pages you wish reproduced.

5. PLEASE NOTE: Some pages may have indistinct print. Filmed as received.

Xerox University Microfilms
300 North Zeib Road
Ann Arbor, Michigan 48106
76-21,669

CRESON, Daniel Lennard, 1935-
THE SOCIALIZATION OF MEDICAL STUDENTS AND
ITS BEARING ON MEDICAL PRACTICE.

Rice University, Ph.D., 1976
Anthropology, cultural

Xerox University Microfilms, Ann Arbor, Michigan 48106
RICE UNIVERSITY

THE SOCIALIZATION OF MEDICAL STUDENTS
AND ITS BEARING ON MEDICAL PRACTICE

By
Daniel Lennard Creson

A THESISSubmitted
IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF

Doctor of Philosophy

Thesis Director's Signature: Edward Norbeck

Houston, Texas
April 1976
ACKNOWLEDGEMENTS

I am particularly grateful to Dr. Edward Norbeck whose useful ideas and editorial assistance probably warrants listing him as a co-author.

I am grateful to Dr. Patricia Blakeney who was both helpful and distracting, and to Dr. Harold Goolishian who was always encouraging.

I wish to thank Margaret Canavan who was able to type the manuscript and at the same time teach me to play the guitar.
TABLE OF CONTENTS

**Section I:**

CHAPTER ONE: Introduction . . . . . . . . . . 1
CHAPTER TWO: Overland Medical School,  
a Description. . . . . . . . . . 14
CHAPTER THREE: Methodology. . . . . . . . . . 21

**Section II:**

CHAPTER FOUR: Sexual Knowledge . . . . . . . . 39
    Faculty Members . . . . . . . . . . . . . . . . . . 41
    Patients. . . . . . . . . . . . . . . . . . . . . . 53
    Students. . . . . . . . . . . . . . . . . . . . . . 58
    Spouses and Guests . . . . . . . . . . . . . . . . . . 82
CHAPTER FIVE: Sexual Attitudes and Values . . 86
    Faculty Members . . . . . . . . . . . . . . . . . . 87
    Patients. . . . . . . . . . . . . . . . . . . . . . 100
    Students. . . . . . . . . . . . . . . . . . . . . . 104
    Spouses and Guests . . . . . . . . . . . . . . . . . . 138
CHAPTER SIX: Medical Decisions and Sex-Related  
    Topics . . . . . . . . . . . . . . . . . . . . . . . 141
    Interviews with Applicants. . . . . . . . . . . . . . 143
    Emphasis on Facts. . . . . . . . . . . . . . . . . . 146
    Examinations . . . . . . . . . . . . . . . . . . . . . 150
    Information Game . . . . . . . . . . . . . . . . . . . 152
    Diagnostic Decisions. . . . . . . . . . . . . . . . . 158
    Decisions on Treatment . . . . . . . . . . . . . . . 161
CHAPTER SEVEN: Perception of Status and Role . . 163
    The Student. . . . . . . . . . . . . . . . . . . . . . 164
The Student as Physician . . . . . . . 170
Gender . . . . . . . . . . . . . 175
As Family Member. . . . . . . . . . 183

Section III:

CHAPTER EIGHT: Ambiguity and Role Conflict as as Result of Change in Status . . . . . . . 186
CHAPTER NINE: The Social Functions of Ambiguity and Role Conflict . . 209
CHAPTER TEN: Medical Education and Changing Sociocultural Norms . . . . . . . . 225

Bibliography . . . . . . . . . . . . . . . 234

Appendices . . . . . . . . . . . . . . . 246
CHAPTER ONE

Introduction

This study concerns the education of medical students at an American medical school for their future roles as physicians. As such, the study also concerns the conflicts experienced by the students when required to make medical decisions and the socio-cultural factors embodied in their programs of training which foster the genesis of these conflicts. Finally, these investigations provide a basis for observations concerning incongruences between the features of the health care delivery system and social values prevailing in the general society.

Specific goals of the research are:

1. To observe and describe some effects of medical education and the social organization of a medical school upon the perception and presentation of the self of the medical students.

2. As a specific example of the first goal, to observe and describe how various aspects of sexuality, including knowledge of sexual matters, are dealt with in the role behavior that students adopt as a result of the formal and informal features of their training as future physicians.

3. To attempt to gain from the investigations described above an understanding of potential and
observed problems arising because of cultural
incongruences between the attitudes and values em-
bodyed in medical practice, as learned by the stu-
dents, and the attitudes and values of the society
at large.

Medical students are a carefully selected group brought
together in an institution where hierarchic lines of
authority are maintained (American Medical Association 1971,
p. 1219). They are there to become physicians and play
future roles as such in the larger society. To master
their roles, they must learn a great deal about the human
body and the various conditions that may affect its func-
tions. That is how they and their teachers understand the
task at hand. However, they learn more than anatomy, phy-
siology and pathology. They are taught patterns of behav-
ior, ways of perceiving the self and others, attitudes, and
values. In understanding the impact of medical education,
it is thus necessary to consider the structural fabric of
the medical school, the roles that medical students play as
students and will be expected to play as physicians, and
also the attitudes and values to which they are exposed in
the course of their education.

My interest in this research was, in part, personal,
the result of my experiences as a student during four
years of medical school. The choice of medicine as a
career was made late in my academic life. I had completed
an undergraduate degree in liberal arts before considering medicine as a career. Consequently, the authoritarian role that seemed a necessary part of being a physician did not fit comfortably with my earlier educational experiences.

Medical knowledge and practice rely on precise, quantifiable parameters by which the presence or absence of physiologic or anatomic disease are defined. These parameters are based on accumulated experience and research and provide a shared and consistent means of discriminating between "normal" and "pathological" conditions. The "medical model", as I came to understand it, was based on the generally recognized pragmatic value of these parameters. The physician was to define pathology by these criteria, and then, to act to restore normal function. Action was crucial to the role of physician, and authority provided the legitimacy for such action.

As I sought in my personal and professional life to accommodate the authoritarian role of the physician with the actual knowledge and expertise available to the medical profession, I became increasingly uneasy. The need to act authoritatively in the face of physical disease could be seen as functionally useful or necessary, but a discrepancy existed between actual knowledge and assumed authority on the part of physicians, especially in matters concerning the behavior of patients. No quantifiable medical parameters existed for judging the behavior of the patients, but physicians continued to act authoritatively in matters
outside the scope of the organic diseases of their patients, basing their judgments upon social values.

No generally accepted means of quantification existed even for recognized forms of behavioral pathology. For example, R. D. Laing and A. Esterson have made the following statement in the introduction to *Sanity, Madness and the Family* (1964, p. 3): "No generally agreed objective criteria for the diagnosis of 'schizophrenia' have been discovered". Thomas Szasz, in the preface to *The Myth of Mental Illness* (1968, p. 9), wrote: "It seemed to me that although the notion of mental illness made good historical sense... it made no rational sense". Since such statements could be made regarding established types of behavioral pathology, questions arose in my mind about the role of physicians as it related to and affected broader aspects of their social behavior.

My decision to specialize in psychiatry was motivated, in part, by a desire to increase my understanding of human behavior, and thus alleviate my own discomfort when placed in a position of authority in relation to the social behavior of my patients. After completing my psychiatric residency and joining a medical school faculty, I found my dilemma unresolved. My dissatisfaction increased as a result of my experiences in teaching medical students in inpatient wards and outpatient clinics. I perceived these students as feeling compelled to make definitive judgments on the basis of a normal-pathological dichotomy about
behavior described by patients. It was a process I could not fully understand but one I increasingly perceived as crucial to an understanding of medicine in its total cultural context. The application of the perspectives of behavioral science to the study of the socialization of students in a medical school setting was a further attempt on my part to understand organized medicine in its cultural context.

Various categories of human behavior might have been studied and related to medical education and the physician's role. Human sexual behavior was chosen for two reasons. First, sexual norms have been changing throughout this century and have been a subject of medical interest over the same period. I hoped the combination of changing norms and medical interest that led to study of this subject would serve to point up relationships between general social values and the role of the physician. Second, the opportunity was afforded me to observe systematically the behavior of students and faculty members in matters concerning human sexuality; this occurred as result of the establishment of a new course designed to provide medical students with a broad perspective on human sexuality.

After a review of the available literature on the subject, human sexual behavior appeared particularly well suited for research having the general goals previously described. A documented discrepancy existed between physicians' knowledge about human sexuality and the
physician's role as an authority in such matters. As late as 1959, Greenbank (1961, pp. 989-992) found that half of the graduating students of five Philadelphia medical schools thought mental illness was frequently caused by masturbation. More recently, a report from the Masters and Johnson clinic (1970, p. 388) indicated a high instance of iatrogenic sexual dysfunction among patients, and this constitutes further evidence of inadequate knowledge among practicing physicians.

Medical authority in sexual matters predates Sigmund Freud (Ellenberger 1970, p. 303). His contributions were just one aspect of the general assumption of medical authority in sexual matters. In speaking of human sexuality, Clara Thompson (1950, p. 132) has pointed out that "... much which Freud believed to be biological has been shown by modern research to be a reaction to a certain type of culture and not characteristic of universal human nature". The same could be said of other medical concepts of sexual behavior. Medical decisions about a patient's sexual behavior, then, do not relate to something intrinsic to the patient's physiologic and anatomic makeup, but rather they represent societal attitudes or ideals. These attitudes and ideals have been recast into concepts of illness and health and then mediated through the health care system in this society.

In behavioral science, the analogy of the theatre often is used as a descriptive model in attempting to
understand human behavior within a social system. Use of the idea that social life is analogous with a tightly constructed drama with assigned roles can provide insights into why individuals behave as they do. Each role is related to and dependent upon all other roles. What one actor does affects what every other actor will do. The dynamic interplay between roles helps to explain both continuity and change within the drama.

A drama has both structure and function. The structure exists in the script and may bridge both time and space. The functional aspects of a drama are the actual implementation of its structure at a given place and time by those playing the ascribed parts. *Hamlet* has the same basic structure when produced in London as it has when produced in New York; the parts are the same and are presented in relation to each other in the same sequence. The actual implementation of that structure may, however, provoke very different experiences in the audience and among the actors at different times and in different places.

Medical students must learn their role, which includes an image of the self in dealing with the sexuality of patients and peers. Sheppe and Hain (1966, p. 5) have attempted to describe this image:

Although devoted to his patients and his calling, young Dr. Kildare is invariably portrayed as an adept (but nice) lady-killer. Upon completion of his internship, however, lusty young Kildare is miraculously transformed into worldly-wise
benignly asexual Dr. Gillespie. In both of these popular hero roles, he is conceived as being unusually experienced and educated in all the esoterica of the boudoir.

Medical students do more than modify or alter the ways in which they perceive themselves; they attempt to project that image in their relationships. The manner in which the student will relate to others is not simply an individual perception of what and who he is. It is, in its simplest form, a complex dynamic interaction between two or more people, each attempting to impose on the situation a definition of self and a definition of other. The interaction itself becomes one of the determinants of behavior.

Although the dramaturgical model is useful in understanding human behavior, it has been criticized on a number of grounds (Thomas & Biddle 1966, pp. 13-14). One such criticism is the lack of precise, mutually agreed upon definitions for the theatrical terms employed. To avoid the danger of a similar criticism of the concepts used in this study, before proceeding further I briefly shall review them in an attempt to make their meanings clear.

Linton (1936) made a classic distinction between status and role and related these concepts to social structure and function, concepts which will be used here following his definitions. Status may be understood as a socially defined position, a social identity. This identity carries with it into given situations established rights and obligations with reference to others holding positions within
the same system (Davis 1948, p. 86). In observing human behavior within a social system, status cannot be observed directly. It must be inferred from observation of individual interactions. The value of the concept lies in the orderly or systematic overview of social relationships which its use allows. Since the concept of status is a convenient shorthand, it may, however, serve to obscure the variety of social relationships of any person (Homans 1950, p.12). The term status-set has been used by Merton (1957, pp.381-384) and others to deal with this problem. By status-set, Merton means the complex of distinct statuses held by an individual.

In this dissertation, the term "status" often will be used in referring to socially defined groups of persons of given statuses vis-à-vis one another. For example, the concept of status will be employed in tracing the generally accepted expectations of physicians and patients in relation to each other and in relation to the larger society. In referring to individuals or small groups of individuals, the term status-set also will be used.

The manner in which an individual carries out established rights and obligations in a given situation is referred to as role (Davis 1948, p.90). The notion that a given status has an unvarying attendant role is superficial. Physicians, for example, do not behave as they do as the result of an abstract social idea of what it means to be a physician. They perform in a dynamic context with other individuals.
In Parsons' words, "... the therapeutic function was conceived as performed by a type of person-in-role, a physician, acting vis-à-vis another person-in-role, a patient defined as sick (1970, pp.337-338)". In such an interaction, the subgroup "physician" interacts with the subgroup "patient", but it does so through a particular physician and a particular patient.

In this dissertation, the term "role" will be used to denote the manner in which individuals seek to carry out established rights and obligations in given situations. This includes the strategies and mechanisms individuals use to promote an image, with reference to status and status-set. In Erving Goffman's (1959, pp.8-10) terms, "role" will be used to describe the manner in which individuals seek to impose a "definition of the situation" in interacting with others.

Nadel (1957, pp.14-17) uses the term "pattern" to denote any orderly distribution of relationships between groups, and "network" to mean the interlocking of relationships whereby interactions act as determinants of other interactions. These terms also will be used, with meanings as defined by Nadel. The situation in which a physician encounters a patient is clearly one example of a broad, orderly pattern of relationships between the two groups. This pattern of relationships may act as determinants of other relationships, for example, between physicians and governmental agencies seeking to regulate the practice of medicine.
As I progressed with my research, I began to notice that in a variety of situations medical students experienced ambiguity and conflict that may be described and interpreted by use of the concepts of status and role. The frequency and intensity of this ambiguity and conflict increased when students were expected to make medical judgments on the basis of human behavior. This was particularly noticeable with reference to sexual and sex-related behavior. My findings in this regard and my speculations as to the reasons for the ambiguity and conflict and its functional significance will be described in the chapters that follow.

Although this research will attend primarily to the role conflict and ambiguity experienced by medical students and the effect of this conflict and ambiguity on the adoption by students of new role behavior it must be noted that other aspects of the students' experiences in medical school are also important in shaping their behavior. Not the least important are rules of etiquette that govern interaction between various groups or classes that constitute the hierarchic social structure of a medical school. Even though this study does not deal directly with rules of etiquette or with personnel of the hospital other than physicians and students, their importance is acknowledged.

The idea that physicians and medical students experience role conflict is not new. Many social scientists have so stated. For example, Seymour Halleck (1967, pp.33-50) has described the dilemma experienced by physicians asked
to "diagnose" criminal acts, and William Caudill (1958, pp. 188-227) has analyzed the conflict experienced by psychiatrists functioning as both administrators and clinicians. In a particularly relevant article, John Waterman (1973, pp. 215-218), a physician, has described some of his own personal conflicts in working with transsexuals.

Ambiguous role expectations and role conflict may occur when an individual's status-set requires, in a given situation, separate patterns of incompatible role behavior (Merton 1966, pp. 282-296). Role conflict and ambiguous role expectations both were apparent to me in observing students dealing with the sexual behavior of patients. The source of conflict and ambiguity is described in a statement in *Sex and the College Student* (Group for the Advancement of Psychiatry 1965, pp. 36-37). "In the matter of managing sexual derive, the late adolescent's problems are compounded by the fact that the adult world itself has no clear standards of (sexual) behavior". It is not surprising that "... the physician, if he is to satisfy his patients, must to some extent perform in accordance with patient expectations, which may require him to behave in a fashion contrary to professional expectations (Mechanic 1968, p. 159)".

The patients, students, faculty members and members of students' families of this study all behaved sexually, of course. Each had concepts of "normal" sexual behavior and expectations with regard to the sexual behavior of others. It was in the context of these interacting concepts and
expectations that medical students were asked to diagnose the sexual behavior of their patients.

I view this research as following the direction of anthropological and sociological studies which analyze overt and covert functions of social institutions within a larger sociocultural system. This dissertation attempts first, to describe the knowledge and attitudes with reference to sexual matters of those who are active participants in the medical school, and then, to describe the relevant behavior of those participants. It then attempts to understand that behavior within the boundaries of the institution by applying the concepts of structure and function and status and role to the data collected. Finally, as previously stated, it attempts to relate its findings to gain an understanding of the relationship of practices of health care to the broader cultural context of daily life and the conflicts in this relationship.

This dissertation is divided into three sections. Section I consists of three chapters that outline the research and describe the setting, the subjects of study and the methods used. Section II presents in four chapters the data collected. Section III, which consists of three chapters, deals with theoretical considerations and presents an interpretation of the topics, problems and issues being studied.
Chapter Two
OVERLAND MEDICAL SCHOOL, A DESCRIPTION

Overland Medical School physically is a complex of buildings, new and old, large and small, attractive and grotesque, that lies on the eastern limits of Overland City, also a pseudonym. The city itself is elongated, following geological constraints. The oldest sections of the city border the medical school. To the west are new housing developments and apartment complexes. North of the medical school is the "downtown" section with shops and stores, and a black ghetto. To the south of Overland City, restaurants, motels and curio shops cater to summer tourists.

Even though the medical school, founded in 1891, has been in existence for almost a hundred years, it appears as an institutional intrusion into a community that traditionally has looked to a few wealthy families for direction. It is an intrusion that is difficult to ignore in a city with a population, presently approximating 65,000 people, that has declined in each of the last three decades. The term "B.O.L.," or born Overland, is used by Overland residents to differentiate between those that "belong" and transients. With notable exceptions, members of the medical school community are relegated to the transient category.
Most inhabitants of Overland City are not privy to the social life, rituals and patterned interactions that give meaning to the Overland Medical School community. They interact with participants in the medical school community in social, economic, religious and political transactions that are based on the norms and traditions of the larger community. Even when the transactions involve the medical school representative as a deliverer of health services, the intricacies of the medical school community, at best, are perceived dimly through mutually recognized expectations of physician and patient.

Overland Medical School physically consists of seven hospitals and a variety of teaching, research and administrative structures, along with such supportive units as warehouses, shops and greenhouses. This physical complex houses a number of academic programs. A School of Allied Health trains technicians and supportive personnel. A School of Nursing operates in conjunction with other academic institutions in the state, and "basic science" departments offer graduate programs at the masters and doctoral level. Recently a program for training physicians' assistants was instituted. In addition, clinical departments offer residencies in clinical specialties.

Despite the various educational programs, the training of medical students is the principal mandated reason for the institution's existence. This primary purpose and its
overriding priority are recognized at all levels of the medical school and across all training programs. The primacy of medical student training is re-emphasized periodically through the state legislative budgeting process that provides fiscal support for the school's continued operation. As a result of legislative pressure, classes periodically are increased in size. In 1971 the entering freshman class of medical students numbered 170. This was increased in 1972 to 200 and was projected to level off at that number.

Most students live within walking distance of the medical school. Single students live, for the most part, in seven medical fraternities that are near the campus. Fraternities, while offering some trappings of university social fraternities, incorporate many of the economic advantages of co-ops by providing inexpensive living through the pooling of expenditures. In the past decade, an increase in the number of married students and increased student affluence have led to vacancies in the fraternity houses. As a result, some fraternities have been forced to rent rooms to non-medical students.

Married students live in apartments or small tract houses near the school; wives of male students work as teachers, secretaries and nurses. The availability of these people and their transient nature tend to keep salaries in such employment low.
Medical school faculty members live in most residential sections of the city.

Settings for social interaction among the members of the medical school are diverse and include metropolitan attractions in a large urban center, 50 miles from Overland City. Most interaction, however, takes place in the houses and apartments of students and faculty members. Extracurricular social activities are primarily intra-group. Social interaction between faculty members and students is limited. For the most part, student-faculty member fraternization takes place in the hospital coffee shop or at receptions, parties and outings sponsored by faculty or student organizations.

Students spend most of their class time in their first two years in two settings. The most frequent teaching format is the "whole group lecture". A whole class is assembled at regularly scheduled times for a lecture by one or more faculty members. Because of the size of the class, there is little interaction between students and lecturer. On rare occasions, students become disaffected with a lecture and hiss, whistle or stamp their feet. More frequently, they sit passively and take notes. A second class format is called, variously, "seminars" or "small group sessions". In such a setting, between eight and twenty students meet with a faculty member to discuss a particular topic.

Students are assigned during their first two years to
various laboratories. Time spent in laboratories is highly structured by the responsible department.

During their clinical years, and to a limited extent during the first two years, students spend time in inpatient units and outpatient clinics. In both settings, the students interview patients and participate in team discussions. Such a team characteristically consists of a faculty member, a resident, an intern, and one or more students.

As noted earlier, during the course of this research, a 20-hour compulsory course on human sexuality was instituted. This course was unique in being the first course of its kind in a medical school curriculum in the state. It also was unique as the first required course at Overland Medical School to be presented at night and as the first required course that included spouses and invited friends of medical students. The course was presented in weekly two-hour sessions over a ten week period. The evening sessions were whole-class lectures, but additional time was provided for elective small group discussions. After the first year, the time of the small group discussions was changed to the regular academic day and participation was required.

Overland Medical School forms one unit in the hierarchic administrative organization of state supported education. At the top of the administrative structure is a nine-member Board of Regents appointed by the governor of the state. The Board of Regents is responsible for a number of
institutions of higher learning within the state, including four medical schools, of which Overland Medical School is the largest and oldest. The mandate of the regents is to formulate general policy and supervise the administrative and fiscal structure of the various institutions. Immediately responsible to the regents is the chancellor, who has the highest full-time position in the state educational hierarchy. As the principal administrative officer in the system, it is his responsibility to see that the decisions of the regents are implemented.

The highest ranking administrative office at Overland Medical School is that of president. Immediately responsible to the president are the deans of the various schools and the chief administrative officer for fiscal affairs. The former are responsible for the academic elements within the medical school and include the Dean of the School of Medicine, the Dean of the School of Allied Health Sciences, the Director of the Marine Biomedical Institute, and the Dean of the Graduate School of Biomedical Science. Within this group, the Dean of the School of Medicine is in fact preeminent; he functions as chairman of the Council of Deans and serves as an intermediary between the other deans and the Office of the President. The chief administrative officer is responsible for the various teaching hospitals that are a part of Overland Medical School.

Further administrative subdivision within the School
of Medicine is on the basis of clinical specialties and basic science disciplines. For example, there are departments of internal medicine, surgery, and psychiatry as well as departments of physiology, anatomy and pathology. Each department has a chairman who answers to the Dean of the School of Medicine. Within the departments, the administrative structure is variable, departmental chairmen having broad latitude in designing the administrative structure of their own departments. In some departments, the structure is rigid and carefully defined. In others, the structure is loose and fluctuating.
CHAPTER THREE
Methodology

In attempting to achieve the objectives of this project, a conscious effort was made to elicit data from as many relevant sources as possible and in a variety of ways. It was my hope that this procedure not only would provide an opportunity to check validity, but would provide ideas for further collection. In this sense, the research was deliberately explorative. William Foote Whyte has described his conviction:

"... that the actual evolution of research ideas does not take place in accord with the formal statements we read in research methods. The ideas grow up in part out of our immersion in the data and out of the whole process of living (Whyte 1943, p. 280)."

The procedures described above are in accord with much anthropological field work, as exemplified by the classic study of Mitla by Parsons (1936), Evans-Pritchard's research among the Nuer (1940), and Elliot Liebow's investigation of a black ghetto (1967).

I acted as a participant observer, and also interviewed various members of Overland Medical School, sometimes conducting a series of interviews with certain informants. On several occasions, I administered standardized tests and questionnaires. I also collected relevant documents
whenever possible and on a few occasions constructed experimental tasks for subjects. As a result of the variety of ways in which data were collected, replicability, in some cases, may have been sacrificed. According to Pelto (1970, pp. 41-42), however, such sacrifice is characteristic of most anthropological field work.

Participant Observation

Participant observation seemed to provide unique opportunities. Malinowski's immersion in Trobriand Island society (Barnouw 1963, p. 60) probably was exceeded by my immersion in the society of the medical school I studied. As an associate professor on the faculty of the school in which I had been trained in medicine and psychiatry, I had experienced Overland Medical School from different perspectives. I had the added advantage of being deeply involved in issues in the medical school relevant to the research. I played a major role in developing and implementing a course for medical students in behavioral science and human sexuality and served as chairman of the admissions committee, which brought me into close contact with large numbers of applicants for admission, many of whom I interviewed in depth. I was in daily contact with students and students' spouses as director of a student counseling program and leader of discussion groups on marital adjustment.

I was in a particularly advantageous position to observe students in their professional role relating to
patients. I supervised junior and senior medical students, and to a limited degree, freshman and sophomore students, on inpatient units for approximately fifteen hours per week. An additional four hours a week were spent observing and supervising junior and senior medical students in an outpatient clinic. In addition to observing students when directly supervising their medical tasks, I had the opportunity to see them through the eyes of other faculty members at meetings of the undergraduate curriculum committee and the grading and promotions committee on which I served.

In a short time, it became apparent that I was encountering problems as a participant observer that other field workers did not have. My role in the medical school hindered as well as facilitated my observations. Preconceptions and vested interests that related to my role in the medical school conflicted at times with my role as observer. For example, as the leading advocate of "sex education" in the medical school, it was easy for me to overlook the efforts of some department to give students an objective perspective on human sexuality. It became increasingly apparent that the roles of both faculty member and researcher could lead to selectivity in observation and distortion in interpretation. Although anthropological work was not a secondary interest to me, a paragraph in Notes and Queries on Anthropology appeared extremely relevant to my circumstances:
"Observers for whom anthropological work is a secondary interest must take into account the type of contact that they personally or their respective professions have had with the natives. They may start from a vantage point, or they may actually be at a disadvantage as compared with a complete stranger." (Committee of the Royal Anthropological Institute of Great Britain and Ireland, 1951, p. 30)

This difficulty was never completely overcome, but I was well aware of the problem, and my status did facilitate the gathering of data. Keeping constantly aware of my dual role and checking my observations with other faculty members and students, I was able to avail myself of opportunities not open to an outsider. As a faculty member and clinical supervisor, it was expected that I would question students as to how they reached a diagnosis and what they included in a patient's history. As therapist and counselor, I was privy to the conflicts, fears and aspirations students ordinarily would not share even with peers. Kobben (1967, p. 43) has pointed out that the information available to the field worker is in part a function of "... the field-worker's status among the group he is studying." As a teacher, supervisor, counselor and therapist, I was in a particularly advantageous position in this regard.

Interviewing and Use of Informants

Only one effort was made to use structured interviews with a selected sample of students or faculty members. Four students responded to an invitation to the freshman
class of 1971 to be interviewed in my office. Three additional students wrote lengthy letters discussing or defending their own views on a variety of sexual topics.

Following the limited response from the 1971 freshmen, the first group to be interviewed, a more informal interview format was used. Students and faculty members were approached in natural settings such as the coffee shop or in the halls between classes. Questions at first were general. After the subjects responded and demonstrated interest in the discussion, they were asked more specific questions tailored to explore relevant areas already touched upon. In many cases, interviews with some persons extended over several days or even weeks, as time and opportunity permitted. When approached in this way, the remarks of both faculty members and students were more spontaneous and candid.

Information obtained from interviews of faculty members, students and members of their families as part of my work as a counselor and therapist was in no way formally incorporated into this study. It was my feeling that to do so without informing my patients was a breach of medical ethics. At the same time, it was impossible to be unaware of the relevance and implications of such data. To the extent that such data provided perspective, direction and a check on data obtained from other sources, it influenced this research.

In the course of my work as a faculty member, I developed
a close relationship with a number of faculty members, students and, in a few cases, spouses of students and faculty members. Many of these individuals became aware of the nature of the research project. Lengthy conversations on the subject of the research led to new insights and supplied important data. In a sense, these individuals were neighbors in the work situation who also acted as informants.

**Standardized Instruments and Questionnaires**

Data were collected by using two versions of a standardized test called the "Sexual Knowledge and Attitude Test" (SKAT) (Appendices 1 and 2) and a questionnaire developed by faculty members in the departments of obstetrics-gynecology and psychiatry (Appendix 3).

Freshmen, juniors and seniors and their consorts of the opposite sex in 1971 were given the SKAT-Form I. The original intent to administer the SKAT to all classes in 1971 was thwarted when the schedule for sophomores did not provide an opportunity to administer the test. The freshmen and their spouses or guests in 1972 were given the SKAT-Form II. Harold Lief, director of the Center for the Study of Sex Education in Medicine at the University of Pennsylvania, developed the SKAT as "... an omnibus institutional research tool and/or classroom teaching aid, and an efficient system for tabulating, scoring and reporting data on sexual knowledge and attitudes from a variety of institutions and groups (Leif and Reed 1972, p. 4)". SKAT-Form I,
which became available shortly before the research began, was revised in 1972. When the freshman class of 1972 was given this test, Form I was no longer available and the revised SKAT-Form II was substituted. Both forms of the SKAT are organized into four parts. An outline of SKAT contents is reproduced here from the Technical Manual.

Part I. Attitudes

a. Sexual activities outside marriage.
b. Sexual activities within marriage.
c. Sexual activities before marriage.
d. Sexual variance; causative agents; remedial or punitive actions.

Part II. Knowledge

a. Physiological aspects.
b. Psychological aspects.
c. Social aspects.

Part III. Basic Information (demographic)

a. Basic information.
b. Personal background.

Part IV. Frequency of Sexual Encounters

a. Heterosexual encounters.
b. Dating - etc.
c. Auto-erotic activities.

(Lief and Reed 1972, p. 10)

An ordinal knowledge score and four ordinal scale scores may be derived from both SKAT I and SKAT II. The scores of the two forms of the SKAT are not directly comparable. Brief definitions of the various scores as taken from the SKAT manual follow:
1. **Knowledge Score - Form I.** Number of correct responses to 100 true-false questions.

2. **Knowledge Score - Form II.** Number of correct responses to 71 true-false questions adjusted so that the national medical student mean is 50.00.

3. **Heterosexual Relations Scale - Forms I and II.** General attitude toward pre- and extramarital heterosexual encounters.

4. **Sexual Myths Scale - Forms I and II.** Acceptance or rejection of commonly held sexual misconceptions.

5. **Autoeroticism Scale - Forms I and II.** Permissibility of masturbatory activities.

6. **Abortion Scale - Forms I and II.** Social, medical and legal feelings about abortion.

The SKAT was chosen for this research because it was the only instrument of its kind available at the time. It provided at a minimum the opportunity for ordinal rankings on a number of subjects.

In addition to the SKAT, the freshmen and their guests in 1972 completed a highly structured questionnaire entitled "Sexual Attitude and Responsiveness Survey" (SARS) (Blakeney and Powell, 1970). This questionnaire was developed within Overland Medical School and was originally designed for couples seeking treatment for a sexual dysfunction. The SARS contained eighty items, many of which required multiple answers. Subjects surveyed in the SARS included parental
attitudes towards such behavior as nudity and masturbation, early sexual experiences and current sexual practices.

Both the SKAT and SARS were administered before the Human Sexuality Course was conducted. The course was first introduced in 1971. Responses to the SKAT and SARS by students in that year thus sampled a population which had not been exposed to the new course. The responses of 1972 freshmen may have been influenced by the fact that their immediate predecessors had had instruction in human sexuality.

Experimental Task

Freshmen, juniors and seniors in 1971 also were subjected to an experimental situation in which "voice gender" was the experimental variable in medical students' responses to the sexual behavior of others. Juniors and seniors were combined to provide a sufficiently large sample for the experiment. (This group will henceforth be referred to as "upperclassmen".) Freshmen were treated separately. Each sample was subdivided into two groups on the basis of spontaneous seating selections on a given day. Students in alternate seats were assigned to the same group. The groups were labeled group A and group B.

The freshman group A consisted of 88 subjects, not all of whom responded to all items. Of these, 84 were male and four female. All but three of the subjects in this group were between the ages of 18 and 26. Three were older than 26. Forty-nine were Protestant and 18 Catholic. Three
were Jewish, and eight subjects declared their religious affiliation as "other than the above". Ten did not answer the question on religious affiliation.

The freshman group B consisted of 63 subjects. Again, not all subjects responded to all items. Fifty-seven were male and six female. Sixty of the subjects were between the ages of 18 and 26. One was younger than 18, and two were older than 26. Thirty-six subjects were single, and twenty-seven were married. Forty-five were Protestant; four were Catholic, and eleven Jewish. Three subjects declared their religious affiliation as "other than the above".

The upperclassman group A consisted of thirteen juniors and nineteen seniors. Twenty-nine of these were male and three female. Twenty-four were between the ages of 23 years and 26 years, and eight were between the ages of 27 years and 35 years. Twenty-two were married, and ten were single. Twenty professed to be Protestant, seven Catholic, four Jewish and one "other than the above".

The upperclassman group B consisted of ten juniors and twenty-three seniors. Thirty-one of these were male and two female. Twenty-nine were between the ages of 27 years and 35 years. Eighteen were married, and 15 were single. Twenty-three professed to be Protestant, four Catholic, three Jewish and three "other than the above".

Subjects in the two A groups and the two B groups were separately presented audiotapes containing eleven brief
vignettes describing specific and varied incidents of sexual behavior. All vignettes contained statements denoting both pleasure and anxiety. The vignettes were represented as excerpts from actual interviews, but not necessarily with patients. The audiotapes were exactly the same for both groups, except for the gender of the voices on the tapes, and thus, also the gender of the actors in the episodes described. Vignettes recorded for group A by a male voice were recorded for group B by a female voice. Vignettes recorded for group A by a female voice were recorded for group B by a male voice.

Students were asked after each vignette to rate the individual represented on the tape in six categories (Appendix 4). For each category, a seven-point scale was used. The seven-point scale was later simplified into three cells. One cell combined numbers one, two and three; another cell contained number four; and the final cell combined numbers five, six and seven. The categories were: (1) oversexed - undersexed; (2) socially acceptable - socially unacceptable; (3) healthy-disturbed; (4) religiously orthodox - religiously unorthodox; (5) needs professional help - needs no help; and (6) desirable sex object for member of the opposite sex - undesirable sex object for member of the opposite sex. Additional data collected after each vignette related to the student's perception of the cause of behavior and his recommendations for future behavior.
Vignette IX, concerning infant masturbation, proved unsatisfactory because the data generated from it were not comparable with the rest of the data, and it was dropped.

Documents and Written Records

To augment observations, interviews and responses to experimental tasks and formal instruments, a variety of written and printed material was collected. In addition to three letters received in response to an invitation to be interviewed by the author extended to the freshmen of 1971, minutes of faculty and curriculum committee meetings, memos, course evaluations, journals kept by students and other documents were collected. In this way, I hoped to check my own observations against those of my subjects.

Of particular note in this regard are the journals of three students who agreed to record their daily observations, perceptions and explanations of sexual expression in the medical school setting. The instructions for keeping their journals were general, and it was left to the individual student to determine what was relevant and appropriate for inclusion. Originally, six students agreed to keep journals. Only three completed the task, maintaining journals for several months after the end of the period of participant observation.

Confidentiality and Informed Consent

The ethical problem of insuring confidentiality and
obtaining "informed consent" was a difficult one. The dilemma of how to handle data obtained in the roles of therapist and counselor has been discussed. The problem, however, was not limited to such situations.

Explaining the research to every student and faculty member involved in the research presented problems. The ethical issue was resolved by deleting all identifying information from notes based upon my observation of individuals, and keeping all data locked in a file cabinet in my office. When the SKAT and the SARS were employed, the general nature of the research was explained and the subjects' participation was voluntary. Code numbers were used instead of names when the SKAT and SARS were administered.

Data Analysis

Because of the heterogeneity of the data, it was necessary to find ways to make them manageable. A number of approaches were attempted before a satisfactory mode was developed. Initial efforts to bring the data into some semblance of order were frustrating and disappointing, but the author gradually became aware that, by immersing himself in the data, tentative hypotheses could be formulated which could then systematically be checked against all available data.

The results of the SKAT and SARS were processed by a computer that reduced the data to frequency counts for specified subgroupings. In addition, computer analysis supplied SKAT scale scores for subgroupings. Since data on
norms were available for SKAT scales, intragroup comparisons could be made.

Responses to the experimental task in which students were confronted with sexual behavior where voice gender was the experimental variable were analyzed by obtaining X2's for each vignette and set of responses.

The numerical counts were reexamined as explanatory hypotheses were developed from data obtained by participant observation and interviews. Comparison of the various types of data in this way frequently led to new insights and often corrected distortions in analysis.

Subjects

In theory, all of the participants in Overland Medical School society were subjects in this study. The size and complexity of the theoretical subject population makes such an assumption suspect, however. Of the approximately 800 medical students in attendance at Overland Medical School, the approximately 400 spouses of medical students, the 436 faculty members (OMS Catalogue 1968-1970) and the other students, trainees and support personnel, only a limited number could, in fact, be studied directly. Of those, only a fraction could be observed and studied systematically. Four separate classes of medical students and the spouses and guests of students in three of those classes were of major importance as subjects. Others contributing to the general conclusions of this study include residents in obstetrics
and gynecology, in psychiatry and in family medicine, faculty members of the departments of internal medicine, family medicine, obstetrics-gynecology and psychiatry, participants in three post-graduate educational programs in human sexuality for practicing physicians, as well as representatives of the medical school administration (deans in the school of medicine).

The medical student classes of most significance in this study were the freshman, junior and senior classes in 1971 and the freshman class in 1972. Descriptive data on students in these classes who completed the SKAT are included in Table 1. The freshman classes in 1971 and 1972 were required to take the Human Sexuality Course and those completing the SKAT included more than 80% of the class. The junior and senior classes in 1971 were not required to take the course. Data in Table 1 on these classes relate only to those who chose to take an elective course in human sexuality. They compose a non-random sample of upperclass students in Overland Medical School.

Medical students were required to meet certain criteria for admission. All were required to have completed, as undergraduates, four semesters of English, three semesters of biological science, and two semesters of mathematics. Less than 10% of each class could be out-of-state residents; in fact, the percentage was much lower. All had to be recommended by undergraduate pre-medical faculty and
### TABLE 1

Students Attending Courses on Human Sexuality

<table>
<thead>
<tr>
<th></th>
<th>Freshmen 1971</th>
<th>Juniors 1971</th>
<th>Seniors 1971</th>
<th>Freshmen 1972</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Genetic sex:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>137(93%)®</td>
<td>20(87%)</td>
<td>39(93%)</td>
<td>157(90%)</td>
</tr>
<tr>
<td>Females</td>
<td>11(7%)</td>
<td>3(13%)</td>
<td>3(7%)</td>
<td>18(10%)</td>
</tr>
<tr>
<td><strong>Ethnicity:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>145(98%)</td>
<td>23(100%)</td>
<td>41(98%)</td>
<td>174(99%)</td>
</tr>
<tr>
<td>Nonwhite</td>
<td>3(2%)</td>
<td></td>
<td>1(2%)</td>
<td>1(&lt;1%)</td>
</tr>
<tr>
<td><strong>Age:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 years</td>
<td>1(1%)</td>
<td>0</td>
<td>0</td>
<td>*</td>
</tr>
<tr>
<td>18-22 years</td>
<td>43(43%)</td>
<td>0</td>
<td>0</td>
<td>*</td>
</tr>
<tr>
<td>23-26 years</td>
<td>54(54%)</td>
<td>18(78%)</td>
<td>34(81%)</td>
<td>*</td>
</tr>
<tr>
<td>27-35 years</td>
<td>3(3%)</td>
<td>5(22%)</td>
<td>8(19%)</td>
<td>*</td>
</tr>
<tr>
<td><strong>Religion:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protestant</td>
<td>101(68%)</td>
<td>13(55%)</td>
<td>29(69%)</td>
<td>119(68%)</td>
</tr>
<tr>
<td>Catholic</td>
<td>23(16%)</td>
<td>6(28%)</td>
<td>5(12%)</td>
<td>31(18%)</td>
</tr>
<tr>
<td>Jewish</td>
<td>13(9%)</td>
<td>1(4%)</td>
<td>6(14%)</td>
<td>10(6%)</td>
</tr>
<tr>
<td>Other</td>
<td>11(7%)</td>
<td>3(13%)</td>
<td>2(5%)</td>
<td>15(8%)</td>
</tr>
<tr>
<td><strong>Marital Status:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>87(59%)</td>
<td>8(35%)</td>
<td>18(43%)</td>
<td>81(46%)</td>
</tr>
<tr>
<td>Married</td>
<td>61(41%)</td>
<td>15(65%)</td>
<td>24(57%)</td>
<td>94(54%)</td>
</tr>
<tr>
<td><strong>Community of origin:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban (2500+)</td>
<td>120(81%)</td>
<td>22(96%)</td>
<td>32(76%)</td>
<td>+</td>
</tr>
<tr>
<td>Rural</td>
<td>28(19%)</td>
<td>1(4%)</td>
<td>10(24%)</td>
<td>+</td>
</tr>
<tr>
<td><strong>Father's Occupation:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional</td>
<td>67(45%)</td>
<td>11(48%)</td>
<td>23(54%)</td>
<td>68(39%)</td>
</tr>
<tr>
<td>Executive</td>
<td>24(16%)</td>
<td>4(17%)</td>
<td>6(14%)</td>
<td>49(28%)</td>
</tr>
<tr>
<td>Clerical/sales</td>
<td>18(12%)</td>
<td>6(26%)</td>
<td>5(12%)</td>
<td>14(8%)</td>
</tr>
<tr>
<td>Laborer</td>
<td>39(27%)</td>
<td>2(9%)</td>
<td>0</td>
<td>44(25%)</td>
</tr>
</tbody>
</table>

® Percentages are approximations for convenience.
* Ages on 1972 freshmen were collected in different categories:
  20-21 years - 6 (3%); 22-23 years - 120 (69%); 24-25 years - 20 (11%); 26-27 years - 10 (6%); 28-30 years - 12 (7%); 31 and over - 7 (4%).

+ Community of origin was not available for 1972 freshmen.
all had to have completed successfully the Medical College Aptitude Test (MCAT).

Competition for medical school admission was intense, and few students with less than a 3.0 grade point average on a 4.0 scale gained admission. The Medical College Aptitude Test scores were important in the selection process and, as a group, students gaining admission had high scores.

The medical students studied were predominantly male, white and Protestant. In the entire 1971 freshman class, for example, there were only eleven females and three non-white students. In that same class, 101, or 68% of the students, were Protestant. They were for the most part from urban areas and upper middle class families. Twenty of the 1971 freshmen, or 14%, were the children of physicians as were three, or 13%, of the juniors and 10, or 24% of the seniors.

Roughly half of the students in each group were married. The percentage of married students increased in the upper classes. Fourteen, or 23% of the married freshmen in 1971 had children. Four, or 17% of the juniors had children as did 10, or 24%, of the seniors.

Some descriptive data collected from freshmen in 1972 were not collected from other students. Of the married freshmen in 1972, two were married before the age of 17. Seventy-seven were married between the ages of 18 and 22, and sixteen were first married between the ages of 23 and 26.
Marriage and childbearing among medical students were delayed as compared with circumstances among the general population. It seems highly probably that they differ from their parents in this regard. Among the 1972 freshmen, only 17 students were from single-child families whereas 50 had one sibling, 46 had two siblings, thirty-two had three siblings, and 30 had four or more siblings.

In 1971, 16 spouses accompanied the upperclassmen to the elective human sexuality course. In 1972, when the course was required for freshmen, 92 guests attended the course with the students. Seventy-two of these guests were spouses. In both 1971 and 1972 the guests were ethically and socio-economically similar to the students. The guests had a slightly lower mean age and, since most students were male, were preponderantly female.
CHAPTER FOUR
Sexual Knowledge

This chapter describes the amount and kinds of sexual information possessed by groups in Overland Medical School. Data were collected from faculty members, patients, medical students, and spouses and guests of medical students. The data collected were of two types, that obtained from the SKAT and that collected by me by observation and interviews.

The accuracy of the sexual information held by members of the groups studied was of interest to me. In determining that accuracy, I compared the information held by subjects to conclusions reported in the literature and supported by experimental data. The major references for determining the accuracy of anatomical and physiological information were the reports by W. H. Masters and V. E. Jounson (1966, 1970). In evaluating information on variety and frequency of sexual behavior, I relied principally on the classic works of Kinsey et al. (1945, 1953) and the more recent surveys of Hunt (1973) and Schofield (1967). Where specific behaviors have been studied and reported in the literature, I used them as a guide in determining the accuracy of sexual information. Examples of such works include Gebhard et al.'s (1965) study of sex offenders, Macdonald's (1973) study of individuals charged with indecent exposure.
and various reports of studies on homosexuality included in "Sexual Inversion", edited by Judd Marmor (1965). Where information concerned gender identity and gender behavior, it was compared with information reported by Stoller (1968) and Money (1972). In cases where authorities appeared to disagree as to the meaning of experimental data, no conclusions were rendered as to the accuracy of information held by groups of subjects.

Faculty members were observed in a variety of settings and selected faculty members were interviewed. Efforts to collect SKAT data on faculty members were unsuccessful. Faculty members chosen to be small group leaders during the course on human sexuality were given the SKAT. They, however, asked that they be allowed to score and keep their own answer sheets, and their desire was respected. As a result, no SKAT data were available on faculty members to compare with SKAT data on other groups or with observational data on the faculty members.

Patients were observed in clinic and outpatient settings. Interviews were conducted with selected patients. When I proposed in 1971 that a group of patients be given the SKAT, there was agreement among the rest of the faculty members participating in planning the course in human sexuality and among members of the administration that such activity might result in outside pressures to delete the new curriculum. As a result, no SKAT data were collected on patients.
Medical students were observed in a variety of settings and under different circumstances. They were observed in classroom and clinical settings and in work and recreational activities. Data from the SKAT were collected from four different classes of students. Data collected during participant observation and that collected from the SKAT were not always the same. Responses to SKAT questions were interpreted as more than a measure of student knowledge. "Quizmanship" was a highly valued skill among the students, and despite efforts to convince them that there was no way to "pass or fail" the SKAT, students persisted in treating it much as they would an examination in another course. One female freshman student in 1972 was heard to say after completing the SKAT: "The longest answers are usually the right ones".

Spouses of medical students were observed during the lectures on human sexuality and in social situations. Friends of other medical students, usually "dates," were observed in the same settings. During 1971 and 1972, the SKAT was administered to mixed groups of friends and spouses.

Faculty Members

Data on the knowledge of human sexuality and sex-related behavior held by faculty members were obtained from six sources: (1) lectures given by faculty members; (2) behavior of faculty members during and after small group
leader training in preparation for the course in human sexuality; (3) behavior of faculty members on the planning committee for the course in human sexuality; (4) evaluations by faculty members after they attended the course in human sexuality; (5) interviews with patients who had received medical care at Overland Medical School; and (6) interviews with individual faculty members. All but the last were indirect measures of knowledge.

Faculty Lectures

During 1971 and 1972 I attended lectures for students other than those included in the course on human sexuality. These were presented by both clinical and basic science faculty members. The lectures, when dealing with sexual topics, primarily concerned sexual anatomy and endocrinology. An exception was psychiatric lectures which presented sexuality in the context of Freudian psycho-sexual development. Material presented on sexual anatomy and endocrinology was accurate, current and frequently supported by references.

Only occasionally in non-psychiatric lectures was sexual behavior mentioned. When sexual behavior was alluded to, it was usually in one of two contexts, either as an entertaining aside or as information. Two examples will serve to illustrate the difference in these contexts. On one occasion, an instructor, after describing the physiological effect of a certain drug, paused and then said, "Of
course we all know alcohol is the best aphrodisiac in blondes". On another occasion, a lecturer, after describing pelvic relaxation stated, "Good pelvic muscle tone is important in achieving a good sexual relationship". The latter statement, presented as information, was unusual in the lectures I attended. When such statements were made, they rarely were referenced, and when I questioned lecturers as to the source of their information, the usual response was that it was "clinical experience".

On the basis of the lectures observed, I concluded that accurate knowledge of sexual anatomy and endocrinology was extensive among Overland Medical School faculty members, at least among those chosen to give the lectures. Knowledge of sexual behavior as a psychological and social phenomenon was either incomplete, or the subject was avoided as inappropriate in a medical lecture. Even in the psychiatric lectures, sexual behavior was described in a generalized way; that is, no mention was made of socio-economic levels, ethnic origins, or marital statuses. Differences were discussed primarily as normal or abnormal in relation to psychological developmental stages.

Small Group Leader Training

In both 1971 and 1972, twenty faculty members attended an orientation session for small group leaders held by members of the planning committee for the human sexuality course. This was viewed by committee members as an
opportunity to correct misinformation and "distorted" attitudes among the small group leaders, who would be meeting in pairs with groups of about twenty students during the human sexuality course.

Attendance in both 1971 and 1972 was incomplete. In 1971, 70% of the potential group leaders attended, and this proportion dropped to 50% in 1972. While waiting for the orientation to begin, several remarks were overheard which suggested that the faculty members in attendance thought they were knowledgeable about human sexuality. A female on the basic science faculty commented to the physician sitting next to her, "How much is there to know about sex?" The answer she received was, "This should take about fifteen minutes, unless they are going to show dirty pictures".

In both 1971 and 1972, as the orientation began, the groups present were asked to complete the SKAT. On both occasions, the flippant attitude of the faculty members rapidly disappeared as they filled out the answer sheets. Faculty members frequently paused, apparently to re-read questions, and occasionally gazed into the distance, apparently thinking about the questions and the appropriate answers. Almost every faculty member present, with the exception of those taking the SKAT for the second time in 1972, was observed erasing answers and re-marking answer sheets.

Following completion of the SKAT, faculty members began asking questions of committee members. Almost all of the
questions related to variation in sexual behavior. On one occasion in 1972, a faculty member asked if the statement "For every female that masturbates, four males do" was false. A committee member responded that it was true. Several other committee members assured the first committee member that this statement was incorrect. She paused, looked perplexed, and said, "You mean that's wrong?" On other occasions, committee members were forced to consult the answer booklet before responding to questions of the small group leaders.

In both 1971 and 1972, the small group leaders showed a great deal of interest in the material presented during the orientation, and many actively questioned those presenting the material. Following the orientations, the small group leaders made comments that suggested they had learned a great deal. For example, a clinical psychologist thanked an individual who had presented some of the material and said, "I really learned a lot". A surgeon was overheard saying, "I wish they had had a course like this when I was in medical school". The author asked several other participants in the orientation if they had learned "anything". Their answers were, in every case, affirmative.

In view of the apparently thoughtful, and at times perplexed, attitudes of the faculty members while answering the SKAT, as well as the questioning that went on during the orientation, it seemed reasonable to conclude that faculty members present were being exposed to new information. This
conclusion was supported by the affirmative response of those faculty members directly questioned as to whether they had learned anything. Although the orientation program in no way measured the level of faculty knowledge about sexuality and sex-related behaviors, it did suggest that many faculty members had less information than they thought they had.

Planning Committee

During the latter part of 1970 and the first part of 1971, an interdisciplinary group of faculty members appointed by the dean of the medical school met weekly to plan the course in human sexuality. The early meetings were characterized by lengthy discussions of such general topics as were included in the course. After three meetings, it became apparent that committee members were reading and collecting material that might be relevant to the course. Committee members were bringing in reprints and quoting from various publications. This new material prompted active debates, and at times interchanges became heated.

Much of the material brought into the committee meetings in this way was treated by other committee members as having questionable merit. On one occasion, a committee member quoted statistics about homosexuality without giving the reference. The accuracy of the statistics was challenged by several other members of the committee. The discussion came to an abrupt end when the reference was given as
Sexual Behavior in the Human Male, the 1948 study by Kinsey et al. No one in the room appeared conversant enough with the classic work to continue the discussion. A committee member who had challenged the statistics mumbled, "So I was wrong".

After six weeks, the character of the committee meetings changed again. There was more active sharing of new information, and the discussions were characterized by what appeared to be less defensive and more knowledgeable critiques. I had the distinct impression that the committee members had realized that there was a lot to learn before presenting the course to the medical students and were now actively working together to collect the necessary information.

This attitude persisted, and the committee frequently referred to the need to "educate" the rest of the faculty. In such discussions, a committee member would on occasion refer to his or her own past "ignorance" as evidence to support the need for faculty education.

In a frequency count of comments by faculty members in four planning meetings, almost all the comments related to judgments of what behavior was normal and what was abnormal. One committee member, a psychiatrist, finally said in exasperation, "How are we going to teach this course if we can't even decide what's normal or abnormal?"
Faculty Course Evaluations

In both 1971 and 1972, a number of faculty members attended the lectures on human sexuality with the medical students. Lectures in this course were given by members of the teaching committee for the course on human sexuality. The number of faculty members in attendance at any given lecture varied. During what I thought was a typical lecture in 1972, the number of faculty members in attendance was twelve.

Following the 1972 course, I asked five faculty members who had attended most of the lectures to evaluate the course informally. Two of the faculty members suggested modifications in the course. One raised questions concerning the advisability of taking "sex" out of the context of "overall human development". All three, however, admitted that it had been a personal learning experience.

The other three faculty members gave the course unqualified praise and spontaneously admitted that they had acquired new information. One said, "I don't know what the students got out of it, but I learned a hell of a lot".

Patient Interviews

On various occasions, I had the opportunity to talk with people who had received medical care at Overland Medical School. Some of these people were my friends, some were students or members of student families, and others were chance acquaintances. During the participant observation period, I attempted, in these conversations, to
elicit individual impressions about the expertise of clinical faculty members in relation to human sexuality.

Most such inquiries evoked general responses such as, "He is a good doctor" or "I am sure he knows what he is talking about". Further questioning usually revealed that there had been little interaction with Overland Medical School physicians in relation to sexual topics.

In a few cases, the patients had approached a faculty physician with a specific sexual complaint. On such occasions, the patient's comments were less laudatory. The most frequent criticism was that the physician was anxious and avoided in-depth discussion. One young woman reported that when she asked her obstetrician why she did not have orgasm, he replied, "You just didn't get drunk enough on your wedding night".

Physicians at Overland Medical School may have had extensive knowledge about sexuality, but on the basis of a limited sample of ex-patients, it appeared they did not share their knowledge with their patients.

Faculty Interviews

During the period of participant observation, I had frequent opportunity to gauge faculty members' knowledge of human sexuality be means of face-to-face questioning.

Faculty members interviewed in this way could be divided roughly into two groups. The largest group was defensive and avoided answering my questions. It was not uncommon for this group to respond with remarks such as, "What
difference does it make?", and then change the subject. When answers were forthcoming they usually were concise and authoritative despite the fact that they were frequently in error. One such dialogue went this way:

Author: How old are males when they lose a desire for sex?
Subject: Late fifties -- or early sixties.
Author: How do you know?
Subject: Christ, I'm only forty and I am not eager to find out.

The other and smaller group was characterized by a less authoritative and more inquisitive response. Their answers were phrased more often in terms of "what they thought" rather than "what they knew". They frequently turned the conversation around by asking me questions. For example, one specialist in internal medicine responded to a question about masturbation after marriage with, "I don't think it's very common. Is it?"

During these conversations I kept track of erroneous responses. The most frequent were: (1) masturbation is in some way harmful; (2) homosexuals are all mentally ill; (3) females usually do not masturbate; (4) the only way some women have orgasm is by direct clitoral stimulation; and (5) anal stimulation represents perversion.

In general, faculty members were very familiar with endocrinology. Genital anatomy could be described by every faculty member questioned, but the anatomical
changes that occur with sexual excitement were known to only a few. The greatest apparent deficiency in faculty knowledge was on the subject of the sociology of sexual behavior. Most faculty members had little idea of correlations between patterns of sexual behavior and demographic variables such as sex, age, and socio-economic status.

**Comparisons**

My impression was that male and female faculty members were equally well-informed or ill-informed. Faculty members from action-oriented specialties such as surgery seemed more prone to give definitive answers, but their level of accurate information did not seem to differ significantly from that of the rest of the faculty. Obstetricians and gynecologists as a group had more information than physicians in other specialties, but even they lacked information about sexual behavior and its relationships to demographic variables. Psychiatrists, although more tolerant of certain sexual behavior such as homosexuality, appeared to be no better informed than their colleagues in other specialties.

There were a few exceptions to the low level of knowledge about human sexuality and sex-related behavior. Although no faculty member on campus stood out as an "expert" on human sexuality, several faculty members had significantly more information than their peers. These individuals represented different specialties. Without exception, all had done extensive reading on human sexuality
In interviews with these people, I was impressed by the fact that all seemed to have learned from their patients. One faculty member recalled his early training in which he had been told repeatedly by his professors, "Hysterical females are frigid". He stated that for a year after joining the faculty, he assumed this was true, until after treating a large number of "hysterical females" who reported having orgasm he suddenly realized: "all of my supervisors were wrong. They were just wrong". He then cited with pride a recent publication presenting statistics based on a survey which indicated that "hysterical females have no greater incidence of anorgasmia than the general female population".

Knowledge After Completing the Course on Sex

By 1973, 40 faculty members either had attended the course on human sexuality with the medical students or acted as small group leaders during the course. Another twelve had lectured in the course.

In face-to-face interviews at this time, I noted an increase in faculty knowledge about human sexuality. This was most apparent in a decrease in the incidence of erroneous responses of the kinds previously described. In addition, there appeared to be a more general understanding of anatomical and physiological responses during sexual excitement as well as a more general awareness of the diversity of sexual practices in the general population.

It was my impression that this shift was most noticeable among faculty members in the departments of obstetrics
and gynecology, psychiatry, and pediatrics, departments which had faculty representatives on the teaching committee for the course on human sexuality. It is perhaps relevant that in the same year, 1973, faculty members from the departments of family medicine, internal medicine and psychiatry asked permission to attend an abbreviated course on human sexuality given for residents in psychiatry and obstetrics and gynecology.

There was no way to quantify changes in faculty knowledge about human sexuality. Misconceptions and inaccurate information were still elicited by my questions to faculty members. However, in my opinion there was greater overall knowledge about human sexuality and sex-related behavior among the faculty members as a group. The attendance of faculty members at student lectures and requests by them additional training opportunities suggested that a further increase of knowledge might be expected.

Patients

Data on the knowledge held by patients of human sexuality and sex-related behavior were obtained from three sources: (1) observation in an outpatient clinic; (2) observation on an inpatient unit; and (3) interviews with people who had received medical care at Overland Medical School. These data were collected for use in the analysis of student and patient interaction contained in Section III.
Outpatient Clinic

During the period of participant observation, I spent two afternoons a week observing third-year medical students interviewing patients. At times, I would participate actively in the interview. Although sex and sex-related behavior were not always discussed in interviews, such topics usually came up as part of the "review of systems" students were expected to complete. The "review of systems" was a standardized part of the history-taking routine in which patients were asked about the function of various organ systems. One of the organ systems was called "genito-urinary".

Occasionally, patients would describe sexual concerns as a reason for visiting the clinic. When that occurred, discussion of sexual topics was more extensive than the perfunctory questions and answers that characterized the "review of systems".

It frequently was difficult to evaluate the patient's level of accurate information about human sexuality. Students tended to ask questions that called for a yes or no answer. These questions also tended to be so general as to make judgments about the patients' information questionable. A student typically would ask a patient as part of the "review of systems", "No problems with sex?" or "Is your sex life O.K.?" Patients usually responded to such questions with a "no" or "yes", and the student would immediately ask another question unrelated to sex.
Some interviews did contain enough information for me to make an estimate of the patient's knowledge. On one occasion, a student asked a middle-aged woman, "Do you masturbate?" The woman responded that she did. The student asked if she used a dildoe, and after ten minutes of what appeared to be mutual confusion, the patient stated that she had no idea of what masturbation meant. She also revealed that the idea of touching her genitals for pleasure was repulsive to her. She then stated her conviction that only "prostitutes" engaged in such behavior.

My overall impression of the level of accurate information about sex and sex-related behavior among the clinic patients was that it was low. Sexual misconceptions were common. On one occasion the author interviewed three patients to demonstrate to students how to take a "sex history". None of the patients had presented sex-related complaints. All three volunteered erroneous information about masturbation, female orgasm and homosexuality. All agreed that masturbation could lead to mental illness. One woman thought masturbation was the cause of acne, and a man stated that women did not masturbate. Two of the patients did not know women could have multiple orgasms, and one female thought orgasm could not occur without penile insertion. All agreed that homosexuals were, by definition, predatory.

Female patients who were questioned about their genital anatomy, with few exceptions, had incomplete or erroneous
ideas. They were not aware of the anatomical position of the clitoris and the urethral meatus. Most had never seen their genitals. Male patients, on the other hand, were knowledgeable about their own genitals and had at least a general idea of female genital anatomy.

Both male and female patients had little information about changes in the human body associated with sexual excitement. For example, despite the fact that male testicles increase in size by about 50% during sexual response (Masters and Johnson 1966), no patient questioned by me in the outpatient clinic was aware the testicles changed in any way.

Patients' information about sexual behavior among or other distinguishable groups of our society was limited. Stereotypes were frequently offered as information, for example, "All those rich guys have mistresses".

Inpatient Units

During the participant observation period, I spent a portion of each morning on an inpatient unit. Contact there with individual patients and individual students was maintained over longer periods of time than in the clinics. This provided a better opportunity to assess the amount and accuracy of information possessed by patients.

Even though the ritual of the "review of systems" was much the same as in the outpatient clinic, there was greater possibility of discussion of sexual topics in the daily interaction between students and patients. Students
were more at ease with patients with whom they were familiar.

The level of sexual knowledge found among inpatients was similar to that found in the outpatient clinic. Misconceptions and lack of information were common. This was not surprising since the inpatients were for the most part from the same backgrounds as the clinic patients.

There was interest in sex-related information among patients in the inpatient unit. Popular magazines and paperback books on the subject of sex were passed around, and their contents discussed. When a physician was available and receptive to questions about sexual anatomy and physiology, patients availed themselves of the opportunity to ask questions.

It was of note that four patients, hospitalized in the unit studied during the participant observation period, had read Masters and Johnson's work, *Human Sexual Inadequacy*. At least one of these patients had misunderstood and misinterpreted the book. The patient was overheard telling another patient that "frigidity" occurred when a woman would not "try" to have an orgasm. He cited Masters and Johnson as his reference.

**Patient Interviews**

In conversations with friends and acquaintances who received medical care at Overland Medical School, I had a further opportunity to assess the level of information of selected patients. The individuals interviewed in this
manner tended to be better educated, younger, and more affluent than those studied in the clinic and inpatient unit.

The author found this group more knowledgeable than the other patients studied. They had at least a general idea of both male and female anatomy. Some misconceptions still occurred. There was, for example, a general misconception that the hood that overlies the clitoris was in fact the clitoris, and that male nipples were physiologically different from female nipples.

Erroneous ideas about age and sexual activity were also elicited. There was a general misconception that males became sexually inactive after age 60 and that exhibitionism and pedophilia were more common in older men, a contradiction that was never perceived.

Certain ideas held by patients in the clinic and inpatient units were partially different among this category of patients. They did not, for example, feel that masturbation caused mental illness or acne, but they expressed concern about the harmful effect of "excess" masturbation.

**Students**

Data on the knowledge of sexuality possessed by students were obtained from five sources: (1) Sexual Knowledge and Attitude Test; (2) observation in an outpatient clinic; (3) observation on an inpatient unit; (4)
interviews with individual students; and (5) student evaluations of the course on human sexuality.

**Sexual Knowledge and Attitude Test**

In 1971, the freshman class of medical students was given the SKAT. Although the whole class was asked to take the test, only 148 out of 170 students actually handed in answer sheets. The SKAT was given before the beginning of the new course on human sexuality and was repeated after the course was completed. In the same year, 43 senior students and 23 junior students took the SKAT before an elective course similar to that given the freshmen. The SKAT was not repeated after the elective course.

In 1972, the entering freshman medical students were given a revised version of the SKAT. The knowledge section in the revised version was not directly comparable with that of the SKAT given the freshmen in 1971. Following the course on human sexuality the 1972, freshmen were asked to re-take the revised version of the SKAT. Again, not all freshman students actually handed in answer sheets. Only 176 out of 200 students returned scorable answer sheets.

The mean knowledge scores based on responses to the SKAT for the various medical student classes before they were exposed to the course in human sexuality were recorded in Table 2 and Table 3. In all of the 1971, classes the mean score fell between the national mean and one standard deviation above the mean; and, as would be expected with
TABLE 2

Mean Knowledge Scores of Medical Students in 1971 as Measured by Knowledge Section of the SKAT in Comparison to National Mean for Medical Students

<table>
<thead>
<tr>
<th>Medical Student Class</th>
<th>Mean Knowledge Score</th>
<th>Standard Deviation</th>
<th>Range</th>
<th>N</th>
<th>National Mean Knowledge Score*</th>
<th>National Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshmen</td>
<td>66.338</td>
<td>5.946</td>
<td>41-79</td>
<td>148</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Juniors</td>
<td>70.560</td>
<td>4.187</td>
<td>63-78</td>
<td>23</td>
<td>65.490</td>
<td>6.690</td>
</tr>
<tr>
<td>Seniors</td>
<td>67.837</td>
<td>5.769</td>
<td>51-79</td>
<td>43</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Based on national sample of medical students at all levels of training.
TABLE 3
Mean Knowledge Scores of Freshman Students in 1972 as Measured by a Revised Version of the Knowledge Section of the SKAT in Comparison to National Mean for Medical Students

<table>
<thead>
<tr>
<th>Medical Student Class</th>
<th>Mean Knowledge Score</th>
<th>Standard Deviation</th>
<th>Range</th>
<th>N</th>
<th>National Mean Knowledge Score*</th>
<th>National Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshmen</td>
<td>47.22</td>
<td>10.2</td>
<td>21-68</td>
<td>176</td>
<td>50.000</td>
<td>10.000</td>
</tr>
</tbody>
</table>

* Based on national sample of medical students at all levels of training.
smaller N's, the standard deviation for the various student classes in 1971 was less than the standard deviation for the national sample.

The freshmen in 1972 took a different version of the SKAT. The mean knowledge score for this group was again well within one standard deviation of the mean for the national sample.

If the SKAT provides a measure of sexual information in the medical student classes, as it purports to do, then two conclusions could be drawn from Tables 2 and 3: (1) junior and senior medical students who elected to take a course in human sexuality did not have significantly more accurate information about human sexuality and sex-related behavior than entering freshmen in the same year; and (2) the medical students tested at Overland Medical School had essentially the same amount of accurate information about human sexuality and sex-related behavior as the general population of medical students tested in institutions throughout the United States.

The fact that the mean knowledge scores of Overland Medical School students failed to increase significantly among the upperclassmen was surprising. It might be argued that upperclassmen attending an elective course in human sexuality were motivated to attend the course by an awareness of their inadequate information about human sexuality in comparison with their peers. This, however, did not appear to be the case when I compared data elicited in
interviews with upperclassmen taking the elective course and upperclassmen who elected not to take the course. In fact, the interview data supported just the opposite conclusion, that students electing to take the course were more knowledgeable than their peers.

An alternative explanation of the similarity in the means of knowledge scores obtained from freshman, junior and senior student groups was that students in Overland Medical School acquired little new information during their medical education. In this regard, it should be noted that the knowledge section of the SKAT contained no questions about genital anatomy as such. It did contain three questions as to the effect of surgical procedures on sexual function, and six questions on physiological functions; for example, question #6 was: "Nursing a baby protects the mother from becoming pregnant". Most of the questions concerned sexual practices. It seemed reasonable, then, to conclude that one factor contributing to lack of significant differences between the student groups was that students acquired little new information about sex-related practices and behavior during their stay at Overland Medical School.

A further analysis of the SKAT knowledge scores of the classes tested in 1971 was made. Since freshmen in 1972 were given a different version of the SKAT, their scores were not included in the analysis.

Responses of male and female students for each class were compared. These data are reported in Table 4. The
### TABLE 4

Mean Knowledge Scores of Male and Female Medical Students in 1971, as Measured by Knowledge Section of the SKAT

<table>
<thead>
<tr>
<th>Class</th>
<th>Mean Scores for Males</th>
<th>N*</th>
<th>Mean Scores for Females</th>
<th>N*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshmen</td>
<td>66.594</td>
<td>133</td>
<td>70.182</td>
<td>11</td>
</tr>
<tr>
<td>Juniors</td>
<td>70.550</td>
<td>20</td>
<td>70.667</td>
<td>3</td>
</tr>
<tr>
<td>Seniors</td>
<td>67.923</td>
<td>39</td>
<td>67.000</td>
<td>3</td>
</tr>
</tbody>
</table>

* Some students failed to record their sex and their scores were omitted.
low female N's reflect the fact that Overland Medical School classes were predominantly male. Mean knowledge scores of all groups of male and female students tested fell between the national mean and one standard deviation above that mean. In the groups tested, males and females had essentially the same amount of accurate sexual information, as reflected in their SKAT responses.

In a further effort to make discriminations among freshmen in 1971, mean knowledge scores were compared on basis of father's occupation, community of origin and marital status. The results of this comparison are reported in Tables 5, 6 and 7. Mean knowledge scores in all categories fell within one standard deviation of the national mean.

It had been hypothesized by the author that knowledge of sex and sex-related behavior would show a correlation with gender, father's occupation, community of origin, and marital status. Since these variables did not help in explaining why some students entered Overland Medical School with more knowledge of human sexuality, as measured by the SKAT, than other students, a further analysis was undertaken. Freshman medical students in 1971 who scored 75 or above on the knowledge section of the SKAT were compared with students scoring 56 or below on the same test.

Eleven freshman students fell in the "75 or above" group and twelve in the "56 or below" group. There was no significant difference in age, sex, religion, father's occupation or community of origin between the two groups.
TABLE 5
Mean Knowledge Scores of Freshman Medical Students in 1971 as Measured by Knowledge Section of the SKAT, by Father's Occupation

<table>
<thead>
<tr>
<th>Father's Occupation</th>
<th>Mean Scores</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physicians</td>
<td>65.050</td>
<td>20</td>
</tr>
<tr>
<td>Clergymen</td>
<td>62.000</td>
<td>1</td>
</tr>
<tr>
<td>Lawyers</td>
<td>--</td>
<td>0</td>
</tr>
<tr>
<td>Teachers</td>
<td>68.333</td>
<td>6</td>
</tr>
<tr>
<td>Other professions</td>
<td>65.050</td>
<td>39</td>
</tr>
<tr>
<td>Executives</td>
<td>66.261</td>
<td>23</td>
</tr>
<tr>
<td>Clerical/sales</td>
<td>67.529</td>
<td>14</td>
</tr>
<tr>
<td>Skilled, manual</td>
<td>68.538</td>
<td>26</td>
</tr>
<tr>
<td>Semi-skilled, manual</td>
<td>67.714</td>
<td>7</td>
</tr>
<tr>
<td>Unskilled, manual</td>
<td>65.429</td>
<td>7</td>
</tr>
</tbody>
</table>
### TABLE 6

Mean Knowledge Scores of Freshman Medical Students in 1971 as Measured by Knowledge Section of the SKAT, by Size of Community of Origin

<table>
<thead>
<tr>
<th>Community Size</th>
<th>Mean Scores</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban, over 100,000</td>
<td>65.973</td>
<td>73</td>
</tr>
<tr>
<td>Urban, over 2,500</td>
<td>67.000</td>
<td>46</td>
</tr>
<tr>
<td>Rural, non farm</td>
<td>66.615</td>
<td>13</td>
</tr>
<tr>
<td>Rural, farm</td>
<td>66.571</td>
<td>14</td>
</tr>
</tbody>
</table>
TABLE 7

Mean Knowledge Scores of Married Freshman Students in 1971 as Measured by Knowledge Section of the SKAT and by Presence or Absence of Children

<table>
<thead>
<tr>
<th>Marital Category</th>
<th>Mean Scores</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>All married students</td>
<td>66.836</td>
<td>61</td>
</tr>
<tr>
<td>Married, without children</td>
<td>66.660</td>
<td>47</td>
</tr>
<tr>
<td>Married, with children</td>
<td>67.429</td>
<td>14</td>
</tr>
</tbody>
</table>
The only significant difference appeared when the groups were compared on the basis of sex education in church and school.

In the high scoring group only one of eleven students reported participating in church-sponsored sex education and that occurred in his second year of college. Fifty percent, or six students in the low scoring group, reported participating in church-sponsored programs in sex education and one-third, or four of these students, participated in church-related programs before entering college.

I have no good explanation of this negative correlation. It might be assumed that religious orthodoxy is reflected by a history of church-sponsored sex education, and that religious orthodoxy acts in some way to inhibit the acquisition of information about sex. I was unable to support this hypothesis on the basis of other data collected as a part of this study.

On the basis of data from the knowledge section of the SKAT, it appeared that students in Overland Medical School had the same amount of accurate information about sex and sex-related behavior as medical students in other medical schools. It also appeared that they did not acquire a significant amount of new information, with the possible exception of knowledge of genital anatomy, during their medical education. The range of knowledge scores among the students could not be explained on the basis of expected correlations with demographic variables.
Outpatient Clinic

While acting as a participant observer in an outpatient clinic, I had the chance to assess the sex-related information possessed by students as well as patients. Following an interview of a patient, I had the opportunity to talk with the student who did the interview. This provided an opportunity to check my impressions of the student's information and further explore the limits of that information.

During the first year of participant observation, none of the students had taken the course in human sexuality. During this period, student interactions with patients reflected a low level of sex-related information. Students failed to correct misinformation presented by patients during interviews and offered advice or directions to patients based on inaccurate information. For example, I observed one interview in which the patient complained of premature ejaculation. The student then asked the patient several questions about his general health and suggested to the patient that he try abstaining from intercourse "for a while". After the patient left, I asked the student why he had prescribed abstinence. The student's response was, "It might work. Maybe I should have gotten a urinalysis".

On another occasion, a male patient's son and daughter-in-law were interviewed before an examination of the patient. The relatives stated they were bringing their "father" to the clinic for a "general check up" because he had been "caught in bed" with a woman who lived in the same
"home for the elderly" in which he resided. A portion of the interview follows:

Son: There is somethins wrong with Dad.

Daughter-in-law: He is acting rational now, Doctor, but I believe Mrs. Jones (nurse at "home for the elderly").

Son: I just don't understand what could have come over him.

Student: Sometimes elderly people act that way when they get senile.

Son: His mind is good.

Student: Senility, at first, can be hard to recognize.

After the patient was examined, I asked the student why he had not investigated with the patient the nature of his relationship with the woman. The student responded, "I didn't think of it. I was pretty sure we were dealing with an incipient brain syndrome". Further questioning revealed that the student was not aware that many people remain sexually active in old age. He assumed that sexual behavior in a 70-year-old man was symptomatic of a physical disturbance.

Even on the subject of genital anatomy, students were not always accurate. One student told a patient who complained that his wife did not get "turned on" during intercourse that "You need to keep the penis in contact
with the clitoris". When the patient did not understand, the student sketched the female genitalia for him. His representation was inaccurate. When asked about this later, the student admitted that although he had done a "lot" of pelvic exams, he had never seen a clitoris.

Not all student information was erroneous. Some students had some awareness of and tolerance for variations in sexual behavior. They lacked specific information to provide patients and resorted to general supportive statements when confronted with questions about the appropriateness of any given behavior. The most frequent advice I heard students give patients was, "Anything you do in the privacy of your own home is normal". That this was not always helpful was reflected in the response of one young housewife who said, "Doctor, if I am the only one in town doing it, it's not normal, no matter what you say".

After the first year of participant observation, some of the students had attended the course on human sexuality. During this period, there was a general improvement in the accuracy of information students provided patients. Students, however, continued to rely at times on inaccurate information. This use of inaccurate information was not always the result of ignorance. On one occasion, I observed a student tell a young female patient that masturbation could interfere with her future heterosexual adjustment. I was aware that the student knew better than that. When I questioned the student as to the appropriateness of
the statements, he responded, "I know, but she is going to get in a lot of trouble masturbating at school".

On the basis of observation in the outpatient clinic, I concluded that students had inadequate information about sex and sex-related behavior. Their knowledge of genital anatomy and sex-related physiological processes appeared superior to that of their patients. It was, however, far from comprehensive. With regard to sex-related behavior, they appeared vaguely aware that differences occurred in the general population, and that these differences were not necessarily related to abnormality. They lacked specific information about variations in sex-related behavior and frequently relied on inaccurate information in making medical judgments.

**Inpatient Unit**

While observing students and patients on the inpatient unit, I was able to gain additional information about the students' knowledge of sex and sex-related behavior. In the more leisurely atmosphere of the inpatient unit, there were chances to engage in lengthy conversations with students. The conclusions derived from observations in the outpatient clinic were supported by observation on the inpatient unit, and it was possible to make additional conclusions.

The failure of data collected from the knowledge section of the SKAT to correlate with sex, socio-economic
status, community of origin, father's occupation and marital status was investigated further in the inpatient unit. It appeared that in the group of students rotating on the inpatient service, the failure of demographic variables to correlate with degree of sexual knowledge was not a statistical artifact. Students' knowledge of sex and sex-related behavior appeared to reflect directly their experiences as undergraduate students. Where students had been in a liberal arts curriculum and participated in student groups, particularly where those groups were oriented toward "advocacy", that is, when they inclined to favor relative freedom of behavior in sexual relations, their sexual knowledge appeared more complete. In the sample of students observed, such undergraduate experiences were not related to the demographic variables used in the analysis of SKAT data. One female student who demonstrated a high level of accurate sex-related information was from a small rural community. She was unmarried and her father was a farmer. Another student, male, with an equal amount of accurate information was from the largest city in the state and was the son of a college professor. Both had been liberal arts majors and active in campus organizations that were concerned with "social change".

It was noteworthy that students with a high level of accurate information about sex-related behavior held convictions that were based on inaccurate information they apparently had acquired during their undergraduate
experiences. For example, the female medical student described above believed that anorgasmia in a female was inevitably the "fault" of male "egomania". Such a conviction was as much an attitude as it was information, but it was not qualitatively different from the previously quoted remark of a patient that "frigidity" in woman was the fault of the woman herself. Neither statement took into consideration the complexities of the relationship in which sexual activity occurred or the importance of the social system in which they participated.

All of the students regarded sexual information as consisting of clear-cut facts. This resulted in much oversimplification. One student, for example, aware that oral-genital sex play was practiced most frequently by better educated couples, persisted in the belief that educated couples who did not engage in such behavior were "neurotic".

**Student Interviews**

In face-to-face conversation with students in non-clinical settings, I had the opportunity to explore further the state of their knowledge of sex and sex-related behavior. The conclusions reached on the basis of SKAT data and observations in clinical settings were not altered on the basis of these face-to-face conversations.

What did emerge from the conversations was the importance to the students of reducing sex-related information to definitive, factual statements. Over and over students
would interject into a conversation comments and questions such as, "That's interesting, but how do you decide if it's normal or abnormal?" At other times they would make statements such as, "You're saying pre-marital sex is healthful" or "Women should learn to masturbate". The distinction between attitudes about sexual behavior and information about sexual behavior was one they had difficulty making.

The point of reference most frequently used in making definitive statements was the distinction between normality and pathology. Students frequently struggled to fit sexual behavior into one category or the other and appeared confused when I would not agree. In the students' views, behavior had to be either normal or abnormal; there was, as one student expressed it, "No such thing as 'anormal'". Comments solicited from students in a small group discussion on homosexuality reflected the students' concern about this behavior. The remarks of a junior student in a hallway conversation after such a discussion illustrates this concern:

All my life I have been taught that homosexuality was bad. In psychiatry Dr. _______ said it was sick. If I understand what you are saying, you don't believe it is always abnormal. Now what I need to know is when I get out in practice and a guy walks into my office and says, "I'm queer", then what am I supposed to do: throw him out, refer him to a psychiatrist or what?
Freshman medical students seemed less compelled to categorize sexual behavior as normal or abnormal than did upperclassmen. They appeared more willing to tolerate relativity in information about sexual behavior. The need to categorize sexual behavior as normal or pathological, however, was still present. A freshman student, in an interview conducted in the campus bookstore, said: "I guess you just have to decide when you see him (the patient). But there should be some sort of guide line. What about something like sadism? Now that's not normal".

The students' tendency to see information about sexual behavior in terms of absolutes acted in some ways to prevent the acquisition of more comprehensive knowledge. When information was presented to them that did not represent an absolute, they would appear confused and attempt to convert it into a statement with which they felt more comfortable.

The tendency I noted, for freshmen to be less prone than upperclassmen to transform information that was relative in nature into an absolute, suggests that, in part, both tendencies were in some way reflections of the medical educations the students had received.

Course Evaluations

Following the course in human sexuality in 1971 and 1972, freshman students were asked to evaluate the course in a structured questionnaire. Five of the questions had to do with their perception of their "basic knowledge"
before and after the course. The students' responses were made available to faculty members in percentages and are reported in Tables 8 and 9.

Although these self evaluations were not taken as direct measures of the level of student information, they do indicate that the students felt they acquired a significant amount of new information as a result of attending the course. The mean increase in the percentage of students rating themselves as having excellent knowledge across all categories in 1971 was 38%, and in 1972 it was 29%. When these data are considered in relation to the mean SKAT scores on the knowledge section of freshmen and upperclassmen reported in Table 2, which demonstrated little difference in the level of knowledge of the two groups, it provides further support for the conclusion that students in Overland Medical School were ignorant of many facts about sex and sexuality. If the course in human sexuality had not been given, there is no reason to assume that their knowledge would have increased appreciably during their four years in medical school.

In the evaluation instruments used in 1971 and 1972, comments of the students were solicited, and most of them made one or more comments, which generally reflected their feeling that they had acquired new information. The comments also reflected the students' concern that information given them be definitive and absolute.

Comments reflecting the acquisition of new information
TABLE 8
Freshman Students' Evaluations in 1971 of Their Knowledge in Five Categories Prior to the Course in Human Sexuality and After Completing the Course

<table>
<thead>
<tr>
<th>Category</th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>before course</td>
<td>1%</td>
<td>6%</td>
<td>36%</td>
<td>58%</td>
</tr>
<tr>
<td>after course</td>
<td>0%</td>
<td>3%</td>
<td>21%</td>
<td>75%</td>
</tr>
<tr>
<td>Basic knowledge of male and female anatomy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>before course</td>
<td>8%</td>
<td>22%</td>
<td>40%</td>
<td>30%</td>
</tr>
<tr>
<td>after course</td>
<td>0%</td>
<td>1%</td>
<td>24%</td>
<td>75%</td>
</tr>
<tr>
<td>Basic knowledge of physiology of human sexual response</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>before course</td>
<td>5%</td>
<td>29%</td>
<td>43%</td>
<td>23%</td>
</tr>
<tr>
<td>after course</td>
<td>0%</td>
<td>1%</td>
<td>26%</td>
<td>73%</td>
</tr>
<tr>
<td>Basic knowledge of variations in human sexual behavior</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>before course</td>
<td>7%</td>
<td>22%</td>
<td>38%</td>
<td>34%</td>
</tr>
<tr>
<td>after course</td>
<td>0%</td>
<td>2%</td>
<td>19%</td>
<td>79%</td>
</tr>
<tr>
<td>Basic knowledge of methods of contraception</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>before course</td>
<td>31%</td>
<td>40%</td>
<td>26%</td>
<td>3%</td>
</tr>
<tr>
<td>after course</td>
<td>0%</td>
<td>18%</td>
<td>46%</td>
<td>36%</td>
</tr>
</tbody>
</table>
TABLE 9

Freshman Students' Evaluations in 1972 of Their Knowledge in Four Categories Prior to the Course in Human Sexuality and After Completing the Course

<table>
<thead>
<tr>
<th></th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic knowledge of male and female anatomy</td>
<td>before course</td>
<td>1%</td>
<td>5%</td>
<td>43%</td>
</tr>
<tr>
<td></td>
<td>after course</td>
<td>1%</td>
<td>2%</td>
<td>35%</td>
</tr>
<tr>
<td>Basic knowledge of physiology of human sexual response</td>
<td>before course</td>
<td>0%</td>
<td>22%</td>
<td>47%</td>
</tr>
<tr>
<td></td>
<td>after course</td>
<td>1%</td>
<td>2%</td>
<td>40%</td>
</tr>
<tr>
<td>Basic knowledge of variations in human sexual behavior</td>
<td>before course</td>
<td>7%</td>
<td>34%</td>
<td>41%</td>
</tr>
<tr>
<td></td>
<td>after course</td>
<td>1%</td>
<td>2%</td>
<td>38%</td>
</tr>
<tr>
<td>Basic knowledge of methods of contraception</td>
<td>before course</td>
<td>2%</td>
<td>11%</td>
<td>53%</td>
</tr>
<tr>
<td></td>
<td>after course</td>
<td>0%</td>
<td>3%</td>
<td>35%</td>
</tr>
</tbody>
</table>
were phrased in different ways. Some examples are:

1. "Built a broad base of sexual information".
2. "Made me aware of wide variations in sex".
3. "Expanded knowledge of sex physiology and variations".

A few comments suggested that students felt they had acquired no new information. One student wrote, "It would have been more effective if they had told me something I didn't already know".

Comments expressing the desire that information be definitive and absolute were the most common, except remarks about the style and presentation of individual lecturers. For example, 39 comments referred to a glossary of "sex-related terminology" provided in the course of instruction. Almost all were positive. Two were negative and two neutral. A typical comment was, "Organized and valuable as a resource tool". The technical definitions of such terms as pedophilia and paraphilia seemed to be especially helpful to the students. One student was overheard remarking to another while pointing to the glossary, "Now, this finally makes some sense".

Examples of the many comments reflecting the students' desire for definitive statements follow:

1. "I would like to have more specific information".
2. "More specifics on effects of extramarital affairs".
3. "Too much nebulous esoteric B.S.!!!"
Spouses and Guests

During the course on human sexuality in both 1971 and 1972, freshmen had the opportunity to bring one guest with them. It was suggested to them that if they were married, they bring their spouses. Not all students chose to bring guests. Married freshmen who brought guests almost always brought their spouses. I observed only two married students who brought guests other than their spouses. One of these brought a cousin, and another brought a friend. In both cases, the guest was of the same sex as the student.

Married juniors and seniors taking the elective course in human sexuality in 1971 were invited to bring their spouses, but unmarried students in the course were not given the opportunity to bring guests.

Demographic data collected on the spouses and other guests of medical students attending lectures on human sexuality revealed that they were similar to the medical students with regard to 1) religious preferences, 2) size of communities of origin, 3) socio-economic statuses, and 4) fathers' occupations. They also were similar as a group to the students in levels of education when students' years in medical school were excluded from consideration. They were dissimilar from the medical students in two ways. Nearly all spouses and other guests were female; only four non-student males attended the course for freshmen in 1971. They also were slightly younger than the medical students.
The mean age of spouses and other guests in 1971 was two years younger than that of the freshmen.

Spouses and other guests were given the SKAT for comparative purposes. In 1971, spouses accompanying juniors and seniors were given the test before beginning the course on human sexuality. In 1972, spouses and other guests accompanying freshmen were given the SKAT before the beginning of the course and observed during the course.

**Sexual Knowledge and Attitude Test**

The mean scores for spouses and other guests are reported in Table 10. Means were all between the national mean for medical students and one standard deviation below the mean.

In 1971, the mean score of spouses was lower than the mean score of their husbands. In 1972, the mean scores of guests and spouses were also lower than those of their escorts. In neither case was the difference significant.

The fact that the upperclassmen in 1971 did not have scores significantly higher than those of their spouses suggests that the students had acquired little new information during their years in medical school, with the possible exception of facts about genital anatomy and general physiology, subjects which were not covered adequately in the SKAT.

The similarity between the mean scores for freshmen and their spouses and other guests in 1972 was not surprising
TABLE 10

Mean Knowledge Scores of Spouses and Other Guests of Junior and Senior Students in 1971 and Freshman Students in 1972 as Measured by Knowledge Section of the SKAT in Comparison to National Mean for Medical Students

<table>
<thead>
<tr>
<th></th>
<th>Mean Score</th>
<th>N</th>
<th>Range</th>
<th>National Mean Knowledge Score</th>
<th>National Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wives of junior and senior students, 1971</td>
<td>64.550</td>
<td>20</td>
<td>50-77</td>
<td>65.490</td>
<td>6.690</td>
</tr>
<tr>
<td>Guests of freshman students, 1972</td>
<td>42.75</td>
<td>94</td>
<td>9-68</td>
<td>50.000</td>
<td>10.00</td>
</tr>
</tbody>
</table>
since they were from similar backgrounds and had equivalent educations.
CHAPTER FIVE

Sexual Attitudes and Values

This chapter attempts to describe the sexual attitudes and values expressed by distinguishable groups in Overland Medical School. The data, collected from faculty members, patients, medical students, and spouses and guests of medical students, were of the two types described in the preceding chapter. Additional data were collected on freshmen, juniors and seniors by submitting them to an experimental task, and the SKAT, which provided a standardized measure of attitudes and values on six scales. The experimental task and the SKAT were described in the section on methodology. SKAT data were not collected from faculty members and patients for the reasons discussed in Chapter Four. Data were collected on all groups by means of participant observation.

Responses to the attitude section of the SKAT should be considered in the context in which the SKAT was given. Students, and students' spouses and guests, were given the test just before attending a course on human sexuality. It may be assumed that, despite instructions to the contrary, individuals may have attempted to give "right" answers rather than to reflect their personal attitudes and values. This may have been the case even though students, when asked, assured the author that the promised anonymity was
sufficient protection for them to respond in the desired manner.

Faculty Members

Faculty Lectures

In the lectures I attended in 1970 and 1971, there were sexual references even on topics having nothing to do with human sexuality. The most common references I noted were intended to elicit laughter from students. A common practice was for lecturers to insert slides of voluptuous nude women into an otherwise non-sexual slide series. This was done on three occasions when I was in attendance, and I heard of other instances from students. Double entendres and explicit references to females as sexual objects were not uncommon. One faculty member noted the number of females present and said, "I see we have a lot of women in this class. I remember old Doctor ____ who used to say 'The only place for a woman is in the kitchen or in the bed'". His remark was greeted with a raucous response of cheers and hisses.

A few students identified the emphasis and preoccupa-
tion of some faculty members with sex. A female medical student, when asked why students seemed to be preoccupied with sex, responded:

Yesterday I attended a class on cancer management and prevention. There were a number of sexual references to which everyone responded . . . with
good long laughter . . . while the students made up the bulk of the laughing population, the professors were the ones telling the jokes.

Faculty members invariably defended to me their sexual levity in lectures on the basis that students found the course material boring, and the introduction of sexual slides and jokes kept the students' attention. One faculty member, when questioned about sexual material he included in his presentation, said, "Oh come on now, it's no big thing". When the faculty member was told that several female students in the class had been angry at the "male chauvinistic flavor" of his remarks, the faculty member said with irritation, "They're medical students now, and they have got to get over their prudishness".

However, even in lectures that purported to deal seriously with sexual topics, lecturers appeared uncomfortable. On occasion, they briefly hesitated or slightly mispronounced words and repeatedly resorted to humorous asides. This behavior was less frequent but still apparent even in lectures that were a part of the course on human sexuality. Lecturers in that course had agreed to delete "humor" that would "demean" individuals or groups, and yet there were references to "castrating females", "butch types", "queers", and sexual weirdos". Lecturers in the course were observed winking at the audience following statements that could be given a double meaning, and on one occasion a lecturer gestured with a "limp wrist".
The tone of voice of most faculty members changed when they were making sexual references. Although such behavior was difficult to document, there was general agreement among three faculty members listening to audio transcriptions of lectures that the best word for defining the altered voice tone was "smirking". One of the lecturers said, "I guess we are all uncomfortable enough with sex that we go back to locker room stories".

Small Group Leader Training

During the first part of the training period for group leaders, there was an apparent consensus that students' attitudes and values on human sexuality were counter-productive to good medical care. As the discussions progressed, however, disagreement occurred between individual faculty members as to the precise definition of productive attitudes and values. Subjects around which there was open disagreement included: 1) abortion, 2) homosexuality, and 3) premarital and extramarital sexual activity. Faculty members frequently resorted to the literature for support, as in the following statement by a male faculty member during an exchange on abortion:

I think we need to equip medical students with the kind of an attitude that is really objective. It doesn't matter what the Supreme Court says--that's different than what is a reasonable... understanding of abortion. We have paper after paper coming out now showing how nurses have problems relating to women in the hospitals waiting for abortions, and doctors too, for that matter. Abortion is, after all, taking a life, and we are trying to teach students to respect human life.
Personal values and attitudes also were evident in these discussions. One basic science instructor present said, "I'll tell you this, I don't think I want a 'swinger' for my personal physician", and another faculty member said, "Most of these students have had a good, sound background, and I don't think we are going to corrupt them by exposing them to some of these things--I wasn't corrupted by medical school".

The small group leaders were observed while they were taking the SKAT. Most of the faculty members at first moved rapidly through the items pertaining to attitude, answering without hesitation, and then they suddenly stopped, thought, and finally marked their answer sheets. This pattern was repeated until the section was completed. The hesitation of the faculty members apparently related to conflict between their attitudes and the attitudes they expected others to have. One faculty member, seated next to me, turned and said after a long period of contemplation, "Some of these questions are hard to answer. It depends on whether they are talking about me or my wife". On another occasion, a faculty member was overheard saying to a peer, "This is what I believe, but I'd beat the hell out of my daughter for doing it".

In both 1971 and 1972, the effect of the course on student values and attitudes precipitated more discussion than did the effect of the course on the level of student knowledge. Each year, several faculty members cautioned
against too much emphasis on "changing attitudes". The use of films to depict various sexual behaviors was questioned. The comment was made that "... sex films are shown every weekend at the drive-in ... and it is sufficient to tell students what they need to know".

When I asked faculty members, who had just completed small group leader training, for their reactions to the way the course was designed, the majority initially responded by emphasizing the need for such instruction. They then went on to voice reservations about its effects on students. Four main topics of concern were the possible consequences for the students' marriages, emotional stability, perception of the faculty, and relationship with patients. A fifth concern, variously articulated, related to the effect of the course on the medical school's relations with outsiders. Some thought that local ministers, prominent citizens, and students' parents would react negatively. The greatest concern was that pressure would be brought to bear on the Board of Regents, who might then withhold funds from the university or react in some other way detrimental to medical school programs. A typical comment was:

We don't need to rush into anything. A lot of these students are from rural or at least conservative backgrounds. Imagine what might happen when a student tells his father who plays golf with a Regent about this course.

Planning Committee

The planning committee spent much of its time discussing
the effect of the Human Sexuality course on students' attitudes and values. This discussion was helpful because it reflected, in many cases, faculty attitudes and values. There was little discussion over sex-related behavior, such as heterosexual behavior within a marital unit, that was considered socially approved. Behavior ideally disapproved but implicitly condoned, such as premarital intercourse by males, similarly provoked minimal controversy. Instead, most of the discussion was devoted to behavior that was generally considered "perverse".

When the lectures on homosexuality were being developed, there was concern, particularly on the part of two committee members, that they might precipitate a "homosexual panic" in a "majority" of the student body. There was also much discussion about sado-masochism, bestiality, transvestitism, and transsexuality, most remarks focusing on the manner in which these subjects were to be presented. The main issue was whether such subjects would be presented as normal or pathological. When it was suggested that they be presented descriptively without placing them in either category, there were objections. A comment abstracted from one such discussion was:

We can't get around the fact that simply describing something like S.M. (sado-masochism) leaves the impression that it's normal. Besides that, if we just describe it then how are students... supposed to learn how to deal with it... Rape, for example; are you just going to describe it?
The apprehension and concern in the planning committee was exemplified by an event that occurred one week prior to the beginning of the course in 1971. By this time, all preparation for the course had been completed: lecture material had been written, visual aid material selected, and student handouts had been reproduced. Three members of the committee sent out a memorandum announcing a "called meeting" of the committee for the next morning. This was done without notifying the committee chairman or the coordinator of the course.

When the committee assembled, the three members who had called the meeting immediately stated that they wanted to postpone the beginning of the course for two weeks. Their argument was that the time was needed for a thorough review of the course to provide a guarantee that the committee was not acting precipitously. Discussion was heated until the course coordinator arrived and stated that he was starting the course as scheduled "no matter what anybody said" and "no matter what votes" the committee took. The matter was finally put to a vote, the decision by a margin of two, being to start the course as scheduled.

In 1972 there was less concern in the committee about the effect of the course on the medical school's relations with the local community and the regents, but there was still a great deal of discussion about its effect on students. The principal point of discussion was the existence of the course itself. While none of the
committee members expressed concern for teaching students about human sexuality, they did question teaching it independently of other aspects of human development. A portion of such a discussion is reproduced below:

Faculty Member A: I'm concerned that this [way of teaching the course] places too much emphasis on sex. It makes it too important.

Faculty Member B: ________, what do you propose?

Faculty Member A: Why don't we do as ________ suggested and integrate it . . . into the human development course.

Faculty Member C: We have taught human development for years and we haven't taught . . . anything about sexuality, and the same thing would happen.

Faculty Member A: Well, sex is not as important as we are making it.

Faculty Member C: That's just another way of going back to where we used to be.

Faculty Member A: That's not necessary true.

Another point of discussion that arose again in the 1972 planning committee was the need to define sexual behavior as normal or abnormal. Student evaluations were used as support for the position of faculty members advocating a "clinical approach". Various modifications in
lecture material were made on the basis of these arguments, and at least nominal attention was given to psychodynamic formulations of sexual behavior in the 1972 course on human sexuality.

**Faculty Course Evaluations**

Most of the comments obtained in the interviews with faculty members who had attended the human sexuality course in 1972 concerned attitudes and values. There was a consensus that the course had had at least some impact on their personal attitudes. One faculty member said, "I suppose we can always learn something, and I sure don't see some things (sexual behavior) in the same way I did before". Of the five faculty members interviewed, three praised the attitudes and values they felt had been incorporated into the presentations, one was ambivalent, and another voiced "serious concern".

The praise was expressed in such terms as "breaking through traditional biases" and "making students think" rather than "ignoring their hangups". The concern had to do with visually depicting sexual behavior and exposing students to material they were not "equipped to handle". The faculty member with the most reservations said at one point, "I am concerned about this whole idea of 'fuckaramas' and desensitization. Maybe we are re-sensitizing students to the wrong things". He went on to say, "I am not sure I would want my wife to see some of this material, and I am
not sure I wouldn't want her to see it. I am going to have to think about it". Similar concern was expressed by the chairman of a basic science department who attended four of the lectures and then spoke briefly about "fuck pictures" at the next general faculty meeting.

**Patient Interviews**

Data on faculty attitudes also were elicited during conversations between the author and individuals who had received medical care at Overland Medical School. The most common comment was that no real conversation about sexuality had been held with physicians. When asked why, the ex-patients responded that they either had no sexual problems, or that they were embarrassed to ask such questions even of a physician. Most of the female ex-patients interviewed did report that they had asked their physicians about birth control and had received some explanation of various options and a recommendation. The few who had had children reported that their physicians had also responded well to their questions about changes in their bodies during pregnancy.

Two ex-patients reported incidents in which they had actually asked physicians questions about sexual practices. One young woman said that when she had asked her physician whether there was any danger in oral-genital stimulation he had referred her to a psychiatrist. She said she saw the psychiatrist on four occasions before quitting therapy. When asked why she quit therapy, she replied:
He reminded me of my mother. I kept trying to ask him [about oral-genital]. He just kept changing the subject. When I asked what he thought, he would always say, "What do you think about it". That's why I didn't go back.

The other ex-patient said she had asked her physician if her husband, who had divorced her, might be homosexual. His response, according to the patient, was to give a brief monologue about homosexuality and then to change the subject before she could ask further questions.

Faculty Interviews

When interviewed, faculty members expressed a wide variety of attitudes and values in relation to human sexuality and sex-related behavior. When asked what type of attitudes and values physicians should have to work effectively with patients, there was an apparent consensus among faculty members. All said in one way or another that physicians should be open, unbiased and accepting of their patients' values. When questioned more specifically, however, the consensus broke down.

Questions relating to the sexual behavior of adolescents provoked a variety of responses. Some thought that sexual intercourse among adolescents, particularly when it involved several partners, was symptomatic of emotional disturbance. Others felt that it might not necessarily be abnormal. More concern was expressed for adolescent females than for males.

One faculty member, however, suggested the following idea:
Think about it [sexual intercourse among young adolescents] this way. Let's assume they ball because it feels good, and let's accept the proposition that adolescents with multiple [sexual] partners show more signs of emotional disturbance--statistically--than their friends. These symptoms could . . . be the result of their parents', friends' and everybody else's reaction . . . rather than their bailing a symptom of their maladjustment.

Although this proposition was put forth partially in jest, it was unusual in that it reversed the cause-and-effect sequence usually heard from faculty members at Overland Medical School.

Extramarital sexual behavior was viewed as symptomatic of an individual's psychological disturbance, or, alternatively, as symptomatic of a "disturbed relationship". Three individuals used the phrase "sick marriages" in their responses. One went on to say, "The real problems are in the individuals. If they were really mature, they would terminate the sick marriage rather than slip around". All faculty members questioned the "health" or "honesty" of marital partners who openly agreed to allow extramarital sexual relationships, and they were universally pessimistic about the future of such relationships. One faculty member, who actively supported the position that "people are just not naturally monogamous", later went on to say, "People are going to be jealous, and no matter how high-sounding their ideals, they are going to react to situations like that".

Homosexuality was another aspect of sexual behavior that faculty members were asked about. Faculty members
universally expressed the feeling that physicians should be accepting of patients' homosexual behavior. One clinician went so far as to say that, because of his personal reactions, he referred homosexuals to other physicians. Faculty members frequently explained their attitudes on the basis that "homosexuals can't help what they are". It appeared to me that most faculty members saw their alternatives in dealing with homosexuality as treating it as "bad" or "sick", and that their expressed concern that patients be treated humanely led them to resort to the latter.

Comparisons

It is difficult to categorize the faculty members' values and attitudes. The popular terms "liberal" and "conservative" break down when specific issues are examined. It is possible to compare groups, however, on the basis of their answers to the question of whether they viewed themselves as more liberal or more conservative concerning sexual behavior. Younger faculty members as a group considered themselves more liberal than older faculty members, but there were exceptions. For example, one thirty-year-old faculty member described himself as "pretty straight" and a sixty-year-old clinician described himself as "too old to worry about what people do". The latter went on to say, "We are all just trying our best to get along in life and enjoy ourselves a bit. I don't have time to make
judgments about other people. Now there are other people who do seem to have the time to worry about what I do".

The self-evaluations did not appear to correlate with an individual's medical specialty or sex. Surgeons and psychiatrists alike described themselves in equal proportion as sexually liberal and conservative. Those psychiatrists who described themselves as conservative in sexual matters were quick to emphasize that such a stance did not mean that they rejected their patients' sexual ideas and behavior. Females seemed to have more difficulty saying they were "liberal" and hastened to correct any "misunderstandings" they thought I might have about their answer.

As a group, faculty members who called themselves liberal had longer hair and were more inclined to sport beards and moustaches. A few wore bracelets and necklaces. Faculty members who called themselves conservative, on the other hand, wore no jewelry other than rings and watches, and more frequently wore coats and ties.

Patients

Outpatient Clinic

During the observation of patient-student interaction in the outpatient clinics, I was struck by the wide divergence of attitudes within the patient population. Some patients appeared to feel that anything that had to do with sex was offensive, while others appeared almost evangelical
in their zeal to explain the "beauty" and "health" that sexual activity represented.

One attitude that characterized female patients, with notable exceptions, was their worry about the reactions of others to female genitalia. This was particularly evident when students did pelvic exams as a part of a general physical exam. Women frequently made comments suggesting apprehension that the students would perceive the patient's genitalia as "dirty" or repulsive. Typical comments were:

1. Doctor, I am not as clean as I would like to be down there. I had to come straight from school.
2. I probably have a funny smell with the heat and all . . . I'm sorry.
3. I hate to do this. Please forgive me for that odor.

This feeling among female patients was further demonstrated by the terms they used to describe their genitalia. I estimated that 90% of the female patients interviewed who mentioned their genitalia used the phrase "down there". Two patients called their genitalia "it", and one called it "my place".

Males showed less reluctance to use generally recognized names for parts of their genitals, for example "balls" and "penis". There were no observed incidents where males apologized for lack of cleanliness or for odor.

When patients referred to problems involving sexual
anatomy, physiology, or behavior they appeared embarrassed and hesitant. Even patients who expressed liberal sexual ideals were reluctant to talk about sexuality as a personal problem. When the student interviewing them did not follow up on their comments or questions, patients tended to drop the subject. It was as if they tentatively tested the student to see how he would react and then dropped the matter when the student failed to respond. The following interaction characterized this process:

Patient: Well, it [intercourse] is sometimes painful--not often--not always--but sometimes.
Student: Do you have any pain on urination?
Patient: No, I think I'm really O.K. except for the headaches.

In a follow-up interview, I found that the patient routinely had pain on intercourse, and that she and her husband had violent quarrels about sex. She stated that she felt guilty about not being a "good wife" and was concerned that "there is something missing in me because I just don't enjoy it the way other people do".

Most male patients appeared defensive when they felt their sexual knowledge or competence was in question. One patient kept interrupting a student, who was explaining the use of a vaginal jelly used for birth control, with "Yeah, yeah, I know all that doc". The student finally stopped
in exasperation and asked the patient to explain it to him so that, "I will be sure you know it". The patient's wife who was in the room interrupted to say, "Never mind him, he just thinks he knows everything".

**Inpatient Units**

My observations in the inpatient units provided little in the way of new insights into the sexual attitudes and values of patients at Overland Medical School. The hospitalized patients, like those in the clinic, expressed a broad range of attitudes and values concerning human sexuality and appeared reluctant to raise questions about sexuality that related to personal problems. When they did and found the physician receptive, they frequently expressed relief and availed themselves of the opportunity to reveal other questions and problems of a personal nature.

**Patient Interviews**

In conversations with friends and acquaintances who had received medical care at Overland Medical School, I had a further chance to assess the values and attitudes of patients at Overland Medical School. This group of ex-patients was better educated and more comfortable in talking about human sexuality and personal sexual problems. Such ease, however, occurred primarily in discussions of past experiences. They described problems in adolescence with apparent comfort, but were reluctant and uncomfortable when questioned about sexual behavior and sex-related problems
in the present. Even in this better-educated group, many women referred to "down there" and expressed concern about the cleanliness of their genitalia.

Males in this group were more prepared than clinic patients to admit some ignorance of human sexuality, but they too became defensive if their knowledge or experience were questioned. One male said, "... I don't want to come on like a macho, but I've been around".

**Students**

Data on medical student attitudes and values in relation to human sexuality were obtained from seven sources. In addition to the five sources previously described in Chapter Four, data were elicited from the SARS described in Chapter Three and completed by freshmen in 1972.

In addition, freshmen in 1971 were asked to participate in the experimental task described in Chapter Three.

**Sexual Knowledge and Attitude Test**

The mean scores for medical students, spouses and guests in 1971 are reported in Table 11. The higher the heterosexual and liberalism scale scores, the more willing the individual was to participate in premarital and extramarital sexual intercourse. The higher the sexual myths score, the more he or she rejected popular sexual myths. The higher the abortion score, the more permissive the individual's attitudes toward abortion, and the higher the
TABLE 11
Mean Attitude Scale Scores for Freshman Medical Students in 1972, as Determined from Responses to SKAT, Compared to National Mean Attitude Scale Scores

<table>
<thead>
<tr>
<th>Scales</th>
<th>Mean for Freshmen in 1971</th>
<th>National Mean for Medical Students</th>
<th>S.D. for National Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heterosexual relations</td>
<td>47.68</td>
<td>50</td>
<td>10</td>
</tr>
<tr>
<td>Sexual myths</td>
<td>46.64</td>
<td>50</td>
<td>10</td>
</tr>
<tr>
<td>Abortion</td>
<td>49.32</td>
<td>50</td>
<td>10</td>
</tr>
<tr>
<td>Autoeroticism</td>
<td>48.89</td>
<td>50</td>
<td>10</td>
</tr>
</tbody>
</table>
autoeroticism score, the more acceptable was the idea of self stimulation.

The attitude scales derived from the SKAT given prior to the course on human sexuality showed no significant differences between freshmen versus juniors and seniors. All scores, reported in Table 11, were close to the national norm for that scale and well within one standard deviation from the national mean. There were also no significant differences between the mean scale scores for the various medical student groups and their spouses or guests. Among medical students there was great diversity in attitudes and values in relation to human sexuality and sex-related behavior. The distribution on SKAT scales was normal or near normal, but there were wide ranges. The lack of significant differences in attitude scale scores between freshmen and upperclassmen suggests that traditional medical education, in which a course on sex was lacking, did not significantly alter the attitudes and values of students in relation to human sexuality.

**Sexual Attitudes and Responsiveness Survey**

The SARS had a total of eighty items. Twelve related to the students' perception of their parents' attitudes toward sexuality and sex-related behavior. These items were closely analyzed on the hypothesis that the parents of medical students were important in shaping their children's values and attitudes. Follow-up interviews with students
who completed the SARS revealed the fact that the students' responses were highly subjective. What one student meant by "good" was very different from what another student meant by the same term. For example, one item on the SARS asked students to rate their parents' relationship as good or poor on a four point scale. Only 15.2% of the students rated their parents' relationships as poor, and 84.4% rated them as good. One student later said he had rated his parents' relationship as good, even though they "fought a lot". His rationale was that they must have had a good relationship "because they stayed married".

When freshmen in 1972 were asked about their parents' attitudes towards sex (Table 12), the largest percentage, approximately half the class, described it as "beautiful but not to be talked about". Another large percentage, approximately one-third of the class, was uncertain about their parents' attitudes toward sex. Thus, if the students' responses were representative of their parents' attitudes, it would seem that sex and sex-related behavior were not discussed in the homes of students attending Overland Medical School.

Students were asked on the SARS if their parents had attempted to give them any information on "sex, reproduction and relationships" (Table 13). This item, by including the nebulous subject of relationships, provided students with the opportunity to interpret the question broadly. Nevertheless, almost 40% of the class responded that their
TABLE 12
Freshman Students' Perception in 1971 of their Parents' Attitude About Sex

<table>
<thead>
<tr>
<th>My parents felt sex was:</th>
<th>Male Students (N=148)</th>
<th>Female Students (N=16)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beautiful</td>
<td>18.4%</td>
<td>12.5%</td>
</tr>
<tr>
<td>Beautiful - but not to be talked about</td>
<td>40.8%</td>
<td>50.0%</td>
</tr>
<tr>
<td>Shameful</td>
<td>3.4%</td>
<td>6.3%</td>
</tr>
<tr>
<td>Attitude unknown</td>
<td>37.4%</td>
<td>31.2%</td>
</tr>
</tbody>
</table>
**TABLE 13**

Freshman Students' Perception in 1971 of Whether Parents Attempted to Give Them any Information on Sex, Reproduction and Relationships

<table>
<thead>
<tr>
<th></th>
<th>Male Students (N=144)</th>
<th>Female Students (N=17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>58.4%</td>
<td>76.5%</td>
</tr>
<tr>
<td>No</td>
<td>32.9%</td>
<td>11.8%</td>
</tr>
<tr>
<td>Not sure</td>
<td>8.7%</td>
<td>11.7%</td>
</tr>
</tbody>
</table>
parents had not attempted to give them such information. There was, however, a significant difference in the answers of male and female students. Some 76.5% of the females reported that their parents had attempted to provide information on sex, reproduction and relationships. This difference, however, may be the result of the small number of females taking the SARS. Alternatively, it may reflect a difference in parental attitudes toward male and female offspring in relation to human sexuality, or it may be the effect of menstruation as a catalyst for parental discussion of sexuality and reproduction.

Students taking the SARS were more certain of their parents' attitudes about modesty, defined as "attitudes about nudity or partial nudity in the home" (Table 14). Three-fourths of the students felt modesty was important to their mothers, and 57% felt modesty was important to their fathers. Only 7.3% of the students reported that they did not know their mothers' attitudes in relation to modesty.

The SARS items related to current attitudes on personal sexual practices again revealed a wide range in responses; 22.6% of the students admitted to being uncomfortable undressing in front of sexual partners. This was less frequent among married students, only 11.1% reporting discomfort when undressing in front of marital partners.

On the SARS, students were asked to report their present satisfaction with past non-marital sexual relationships (Table 15). A majority of both male and female students
TABLE 14
Freshman Students' Perception in 1971 of their Parents' Attitudes About Modesty (N=165)

<table>
<thead>
<tr>
<th>To my parents modesty was:</th>
<th>Students' Mothers</th>
<th>Students' Fathers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Important</td>
<td>75.0%</td>
<td>57.0%</td>
</tr>
<tr>
<td>Unimportant</td>
<td>17.7%</td>
<td>26.0%</td>
</tr>
<tr>
<td>Attitude unknown</td>
<td>7.3%</td>
<td>17.0%</td>
</tr>
</tbody>
</table>
TABLE 15

Freshman Students' Reports in 1972 of Present Degree of Satisfaction with Past Nonmarital Sexual Relationships

<table>
<thead>
<tr>
<th>Present feelings regarding past nonmarital sexual relationships</th>
<th>Male Students (N=137)</th>
<th>Female Students (N=16)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfied</td>
<td>60.6%</td>
<td>56.2%</td>
</tr>
<tr>
<td>Indifferent</td>
<td>15.3%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>17.5%</td>
<td>25.0%</td>
</tr>
<tr>
<td>Not sure</td>
<td>6.6%</td>
<td>18.8%</td>
</tr>
</tbody>
</table>
described themselves as satisfied. A slightly higher percentage of female students described themselves as dissatisfied. None of the female students described themselves as indifferent.

The freshman students also were asked to rate themselves as to frequency of guilt feelings in relation to masturbation (Table 16). Over half the students admitted to at least some guilt with masturbation. Only about one-third of the class said they never experienced guilt with masturbation. Female students appeared to have somewhat more frequent guilt feelings than male students.

I attempted to get an indirect measure of a feeling that sex was dirty by analyzing the SARS question which asked if respondents often felt a need to shower immediately before or after intercourse. Some 45% of the students responded that they often felt such a need.

To follow up this line of inquiry, responses to the SARS question relating to intercourse during menstrual periods were analyzed (Table 17). It could be hypothesized that students who felt sex was dirty would avoid intercourse during menstrual periods on the basis that it would be perceived as even more "dirty" at that time. The majority reported that they did engage in sexual intercourse during menses. Over 40%, however, reported that they never or almost never had sexual intercourse during menstrual periods.

When students were asked about their orgasm, 22.9% responded that they felt it should occur only with vaginal
TABLE 16

Freshman Students' Reports in 1972 on the Presence of Guilt in Relation to Masturbation

<table>
<thead>
<tr>
<th>Do you have guilt feelings regarding masturbation?</th>
<th>Male Students (N=140)</th>
<th>Female Students (N=15)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almost always</td>
<td>3.6%</td>
<td>6.7%</td>
</tr>
<tr>
<td>Occasionally</td>
<td>33.6%</td>
<td>26.7%</td>
</tr>
<tr>
<td>Almost never</td>
<td>25.0%</td>
<td>26.7%</td>
</tr>
<tr>
<td>Never</td>
<td>35.0%</td>
<td>26.7%</td>
</tr>
<tr>
<td>Not sure</td>
<td>2.8%</td>
<td>13.3%</td>
</tr>
</tbody>
</table>
TABLE 17
Freshman Students' Reports in 1972 on Their Intercourse in Relation to Menstrual Periods

<table>
<thead>
<tr>
<th>Do you have intercourse during menstrual periods?</th>
<th>Male Students (N=127)</th>
<th>Female Students (N=12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Often</td>
<td>10.2%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Sometimes</td>
<td>44.1%</td>
<td>58.3%</td>
</tr>
<tr>
<td>Almost never</td>
<td>30.7%</td>
<td>25.0%</td>
</tr>
<tr>
<td>Never</td>
<td>15.0%</td>
<td>8.4%</td>
</tr>
</tbody>
</table>
containment of the penis. They felt that genital self-stimulation or manual stimulation by a partner was not appropriate, either because it was abnormal or because of personal biases.

Responses to the SARS suggested that the medical students were diverse in their attitudes and values in relation to human sexuality and sex-related behavior. Many students felt ill at ease with their own bodies during sexual interaction and had guilt feelings about current sexual practices. Data from student responses to the SARS suggested that some medical students felt and behaved as if sex was dirty.

Experimental Task

The experimental task to which freshmen in 1971 were subjected was described in the chapter on methodology. The purpose of the experimental task was to determine if the freshmen made judgments on the basis of different attitudes and values when confronted with the same sexual behavior on the part of both males and females.

The first behavior tested was "sexual aggressiveness". In this vignette the voices on the audiotapes reported pleasure in being sexually aggressive, a desire to be more aggressive, and some concern that such behavior was inappropriate. The differences in the responses of the two groups of students was significant (Table 18). The male voice was most frequently rated as normally sexed, while the female was most frequently rated as oversexed. The female voice
TABLE 18

Ratings of Freshman Students in 1971 in Response to Male and Female Voices on Audiotapes Reporting Aggressive Sexual Behavior as both Desirable and Anxiety Producing

<table>
<thead>
<tr>
<th></th>
<th>Male Voice</th>
<th></th>
<th></th>
<th></th>
<th>Female Voice</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>high</td>
<td>medium</td>
<td>low</td>
<td>total</td>
<td>high</td>
<td>medium</td>
<td>low</td>
<td>total</td>
</tr>
<tr>
<td>Oversexed/</td>
<td>5</td>
<td>51</td>
<td>29</td>
<td>85</td>
<td>39</td>
<td>20</td>
<td>3</td>
<td>62</td>
</tr>
<tr>
<td>undersexed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Socially acceptable/</td>
<td>28</td>
<td>41</td>
<td>15</td>
<td>84</td>
<td>17</td>
<td>9</td>
<td>36</td>
<td>62</td>
</tr>
<tr>
<td>socially unacceptable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Healthy/</td>
<td>22</td>
<td>26</td>
<td>38</td>
<td>86</td>
<td>27</td>
<td>14</td>
<td>21</td>
<td>62</td>
</tr>
<tr>
<td>disturbed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religiously orthodox/</td>
<td>32</td>
<td>50</td>
<td>2</td>
<td>84</td>
<td>16</td>
<td>18</td>
<td>28</td>
<td>62</td>
</tr>
<tr>
<td>religiously unorthodox</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Needs professional help/</td>
<td>52</td>
<td>15</td>
<td>18</td>
<td>85</td>
<td>23</td>
<td>11</td>
<td>28</td>
<td>62</td>
</tr>
<tr>
<td>needs no help</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desirable sex object/</td>
<td>17</td>
<td>19</td>
<td>47</td>
<td>83</td>
<td>31</td>
<td>8</td>
<td>23</td>
<td>62</td>
</tr>
<tr>
<td>undesirable sex object</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTALS</td>
<td>156</td>
<td>202</td>
<td>149</td>
<td>507</td>
<td>153</td>
<td>80</td>
<td>139</td>
<td>372</td>
</tr>
</tbody>
</table>

\[ df = 2; \quad p < .05 = 5.991 \quad \chi^2 = 33.2035 \]
was perceived by the students as less socially acceptable. The male voice was perceived as more in need of help and as a less desirable sex object for a member of the opposite sex.

The second behavior tested was "anal intercourse". This vignette reported previous pleasurable experiences with anal intercourse and anxiety that a current sexual partner would be offended if anal intercourse was suggested. The difference in the students' responses to the two tapes was again significant (Table 19). Students rated the male voice most frequently as normally sexed and socially unacceptable, and were almost evenly divided as to whether he was a desirable or an undesirable sex object. Students rated the female voice as tending to be oversexed, more socially acceptable and more desirable as a sex object.

The third behavior tested was "unsatisfactory orgasm". This vignette reported pleasure with heterosexual orgasm but some anxiety and concern that such orgasms were not more satisfying. The differences in response to the male and female voice were again significant (Table 20). The male voice was most frequently perceived as undersexed and disturbed, and as representing an undesirable sex object. The female voice was most frequently perceived as normally sexed, socially acceptable and healthy.

The fourth vignette reported past experiences in which there was incest with a sibling that was pleasurable but anxiety producing. Differences in the responses of the two
### TABLE 19
Ratings of Freshman Students in 1971 in Response to Male and Female Voices on Audiotapes Reporting Anal Intercourse as both Desirable and Anxiety Producing

<table>
<thead>
<tr>
<th></th>
<th>Male Voice</th>
<th></th>
<th>Female Voice</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>high</td>
<td>medium</td>
<td>low</td>
<td>total</td>
</tr>
<tr>
<td>Oversexed/undersexed</td>
<td>12</td>
<td>47</td>
<td>3</td>
<td>62</td>
</tr>
<tr>
<td>Socially acceptable/socically unacceptable</td>
<td>9</td>
<td>10</td>
<td>43</td>
<td>62</td>
</tr>
<tr>
<td>Healthy/disturbed</td>
<td>23</td>
<td>24</td>
<td>15</td>
<td>62</td>
</tr>
<tr>
<td>Religiously orthodox/religiously unorthodox</td>
<td>8</td>
<td>19</td>
<td>35</td>
<td>62</td>
</tr>
<tr>
<td>Needs professional help/needs no help</td>
<td>16</td>
<td>17</td>
<td>29</td>
<td>62</td>
</tr>
<tr>
<td>Desirable sex object/undesirable sex object</td>
<td>30</td>
<td>7</td>
<td>25</td>
<td>62</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td>98</td>
<td>124</td>
<td>150</td>
<td>372</td>
</tr>
</tbody>
</table>

\[df = 2; \ p < .05 = 5.991 \quad \chi^2 = 10.7468\]
<table>
<thead>
<tr>
<th></th>
<th>Male Voice</th>
<th></th>
<th></th>
<th>Female Voice</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>high</td>
<td>medium</td>
<td>low</td>
<td>total</td>
<td>high</td>
<td>medium</td>
</tr>
<tr>
<td>Oversexed/undersexed</td>
<td>3</td>
<td>27</td>
<td>54</td>
<td>84</td>
<td>5</td>
<td>43</td>
</tr>
<tr>
<td>Socially acceptable/socially unacceptable</td>
<td>19</td>
<td>36</td>
<td>29</td>
<td>84</td>
<td>31</td>
<td>25</td>
</tr>
<tr>
<td>Healthy/disturbed</td>
<td>7</td>
<td>14</td>
<td>62</td>
<td>83</td>
<td>30</td>
<td>19</td>
</tr>
<tr>
<td>Religioulsly orthodox/religioulsy unorthodox</td>
<td>23</td>
<td>50</td>
<td>10</td>
<td>83</td>
<td>26</td>
<td>32</td>
</tr>
<tr>
<td>Needs professional help/needs no help</td>
<td>64</td>
<td>9</td>
<td>10</td>
<td>83</td>
<td>39</td>
<td>10</td>
</tr>
<tr>
<td>Desirable sex object/undesirable sex object</td>
<td>21</td>
<td>11</td>
<td>49</td>
<td>81</td>
<td>24</td>
<td>18</td>
</tr>
<tr>
<td>TOTALS</td>
<td>137</td>
<td>147</td>
<td>214</td>
<td>498</td>
<td>155</td>
<td>147</td>
</tr>
</tbody>
</table>

df = 2; p < .05 = 5.991 \( \chi^2 = 57.0623 \)
groups of students was again significant (Table 21). Over half the students indicated that the female voice represented a desirable sex object to a member of the opposite sex, while the male voice was perceived more frequently as an undesirable sex object.

The fifth vignette reported weekly masturbation by a working adult which was pleasurable and tension reducing but a matter of concern. The responses to the two voices did not show significant differences (Table 22) at the .05 level. When the six parameters on which students rated the behavior were tested separately for significance using $x^2$, the only significant difference was on the greater desirability of the female as a sex object. The $x^2$ was significant on that rating at greater than the .05 level.

The sixth vignette portrayed a stable homosexual "marriage", arrived at after several years of sharing a residence. The voices on the tapes voiced occasional concern about homosexuality. The responses to the male and the female voices did not show significant differences (Table 23) at the .05 level. When the six rating parameters were tested separately for significance, only desirability as a sex object for both the male and female voices was significant at a level greater than .05.

The seventh behavior tested was "premarital coitus". The taped vignette reported past experiences with premarital coitus and some concern as to the appropriateness of such behavior. The differences in the responses to the male
TABLE 21

Ratings of Freshman Students in 1971 in Response to Male and Female Voices on Audiotapes Reporting Sibling Incest as both Desirable and Anxiety Producing

<table>
<thead>
<tr>
<th></th>
<th>Male Voice</th>
<th></th>
<th>Female Voice</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>high</td>
<td>medium</td>
<td>low</td>
<td>total</td>
</tr>
<tr>
<td>Oversexed/undersexed</td>
<td>41</td>
<td>17</td>
<td>3</td>
<td>61</td>
</tr>
<tr>
<td>Socially acceptable/</td>
<td>1</td>
<td>0</td>
<td>61</td>
<td>62</td>
</tr>
<tr>
<td>socially unacceptable</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Healthy/disturbed</td>
<td>3</td>
<td>4</td>
<td>55</td>
<td>62</td>
</tr>
<tr>
<td>Religiously orthodox</td>
<td>5</td>
<td>9</td>
<td>48</td>
<td>62</td>
</tr>
<tr>
<td>religiously unorthodox</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Needs professional help/</td>
<td>44</td>
<td>1</td>
<td>17</td>
<td>62</td>
</tr>
<tr>
<td>needs no help</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desirable sex object/</td>
<td>19</td>
<td>14</td>
<td>29</td>
<td>62</td>
</tr>
<tr>
<td>undesirable sex object</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTALS</td>
<td>113</td>
<td>45</td>
<td>213</td>
<td>371</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 9.2851 \]

\[ df = 2 ; \ p < .05 = 5.991 \]
TABLE 22
Ratings of Freshman Students in 1971 in Response to Male and Female Voices on Audiotapes Reporting Solitary Adult Masturbation as both Desirable and Anxiety Producing

<table>
<thead>
<tr>
<th></th>
<th>Male Voice</th>
<th></th>
<th>Female Voice</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>high</td>
<td>medium</td>
<td>low</td>
<td>total</td>
</tr>
<tr>
<td>Oversexed/undersexed</td>
<td>40</td>
<td>39</td>
<td>5</td>
<td>84</td>
</tr>
<tr>
<td>Socially acceptable/socially unacceptable</td>
<td>18</td>
<td>17</td>
<td>49</td>
<td>84</td>
</tr>
<tr>
<td>Healthy/disturbed</td>
<td>28</td>
<td>26</td>
<td>31</td>
<td>85</td>
</tr>
<tr>
<td>Religiously orthodox/religiously unorthodox</td>
<td>13</td>
<td>32</td>
<td>39</td>
<td>84</td>
</tr>
<tr>
<td>Needs professional help/needs no help</td>
<td>35</td>
<td>22</td>
<td>27</td>
<td>84</td>
</tr>
<tr>
<td>Desirable sex object/undesirable sex object</td>
<td>32</td>
<td>26</td>
<td>26</td>
<td>84</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td>166</td>
<td>162</td>
<td>177</td>
<td>505</td>
</tr>
</tbody>
</table>

df = 2; p < .05 = 5.991 \( \chi^2 = 5.8628 \)
TABLE 23

Ratings of Freshman Students in 1971 in Response to Male and Female Voices on Audiotapes Reporting Homosexuality as both Desirable and Anxiety Producing

<table>
<thead>
<tr>
<th></th>
<th>Male Voice</th>
<th></th>
<th></th>
<th></th>
<th>Female Voice</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>high</td>
<td>medium</td>
<td>low</td>
<td>total</td>
<td>high</td>
<td>medium</td>
<td>low</td>
</tr>
<tr>
<td>Oversexed/undersexed</td>
<td></td>
<td>3</td>
<td>46</td>
<td>13</td>
<td>62</td>
<td>17</td>
<td>51</td>
<td>16</td>
</tr>
<tr>
<td>Socially acceptable/socially unacceptable</td>
<td>2</td>
<td>3</td>
<td>57</td>
<td>62</td>
<td>1</td>
<td>4</td>
<td>79</td>
<td>84</td>
</tr>
<tr>
<td>Healthy/disturbed</td>
<td></td>
<td>5</td>
<td>4</td>
<td>52</td>
<td>61</td>
<td>6</td>
<td>12</td>
<td>67</td>
</tr>
<tr>
<td>Religiously orthodox/religiously unorthodox</td>
<td>2</td>
<td>9</td>
<td>52</td>
<td>63</td>
<td>2</td>
<td>17</td>
<td>66</td>
<td>85</td>
</tr>
<tr>
<td>Needs professional help/needs no help</td>
<td>36</td>
<td>6</td>
<td>19</td>
<td>61</td>
<td>5</td>
<td>10</td>
<td>24</td>
<td>85</td>
</tr>
<tr>
<td>Desirable sex object/undesirable sex object</td>
<td>2</td>
<td>4</td>
<td>56</td>
<td>62</td>
<td>6</td>
<td>7</td>
<td>72</td>
<td>85</td>
</tr>
<tr>
<td>TOTALS</td>
<td></td>
<td>50</td>
<td>72</td>
<td>249</td>
<td>371</td>
<td>83</td>
<td>101</td>
<td>324</td>
</tr>
</tbody>
</table>

\[ df = 2; \ p < .05 = 5.991 \quad \chi^2 = 1.5526 \]
voice and the female voice were significant (Table 24). The male voice was perceived more frequently as normally sexed and socially acceptable than was the female voice. The female voice was perceived more frequently as needing professional help.

In the eighth vignette, oral-genital stimulation was described as a preferred method of sexual gratification. Some anxiety was voiced as to the appropriateness of such behavior. There was no significant difference (Table 25) when the responses to the male voice and the responses to the female voice were taken as a whole. Only the ratings on desirability as a sex object showed a significance at greater than the .05 level when the ratings were tested separately.

Explicit sexual fantasy was reported in the ninth vignette. This vignette described pleasant, sexually stimulating fantasies that involved acquaintances, friends and strangers, which caused the individual some concern. Differences in the two groups were significant (Table 26). The female voice was perceived as socially unacceptable, disturbed, and needing professional help. At the same time the female voice was also seen by a large majority of the students as representing a desirable sex object.

In the tenth vignette, experiences with extramarital coitus were described as pleasurable. Anxiety in relation to the spouse's reaction was described. The two sets of responses did not show a significant difference (Table 27).
TABLE 24

Ratings of Freshman Students in 1971 in Response to Male and Female Voices on Audiotapes Reporting Premarital Coitus as both Desirable and Anxiety Producing

<table>
<thead>
<tr>
<th></th>
<th>Male Voice</th>
<th></th>
<th></th>
<th></th>
<th>Female Voice</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>high</td>
<td>medium</td>
<td>low</td>
<td>total</td>
<td>high</td>
<td>medium</td>
<td>low</td>
<td>total</td>
</tr>
<tr>
<td>Oversexed/undersexed</td>
<td>35</td>
<td>49</td>
<td>1</td>
<td>85</td>
<td>43</td>
<td>18</td>
<td>1</td>
<td>62</td>
</tr>
<tr>
<td>Socially acceptable/socially unacceptable</td>
<td>30</td>
<td>15</td>
<td>40</td>
<td>85</td>
<td>11</td>
<td>4</td>
<td>47</td>
<td>62</td>
</tr>
<tr>
<td>Healthy/disturbed</td>
<td>42</td>
<td>24</td>
<td>19</td>
<td>85</td>
<td>19</td>
<td>21</td>
<td>21</td>
<td>61</td>
</tr>
<tr>
<td>Religiously orthodox/religiously unorthodox</td>
<td>5</td>
<td>22</td>
<td>57</td>
<td>84</td>
<td>2</td>
<td>9</td>
<td>50</td>
<td>61</td>
</tr>
<tr>
<td>Needs professional help/needs no help</td>
<td>19</td>
<td>21</td>
<td>45</td>
<td>85</td>
<td>26</td>
<td>14</td>
<td>22</td>
<td>62</td>
</tr>
<tr>
<td>Desirable sex object/undesirable sex object</td>
<td>60</td>
<td>17</td>
<td>7</td>
<td>84</td>
<td>52</td>
<td>5</td>
<td>5</td>
<td>62</td>
</tr>
<tr>
<td>TOTALS</td>
<td>191</td>
<td>148</td>
<td>169</td>
<td>508</td>
<td>153</td>
<td>71</td>
<td>146</td>
<td>370</td>
</tr>
</tbody>
</table>

df = 2 ; p < .05 = 5.991          \( \chi^2 = 11.1466 \)
<table>
<thead>
<tr>
<th></th>
<th>Male Voice</th>
<th></th>
<th>Female Voice</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>high</td>
<td>medium</td>
<td>low</td>
<td>total</td>
</tr>
<tr>
<td>Oversexed/undersexed</td>
<td>22</td>
<td>39</td>
<td>1</td>
<td>62</td>
</tr>
<tr>
<td>Socially acceptable/socially unacceptable</td>
<td>18</td>
<td>10</td>
<td>33</td>
<td>61</td>
</tr>
<tr>
<td>Healthy/disturbed</td>
<td>28</td>
<td>19</td>
<td>15</td>
<td>62</td>
</tr>
<tr>
<td>Religiously orthodox/religiously unorthodox</td>
<td>8</td>
<td>16</td>
<td>36</td>
<td>60</td>
</tr>
<tr>
<td>Needs professional help/needs no help</td>
<td>15</td>
<td>9</td>
<td>35</td>
<td>59</td>
</tr>
<tr>
<td>Desirable sex object/undesirable sex object</td>
<td>37</td>
<td>14</td>
<td>9</td>
<td>60</td>
</tr>
<tr>
<td>TOTALS</td>
<td>128</td>
<td>107</td>
<td>129</td>
<td>364</td>
</tr>
</tbody>
</table>

df = 2;  \ p < .05 = 5.991  \chi^2 = 2.76695
**TABLE 26**

Ratings of Freshman Students in 1971 in Response to Male and Female Voices on Audiotapes Reporting Sexual Fantasy as both Desirable and Anxiety Producing

<table>
<thead>
<tr>
<th></th>
<th>Male Voice</th>
<th></th>
<th>Female Voice</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>high</td>
<td>medium</td>
<td>low</td>
<td>total</td>
</tr>
<tr>
<td>Oversexed/undersexed</td>
<td>23</td>
<td>35</td>
<td>1</td>
<td>59</td>
</tr>
<tr>
<td>Socially acceptable/socially unacceptable</td>
<td>14</td>
<td>16</td>
<td>32</td>
<td>62</td>
</tr>
<tr>
<td>Healthy/disturbed</td>
<td>20</td>
<td>17</td>
<td>25</td>
<td>62</td>
</tr>
<tr>
<td>Religiously orthodox/religiously unorthodox</td>
<td>11</td>
<td>18</td>
<td>31</td>
<td>60</td>
</tr>
<tr>
<td>Needs professional help/needs no help</td>
<td>31</td>
<td>16</td>
<td>14</td>
<td>61</td>
</tr>
<tr>
<td>Desirable sex object/undesirable sex object</td>
<td>25</td>
<td>14</td>
<td>23</td>
<td>62</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td>124</td>
<td>116</td>
<td>126</td>
<td>366</td>
</tr>
</tbody>
</table>

\( df = 2; \ p < .05 = 5.991 \quad \chi^2 = 10.324 \)
<table>
<thead>
<tr>
<th></th>
<th>Male Voice</th>
<th></th>
<th>Female Voice</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>high</td>
<td>medium</td>
<td>low</td>
<td>total</td>
</tr>
<tr>
<td>Oversexed/undersexed</td>
<td>20</td>
<td>61</td>
<td>1</td>
<td>82</td>
</tr>
<tr>
<td>Socially acceptable/socially unacceptable</td>
<td>8</td>
<td>15</td>
<td>62</td>
<td>85</td>
</tr>
<tr>
<td>Healthy/disturbed</td>
<td>38</td>
<td>25</td>
<td>21</td>
<td>84</td>
</tr>
<tr>
<td>Religiously orthodox/religiously unorthodox</td>
<td>2</td>
<td>22</td>
<td>60</td>
<td>84</td>
</tr>
<tr>
<td>Needs professional help/needs no help</td>
<td>22</td>
<td>25</td>
<td>37</td>
<td>84</td>
</tr>
<tr>
<td>Desirable sex object/undesirable sex object</td>
<td>60</td>
<td>11</td>
<td>10</td>
<td>81</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td>150</td>
<td>159</td>
<td>191</td>
<td>500</td>
</tr>
</tbody>
</table>

\[df = 2; \ p = .05 = 5.991 \quad \chi^2 = 4.189\]
When tested separately, however, four of the rating categories showed significant differences. These were: 1) oversexed-undersexed; 2) healthy-disturbed; 3) needs professional help-needs no help; and 4) desirable sex object for member of opposite sex-undesirable sex object for member of opposite sex.

The final behavior tested was mutual manual stimulation to orgasm. The vignette described heterosexual manual stimulation of the genitals resulting in orgasm as pleasurable, but as resulting in some concern. Differences in the responses were significant (Table 28). The male voice was more frequently perceived as undersexed and as an undesirable sex object for members of the opposite sex, while the female voice was rated more frequently as normally sexed and as more desirable as a sex object.

Of the eleven sets of responses, only four showed no significant differences. This suggests that the freshmen did have different attitudes and values towards female sexuality than they did toward male sexuality.

**Outpatient Clinic**

While acting as a participant observer in the outpatient clinic, I had a further opportunity to assess the medical students' attitudes and values in relation to human sexuality and sex-related behavior.

Students as a group, with extremely rare exceptions, appeared uneasy in dealing with sexual topics with patients.
TABLE 28

Ratings of Freshman Students in 1971 in Response to Male and Female Voices on Audiotapes Reporting Mutual Manual Stimulation to Orgasm as both Desirable and Anxiety Producing

<table>
<thead>
<tr>
<th></th>
<th>Male Voice</th>
<th></th>
<th></th>
<th></th>
<th>Female Voice</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>high</td>
<td>medium</td>
<td>low</td>
<td>total</td>
<td>high</td>
<td>medium</td>
<td>low</td>
<td>total</td>
</tr>
<tr>
<td>Oversexed/undersexed</td>
<td>2</td>
<td>32</td>
<td>27</td>
<td>61</td>
<td>4</td>
<td>61</td>
<td>16</td>
<td>81</td>
</tr>
<tr>
<td>Socially acceptable/socially unacceptable</td>
<td>19</td>
<td>19</td>
<td>23</td>
<td>61</td>
<td>25</td>
<td>36</td>
<td>21</td>
<td>82</td>
</tr>
<tr>
<td>Healthy/disturbed</td>
<td>21</td>
<td>17</td>
<td>23</td>
<td>61</td>
<td>36</td>
<td>30</td>
<td>16</td>
<td>82</td>
</tr>
<tr>
<td>Religiously orthodox/religiously unorthodox</td>
<td>16</td>
<td>27</td>
<td>17</td>
<td>60</td>
<td>17</td>
<td>48</td>
<td>17</td>
<td>82</td>
</tr>
<tr>
<td>Needs professional help/needs no help</td>
<td>19</td>
<td>17</td>
<td>24</td>
<td>60</td>
<td>22</td>
<td>23</td>
<td>36</td>
<td>81</td>
</tr>
<tr>
<td>Desirable sex object/undesirable sex object</td>
<td>16</td>
<td>15</td>
<td>29</td>
<td>60</td>
<td>42</td>
<td>28</td>
<td>12</td>
<td>82</td>
</tr>
<tr>
<td>TOTALS</td>
<td>93</td>
<td>127</td>
<td>143</td>
<td>363</td>
<td>146</td>
<td>226</td>
<td>118</td>
<td>490</td>
</tr>
</tbody>
</table>

\( df = 2 \); \( p = .05 = 5.991 \) \( \chi^2 = 23.5257 \)
The majority of medical histories written by students and reviewed by me did not mention sex-related topics at all. Of those that did, the most common notation was "sexual history - non-contributory".

In observing the interactions between students and patients, I noted two frequent patterns of response by students when patients broached sex-related topics. One of these was to change the subject. On occasion, the transition was so abrupt as to catch the patient's attention. During a history-taking session, a junior medical student asked a female patient if she had any troubles in her marriage. The woman responded by saying that her husband had "lost his nature". The student ignored her answer and asked an unrelated question. The patient said, "Doctor, my husband's nature, can something be done about that?" The student stopped, and then said, "We'll get back to that". He then repeated his question. The woman persisted, and after several minutes the student finally agreed to arrange an appointment for the patient's husband in the Genito-Urinary Clinic. The sexual problems in the marriage subsequently were not mentioned by either the student or the patient.

The second pattern of student response was to pursue the sexual topic in a circuitous fashion. This usually occurred when the student wished further information, but could not bring himself to ask specific questions. Students explained this to me on the basis of their concern that the patients would otherwise be offended. Two examples will
serve to demonstrate this pattern.

In one case, a student felt that his female patient, who was young and single, was worried that she might be pregnant. He had arrived at this conclusion on the basis of several oblique references she had made earlier in the interview. He then proceeded, as he admitted later, to attempt to get her to volunteer the information. A portion of the interview included the following:

Student: I just feel there is something more bothering you.

Patient: What do you mean?

Student: Well, you just seem nervous. I am not going to tell anybody anything you don't want me to tell.

Patient: Tell who?

Student: Anybody.

Patient: Is it indigestion? I have really been sick . . .

Student: Are you sure there is nothing else you're worrying about?

Patient: It is not in my mind.

The patient was afraid she was pregnant. This did not become clear, however, until the attending physician joined them and asked the patient if she might be pregnant. The student spent approximately twenty minutes attempting to get the patient to volunteer the information before the
faculty member appeared.

The second example was a clinical interview with a male adolescent whom the student felt was homosexual. This student also admitted later he did not want to offend the patient by asking a direct question. Instead he engaged in a lengthy effort to convince the patient to volunteer the information. This interview continued for over an hour before I intervened and asked the patient if he was worried about being a homosexual. The patient responded that he was not, but did feel very distraught when peers teased him about his "feminine" traits.

Students in the clinic frequently tended to judge their patients' sexual behavior. In some cases, this was apparent during their interaction with a patient. On other occasions, it appeared only after the patient had left the clinic. The following comments were made by a student upon entering the clinic conference room and were addressed to four other students already in the room: "I just saw the queen of castrating bitches. She's screwed everything in town. If I was her old man I'd beat the shit out of her".

There was a strong tendency among students in the clinic to treat attitudes and values as if they were facts. The students returned over and over again to the question of whether a given sexual behavior was normal or pathological. Most of the arguments to support such a point of view had more to do with values than with facts, but the students did not appear to discriminate between the two.
For example, two students in the clinic were discussing a patient's extensive extramarital experiences, one contending the patient was psychopathic and the other appearing non-committal. Finally, the student who felt the patient was psychopathic said, "Don't tell me he's normal. How would you feel if he was married to your sister?" The discussion ended at that point.

**Inpatient Unit**

The observations made at the inpatient unit of students' attitudes and values in relation to sex-related behavior were similar to the observations made in the clinic. The one significant difference appeared to be the longer period of contact students had with individual patients. They learned more about them, and as a result, tended to become more personally involved in the patients' problems.

In some cases, this led to acceptance and understanding of a patient's sexual behavior, that in other circumstances would have been rejected as inappropriate or abnormal. One male student was observed relating to an adolescent male homosexual patient over several weeks. The student had made it clear when he was assigned to the patient that he had no tolerance for homosexuals and had even made the comment in reference to this particular patient that "that's what jails are for". After a tense beginning, the patient and student developed an increasingly comfortable relationship. At first, the student's change in attitude with regard to his patient was revealed in his continual re-assessment of
the case. He began to suggest that the patient was really not homosexual and perhaps psychotherapy would help the patient to see this. At one point, he suggested that what the patient really needed was a "good lay". He even volunteered to find the patient a female sexual partner.

The tendency of students to treat attitudes about sexual behavior as if they were facts also was evident on the inpatient units. Attitudes about sexual behavior were used to define normality and pathology. Pedophilia, for example, universally was perceived unquestionably as not only bad, but sick. Extramarital sexual intercourse, however, was seen in different ways by different students but almost always as normal or pathological.

**Student Interviews**

The tendency to use personal attitudes as facts about human sexuality often led students into paradoxical positions. For example, one student told me during a conversation in a local sandwich shop that he was concerned that one of his classmates, a female, was "decompensating under the stress of medical school". He cited as the only evidence for his judgment the fact that she was "having an affair" with a man who did not have a college degree. Earlier in the conversation, the student had confided to me that he had been dating and had been sexually intimate with a student at the junior college. He had then made the statement that, unlike his peers, he arranged to take time off from studying to have "a little fun".
Course Evaluations

The students' evaluations of the course on human sexuality did reveal that the freshman students perceived their attitudes and values towards sexuality and sex-related behavior to have changed. In 1971, approximately 44% of the students turning in evaluations said the course had helped them "substantially" to "better understand and accept" their own sexuality. In 1972, the percentage was 46%. In addition, 61% of the students in 1971 and 56% of the students in 1972 felt the course had helped them "substantially" to "talk to patients about their sexual problems". Fifty-seven percent of the students in 1971 and 37% in 1972 felt the course had helped them "substantially" to "give patients advice regarding their sexual problems".

Despite this evaluation by the students, there was no significant change in the class mean on any attitude scale when they were given the SKAT following the course on human sexuality. Student comments collected as a part of the course evaluation further supported the previously described diversity of student attitudes and values. Four negative and four positive comments provided examples of this diversity.

**Negative:**

1. No one needs or has to see someone reach their climax.

2. There are those available who can present the material with moral reasoning.
3. If you purport to have Christians speak, then get some real ones.

4. Don't you folks hold anything sacred?

Positive:

1. Anyone to whom the material was offensive surely didn't get much out of the course.

2. The course was extremely effective in presenting and reinforcing the idea that there is a wide spectrum of human sexual responses and attitudes.

3. Maybe this course will get through to some of the narrow hypocritical bigots in our class--yes, there are some even in medical school.

4. The lectures were well presented, factual and well researched.

Spouses and Guests

Spouses and other guests who accompanied freshman students to the course on human sexuality in 1972 were given the SKAT. In addition, they were observed by me during the course. For the most part there were no observable differences in their attitudes and values in comparison to those of their student hosts. The same diversity was apparent. One one occasion, a guest literally accosted me after class because I had not "emphasized the fact that homosexuality was a problem created by heterosexuals". On another occasion, I spent nearly an hour comforting a student's wife who had
became nauseated and left the class during the lecture on homosexuality.

**Sexual Knowledge and Attitude Test**

The mean attitude scores of the students' spouses and guests, obtained prior to the course on human sexuality, are reported in Table 29. They do not differ significantly from the student means, in that they all fall between the national mean for medical students and one standard deviation below the national mean. This again suggests that the attitudes and values medical students have in relation to human sexuality and sex-related behavior represent the spectrum of attitudes and values found in the larger society.
TABLE 29

Mean Attitude Scale Scores for Guests of Freshman Medical Students in 1972, as Determined from Responses to SKAT, Compared to National Mean Attitude Scale Scores

<table>
<thead>
<tr>
<th>Scales</th>
<th>Mean for Guests of Freshmen in 1971</th>
<th>National Mean for Medical Students</th>
<th>S.D. for National Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heterosexual relations</td>
<td>44.54</td>
<td>50</td>
<td>10</td>
</tr>
<tr>
<td>Sexual myths</td>
<td>46.48</td>
<td>50</td>
<td>10</td>
</tr>
<tr>
<td>Abortion</td>
<td>48.99</td>
<td>50</td>
<td>10</td>
</tr>
<tr>
<td>Autoeroticism</td>
<td>46.60</td>
<td>50</td>
<td>10</td>
</tr>
</tbody>
</table>
CHAPTER SIX
Learning to Make Medical Decisions

Students in Overland Medical School learned more than information and attitudes. They also learned how to make medical decisions. Students attended medical school in order to become physicians, and they perceived the physician's authority in making decisions as not only a responsibility, but a desirable privilege that set the physician apart as a special person.

Students did not discriminate between various types of decisions made by physicians. They perceived decisions in relation to diagnosis, treatment, and responsibilities of other members of the health care team as a part of the physician's position in the social system. The hierarchical structure of Overland Medical School placed the responsibility and prerogative of making every decision in the hands of the "senior" physician involved. This responsibility and prerogative might be delegated or abrogated, but they could always be re-assumed at the discretion of the senior physician.

The concept of seniority at Overland Medical School was complex, involving the various statuses held by physicians as faculty member, fellow, resident, intern, and among students as seniors, juniors and sophomores. Freshmen were not seen as part of the health care team and had no
prerogative to make decisions. Seniority also involved administrative responsibility within a given department. For example, a physician on the faculty might be assigned administrative responsibility for a ward or clinic in which other faculty members occasionally worked. Faculty rank also was a reflection of seniority that did not necessarily parallel administrative responsibility.

Specialization among physicians represented a seniority system that was highly relative in that the hierarchical positions of the individuals involved were determined by the decisions to be made. For example, neurologists assumed authority over surgeons when a diagnostic decision related to a neurological problem.

The physician whose name was entered on a patient's chart, either because he admitted the patient to the hospital or was assigned the patient on a rotational basis, had the ultimate prerogative of making decisions in relation to that patient. This physician was called "the attending physician."

Medical decisions were made daily in Overland Medical School that related to sex. These decisions were made at all levels of the various seniority systems. Frequently, because faculty members delegated or abrogated responsibility, these decisions were made by students.

Students perceived the various systems of seniority at Overland Medical School with confusion. They did not
discriminate clearly between the various types of seniority. They did, however, see seniority as important and decision making as a highly desirable prerogative of that seniority. A number of factors begin to prepare students for decision making from their first day on campus, some of which will be discussed in this chapter.

**Interviews with Applicants**

In my role as Chairman of the Admissions Committee at Overland Medical School, I had the opportunity to observe faculty members interviewing applicants for admission to the school. These interviews served two purposes: they provided information about the applicants to the interviewers and also provided the first opportunity for faculty members to influence the potential students.

Applicants invited to Overland Medical School for interviews generally had been conscientious undergraduate students. Almost without exception they had grade point averages above 3.0. Most had majored in a science, usually chemistry or biology. All had demonstrated their ability in their undergraduate programs to take examinations successfully. In many cases, this ability came as a result of developed skill in memorizing lecture notes and regurgitating the information presented by the lecturer at examination time. One student who was interviewed clearly articulated this when he said to me, "Passing tests and learning something are two different things. You've got to pass the tests".
During the interviews, faculty members returned repeatedly to two themes, (1) the need to learn vast amounts of information, and (2) the immense responsibility involved in being a "good" physician. These two themes were always implicitly and frequently explicitly linked. A good physician was understood by both applicant and interviewer as one who assumed responsibility, made accurate and definitive appraisals of a situation and then authoritatively made necessary decisions.

In this was learning "facts" and making decisions were inexorably interrelated. An excerpt from an interview I observed in 1972 provides an example:

Interviewer: Now, are you really prepared to do the kind of studying necessary if you are accepted?

Applicant: Yes sir.

Interviewer: There is more to learn than it's possible to learn and you are going to have to know every -- all of it.

Applicant: I understand that and I . . .

Interviewer: A doctor must make decisions and he has to make them -- he can't take a few days off to contemplate his navel. He's got to know, not guess or think maybe. That means you have got to study, study, study. First you are going to have to learn a lot of
minutiae just to stay in school and you're not going to see it as important. But later on when you are taking care of patients you will be glad you learned it.

Sexual matters seldom were mentioned in the interviews, which usually concerned the physical sciences and clinical practice. When the subject of sex did come up, it was usually in relation to the applicant's social life as it might affect his or her role as a medical student. For example, single female applicants were almost always asked if they were going to get married and drop out of school or not work as a physician. Married applicants, more frequently females than males, were told that they were going to have little time to spend with their spouses and should make sure their highest priority was medical school. On occasion, single male students would be assured that there were plenty of single women around. They might be encouraged subtly to take advantage of that fact and terminate dating relationships that might become intimate and time-consuming. In this regard, I overheard a faculty member say to an applicant, "I would suggest you forget about marriage and have fun on weekends. That way you can study during the week".

In only one interview I observed did the subject of decision making in relation to sexual behavior come up. This was an interview conducted by a faculty member who
was on the planning committee for the course in human sexuality. The interviewer suggested to the applicant that "treat the whole person" was more than a catch phrase and went on to explain that "personal" attitudes and biases about sex were all right, but should not interfere with "accepting the patient where he is rather than where you think he should be".

The rigors of medical school, as presented by faculty members interviewing applicants, were exaggerations of fact. Although the amount of information to be mastered was quantitatively greater in Overland Medical School than in most of the undergraduate institutions in the state, almost all applicants had demonstrated their ability to make satisfactory grades. The majority of students accepted to Overland Medical School had no academic difficulties. They maintained active social lives and "crammed" before examinations. Academic failure was unusual. Less than five students per year were dropped for academic reasons during the period of study.

Emphasis on Facts

When freshmen arrived on the campus of Overland Medical School, they were immediately informed of the importance of learning "facts". In the welcoming address by the president of the school and a following address by the dean in 1971, the importance of learning specific information was stressed six times. On two occasions during these remarks, the
importance of these "facts" was linked to the responsibility of physicians to make decisions.

This emphasis continued in the lecture hall, laboratory and seminar room. Even when there was extensive correlation between basic science courses and clinical practice, the importance of learning facts was emphasized. For example, in one "clinical demonstration" relating to metabolic diseases the instructors repeatedly emphasized the importance of learning each step of very complicated metabolic pathways in order to be able to make appropriate diagnosis and institute treatment. I was aware of the fact that one of the physicians giving the demonstration had missed a medical school function the night before the lecture in order to review and re-learn the steps in the metabolic pathways he was describing.

Students frequently raised questions about the relevance of memorizing material and felt irritation and frustration because of the amount of apparently irrelevant "minutiae" they were expected to learn. Dissatisfaction was demonstrated by skipping lectures and occasionally by hissing or stomping feet during lectures. Faculty members responded to these objections and complaints with assurances, at times patronizing, that the facts were important and students would realize that in their clinical years.

There was little question in the students' minds that "facts were important", but the continual emphasis on the extreme importance of learning the most obscure and
esoteric information was hard for them to accept. Although they objected and raised questions about the relevance of memorizing large amounts of information, they slowly began to accept the faculty's premise.

This acceptance, however, created conflict in many students who found the task impossible. I was aware in my own clinical practice that many students felt a great deal of anxiety about their own competence because they were not learning "all" of the material presented. I questioned five faculty members who were either psychiatrists or psychologists as to the frequency with which they observed such anxiety in students they counseled who were not in academic difficulty. All faculty members responded that they frequently observed such anxiety. One said, "In almost every student that walks through my door".

As students accepted the faculty position that learning minute and esoteric information was important to being a competent physician, they began actively to support the premise with less advanced students. It was not uncommon to hear juniors and seniors telling freshmen and sophomores how important it was they they learn material that the upperclassmen had at one time memorized.

The emphasis on memorizing facts for use in medical decisions carried over into other behavior. In observing students in outpatient and inpatient settings, I found them routinely applying to behavior described by patients specific criteria which they had learned. For example,
when a patient in the outpatient clinic mentioned that he had had recent dreams involving acts of violence, the student described him as "autistic, ambivalent, with impairment of affect and loose associations", the four classical criteria for a diagnosis of "schizophrenia". When I questioned the student as to the evidence for these traits, he related each of them to the dreams and the patient's manner of describing them.

In the human sexuality course, the conflict experienced by freshmen over the importance of learning "facts" became apparent. These freshman students had not yet fully accepted the faculty's premise that all facts were important, and still felt that memorizing a list of specifics was not so relevant as understanding the medical problems involved. Under the relentless emphasis on memorization, however, they were becoming uncertain about the soundness of this view. Comments by two students will serve to illustrate this conflict.

1. Dr. ________'s lecture was dry and boring. He presented things as if he knew it all, like everything was cut and dried. He also didn't say anything you could use -- he gave us so many possible causes for homosexuality they were useless.

2. The lectures were very interesting, even entertaining. Maybe next year the facts could be put in a handout and the
student could learn them later. That way the lectures could just be enjoyed. I think the students would get more out of it that way.

Examinations

The emphasis on learning facts was further reinforced by the nature of the examinations given. Even examinations in the clinical years which emphasized medical decisions such as deciding on a diagnosis, appropriate laboratory tests, or effective procedures of treatment were constructed in such a way that there were no right and wrong answers.

As far as I was able to ascertain, every examination, except two, given in Overland Medical School in 1971 and 1972 was composed of true-false, multiple choice and matching questions. The two exceptions were in Preventive Medicine and Community Health (PMCH) and Behavioral Science. The PMCH final exam included one short essay question and the Behavioral Science exam included three. Both courses had a low priority in the medical school and among students. The essay questions were the object of criticism by students taking the examinations. A typical criticism was, "What's the point of writing four pages of bullsh*t" and "I think they would have had a better idea of what we really know if they asked multiple choice questions".

Faculty members supported non-essay examinations because of the excessive time required to grade essays and
and the advantage essay examinations gave to "verbal" students. Several faculty members interviewed said they were not opposed to essay examinations, they just could not see that they were an improvement over the traditional type of exam given at the school.

The committee responsible for the course in human sexuality repeatedly debated the issue of what type of examination to give, while planning the course in 1971. The issue came up again in 1972, and lengthy discussions followed.

In 1971, the committee's deliberations revealed a split among committee members. The behavioral scientists on the committee actively supported the use of essay examinations, whereas the physicians on the committee advocated true-false and multiple choice examinations. After several long discussions, decision on this matter was deferred, but when the course actually started, a decision became imperative.

The behavioral scientists, and one psychologist in particular, were adamant in their position that the subject did not lend itself to true-false and multiple choice questions. Their position was summed up in the statement: "How do you intend to test students over this material by giving them a true-false test? What are we going to ask them: 'Premarital sex is normal, true or false?' Come on now, let's be reasonable".

The physicians on the committee engaged in less rhetoric, but consistently held out for a non-essay examination. Their arguments consistently returned to their heavy
work schedules and the time that would be required to grade an essay examination. A gynecologist summed up this position when he said, "Who is going to grade 200 tests (essay type) that run on to 10 or 15 pages? I think we can find enough things they need to know that we can test with multiple choice questions".

The final decision was made in the course and apparently expediently. A physician responsible for coordinating the course independently developed an examination that contained true-false and multiple choice questions. The committee agreed to use the examination in view of the impending end of the course and the lack of any alternative.

In 1972, the process for deciding on an examination was much the same. The examination finally adopted was a modification of the one used the previous year. No essay questions were included.

The heavy emphasis on examinations that tested for specific bits of information, and in which there were only right and wrong answers, lent additional support to the premise that memorization of definitive facts was extremely important in being a physician. Students were continually under pressure to memorize, not just because physicians "need" to know particular bits of information, but also because, as students, they had to do so in order to stay in school.

The Information Game

The prevailing emphasis on facts in the teaching and
testing of medical students was reflected in the way students related to each other and to other groups in the school. This emphasis was also reinforced by the prevailing status hierarchy through an established ritualized custom that I have called "the information game", which is described in the following paragraphs.

Members of the school learned to put a high value on the ability to provide brief, accurate answers to questions relating to the "medical sciences". In many ways, both faculty and students appeared to act as if the primary purpose of the medical school was to make each graduate into an encyclopedic bank of information. This goal was rarely stated explicitly, and when asked if such a value existed, informants denied it. After denying that the accumulation of specific information was deemed important, students and faculty members were quick to point out that a certain amount of information was indispensible. Although students complained about having to learn minutiae, they worked diligently to do so.

Students in classrooms were asked questions to which they were expected to give precise and specific answers, and characteristically tried to avoid revealing ignorance or uncertainty in responding. They attempted to appear certain and definitive, although it was evident that they were frequently doubtful of the accuracy of their knowledge and engaged in a variety of stratagems to avoid being "put on the spot".
This manner of interrogating students was continued in clinical settings, such as inpatient units and outpatient clinics. Residents and interns grilled students assigned to their services with serial questions requiring specific answers. Questions usually related to specific patients or syndromes. When the student was able to answer accurately and rapidly, the questions tended to become more esoteric, until the student's ignorance was revealed and the questioner's superior expertise was made manifest. Then, and only then, did the interrogation end.

This question-and-answer format provided an opportunity to make explicit the hierarchic statuses of those engaging in these exchanges. Juniors and seniors questioned freshmen and sophomores, interns and residents questioned juniors and seniors, and faculty members questioned interns and residents, as well as students. On any given occasion, the game continued until the established status hierarchy was validated. An "information game" observed in the emergency room serves as a typical example:

Intern: What do you think is wrong with him?
Student: I think he has an infection.
Intern: Why?
Student: High white count, low grade fever, general malaise.
Intern: What kind of infection?
Student: Urinary tract.
Intern: Why?
Student: He has some pain in his left flank.

Intern: What is the most common type of organism in kidney infections?

Student: Uh--just a minute--I don't remember. We haven't had that yet.

Intern: You need to read up on that.

The "information game" was not limited to players of different statuses. It took place with particular intensity between members of peer groups, among whom it served to establish informal positions of superiority and inferiority that might be temporary or enduring. The lower the peer group status, the more intense the competition. Students engaged in such question and answer competitions with rules that were mutually understood. Questions had to be brief, and they required specific, brief answers. Individuals alternated in asking and answering questions. When there was disagreement as to the accuracy of an answer, other members of the peer group were used as the final authority. When no arbiters were available, both participants continued to support their positions.

These competitions between students occurred at various times. They were particularly common in the break between classes and omnipresent just before examinations. During 1972, while walking through a medical fraternity house just before a major examination in internal medicine, I observed four pairs of students asking and answering questions in this manner. One of the students, unable to answer a
question, got to his feet, mumbled "This isn't doing me any good", stomped into his room and slammed the door.

That the information game was a means of vying for status and not just a way of exchanging important information was clear in the esoteric and frequently irrelevant nature of the questions, as well as in the competitive striving observed in the interchanges. In my walk through the fraternity house, I overheard one student say to his counterpart, "Of course, none of this crap is going to be on the exam".

The relative statuses of peers was often temporary and might be reversed in the next competition. One student I interviewed confessed to making special preparations before encountering, in an apparently spontaneous contest, a player who was regarded as particularly adept.

The rules of the information game, when played by individuals of different statuses, insured that the higher status would be validated. It was the representative of the higher status who asked the questions, until he received a wrong answer. I questioned separately the participants in one such game just after its completion. The winner, a resident, said with a slight smile, "Students these days don't seem to have learned anything". The loser, a student, said, "I hate it when they make you feel like a fool". Within a peer group, the questioning alternated between individuals, until the superiority of one or the other was determined.
It was not surprising, in view of the objectives of the game, that little attention was paid in it to topics poorly suited to the question and answer format. Little status could be achieved by posing questions with answers that were not clear-cut or which varied according to related circumstances. Questions relating to blood pH, enzyme levels, and origins and insertions of muscles, for example, had "correct" answers. Questions relating to human behavior frequently did not.

The author observed few instances of students playing the information game on the subject of human sexuality. These games were poor examples of their kind because they broke down into arguments about the correctness of answers.

In an effort further to explore the nature of this varying, I artificially created information games using sexual topics. Students responded to my questions in two ways, with general statements given as definitive answers or with stratagems to avoid responding. Definitive answers were couched in popular catch phrases. For example, when I asked what should be done in response to a patient's concern about masturbation, typical responses included "get counseling", "expand the marital relationship" and "improve the husband-wife communication".

Most students, however, engaged in stratagems to avoid answering. The most common strategy was to indicate the need for more information before a definitive answer was possible. Typical of this type of response were such
statements as "to properly evaluate must interview spouse", "need more information", and "must have other problems". Only very infrequently would a student respond as one did: "I don't know how abnormal it is".

**Diagnostic Decisions**

The emphasis on learning facts described above was usually defended by faculty members and students alike as important because of the decisions the physician must make. A major type of decision frequently referred to was the choice of a diagnosis.

Beginning early in the freshman year, students were expected to begin classifying illnesses on the basis of categories contained in the medical nomenclature. For freshmen and sophomores, this classification occurred in hypothetical situations in laboratory exercises or in examinations. Juniors and seniors diagnosed ailments of actual patients. Classification began with a differentiation between "normal" and "pathological" and w.r.s followed by increasingly subtle differentiations on the basis of a typology of pathology. This process was called diagnosis, and students rapidly learned that making a diagnosis was a prerogative of the physician.

In observing students in small group sessions and with patients, their preoccupation with the question "is it abnormal?" was apparent. Faculty supervisors frequently articulated the question to students discussing patients, and the students did so among themselves. Even in basic
science courses and laboratories, physiological and anatomical phenomena were described as normal or abnormal, separate and apart from any given patient.

In basic science and clinical setting, quantifiable criteria were constantly presented to students as facts on which a diagnosis was to be based. Fractional changes in hemoglobin levels or blood pressure readings sufficed to determine the presence of pathology. Such criteria were among the vast number of items of specific information which the students memorized and then used in the information game. Without these facts, diagnoses would be impossible.

For the most part, students readily accepted physiologic parameters as valid criteria for categorizing individuals. Such categorization based on biological variables was a part of being a physician as the roles of a physician had been presented to them in previous talks with pre-med counselors, contacts with hometown physicians and through the public media of motion pictures and television.

Students rapidly accumulated knowledge of a large number of generally accepted physiologic criteria of pathology. In response to institutional expectations, they availed themselves of every opportunity to demonstrate their knowledge of these criteria. During one month of supervising students in the psychiatry outpatient clinic, a total of sixteen students "presented" patients to me. Of these, only two failed to mention at least one such
physiologic criterion of pathology, despite the fact that the patients were not being seen for biological dysfunction.

During the first months of training, some students were reluctant to categorize patients, medically, when such physiological parameters were not available. In a discussion following the presentation of a patient on videotape, one freshman continually reiterated his inability without a quantitative measure to decide whether the patient was "mentally ill". When the faculty member present was unable to supply such a measure the student became increasingly uneasy and confused. He finally ended the discussion with the statement, "Well, he must be sick, since he is in the hospital".

Students understood that physicians diagnosed behavior, as well as physical pathology. They tried diligently to elicit from their instructors the criteria they felt must exist for such diagnoses. To a limited extent they were successful, but the criteria were usually so broad and ill-defined as to provide much latitude for subjective judgment. For example, psychiatric criteria for a variety of diagnoses left students confused although they rarely questioned the criteria. Rather, they questioned their own competence. One student said, "I don't know why I missed the diagnosis. I just haven't spent enough time talking to depressed patients".

Students felt that sexual behavior should fit neatly into diagnostic categories. Their attempts to impose such
categories posed a dilemma for them. This dilemma was underlined when, during the human sexuality course in 1972, three students approached a faculty member in his office and insisted on being told whether homosexuality was normal or abnormal. The faculty member's response was to review an ongoing debate in the medical literature and an impending referendum on the subject among members of the American Psychiatric Association. The three students were unsatisfied and left the faculty member's office, obviously irritated.

**Decisions on Treatment**

A second major category of decisions that faculty members and students held up as an example of why it was important to learn specific facts was decisions on treatment. Once having arrived at a diagnosis, physicians were expected to institute treatment. The best treatment was implicit in the diagnosis, if one was familiar with current medical literature on the subject.

Much of the students' frustration and anxiety, when there were no fixed criteria for diagnoses, could be understood in terms of their dilemma in prescribing treatment without a diagnosis. They had learned that diagnosing behavior was within the province of medical responsibility, and they felt that diagnosis must be the basis for subsequent medical intervention.

Sexual behavior was particularly difficult for the students to understand except as being either normal or
pathological. The fact that such behavior had, throughout their lives, been discussed as either good or bad supported this view. One student commented on his evaluation form after completing the course on human sexuality:

In Dr. _______’s lecture, he said it was impossible to say everyone who did S.-M. was neurotic. Some of the other lecturers implied the same. That’s all fine and interesting, but what am I supposed to do when I am face-to-face with a patient in my office?
CHAPTER SEVEN

Medical Students: Perceptions of Status and Role

In Chapter Six data were presented on the manner in which medical students were taught to make medical decisions and how this affected students when they were confronted with sexual behavior. Medical students were, however, more than the product of medical education. They were students and at times physicians. They were males or females, husbands or wives, fathers or mothers, and sons or daughters, and they held a variety of other statuses at the same time. The manner in which they responded to a given situation was almost never uniform and rarely could be explained on the basis of a single status position.

This chapter will explore some of the different definitions of self that were important contributors to the students' responses to human sexuality and sex-related behavior. In many situations, the students experienced conflict when responding to sexual behavior. For example, a male student might feel the need to respond as a receptive and protective male to the sexual complaints of an attractive but "helpless" female patient, and at the same time remain aloof and wary as an "experienced" and practical physician. For some students, such conflicts posed serious difficulties, which they did not experience to the same degree when confronted with physiological disease. Physiological disease
could be approached from the point of view of the quantitative parameters students had learned as facts; behavior, particularly sexual behavior, did not lend itself easily to such an approach. As a result, students used other references in choosing their response. These involved their perception of their roles as student, physician, male or female, and family member.

The Student

Students in Overland Medical School were well aware that they were members of a distinct and elect group of individuals. They frequently bragged to others about the high grade-point averages required for admission to medical school. In addition, they were fond of comparing "horror stories" about the difficulties and obstacles medical students had to overcome in order to become physicians.

Students who dropped out of medical school were characterized as lacking the fortitude necessary to complete their medical education. Even when the dropout was a close friend, students perceived the event in negative terms. After her roommate quit medical school in order to enter a graduate program in a prestigious university, one female student confided to me: "It's really sad. She is really bright and I think she would have been a good doctor. It's just too bad she couldn't stick with it a little bit longer".

During their daily routine, medical students wore and carried symbolic signs of their status. White coats, black
bags, stethoscopes and unique name tags served to identify them as medical students. In the absence of such symbols and in the presence of others unfamiliar with their position, students would often casually mention their status.

Students were expected to be dedicated. They were to place the highest priority on their medical education. As already indicated in Chapter Six, comments by faculty members to applicants visiting Overland Medical School were indicative of this expectation. In a curriculum committee meeting, a departmental chairman summed up this attitude when he said:

These students have time to lie on the beach and drink beer, but then they come to us crying about how much material they have to learn. When I was a student, I studied until the early morning hours every night, and I have no sympathy for their complaints.

Students accepted this expectation. They were frequently critical of peers who failed to appear as dedicated as they thought they should be. One comment I overheard during the study pertained to a student who apparently did less studying than his peers and bragged about it. He was described as a "psychopath" who would be an incompetent physician.

Students frequently mentioned the hours they had studied for an exam, and at times students would even compete in reciting the time they devoted to medical school. Such competition was evident in a conversation overheard in the coffee shop:
Student One: I didn't get to bed until 2:30 this morning studying for pediatrics.

Student Two: I guess it was about 4:00 before I went to bed.

Student One: Yeah, I started about 5:00. There was a lot of material.

Student Two: That's about the time I started.

This appearance of dedication was also apparent in the way one student explained the absence of his wife at the human sexuality course. He said he came alone because he could learn more that way. Only later did he reluctantly admit that his wife had refused to accompany him.

Students were expected to be novices in relation to faculty members. The student role was characterized by a faculty member as one where "They should keep their mouths closed and their ears open". Although this view might appear extreme to outsiders, it prevailed among faculty members at Overland Medical School. The student was defined as a novice and was expected to act as such, learning from the experience and expertise of faculty members. When students did not maintain the appropriate attitude, the information game provided an effective tool for re-instituting expected behavior.

Students understood this; and to a great extent, accepted it. They rarely challenged instructors. Questions asked by students were usually requests for more information or clarification of a statement. This attitude was characterized by several students who told me that the best way to
get through medical school was "not to make waves".

When confronted by sex-related behavior, students listened to explanations and descriptions offered by faculty members. Students asked questions as they would have when confronted by physiologic disease. Such questions were usually one of three types: 1) What is abnormal?; 2) How can I tell?; and 3) What do I do about it?

Because they were novices, students were expected to be incompetent or at least worry that they were not competent. The remarks previously cited, in which students in good academic standing worried that they would not be good physicians, provide examples. Much of the frustration students demonstrated, when they could not elicit definitive answers about what sexual behavior was 'normal' and what abnormal, was related to the students' concern about their own competence.

Students were also supposed to act on behalf of individual patients. The idea of the physician as a helpful person acting as an advocate for troubled individuals was expressed repeatedly in lectures and small group discussion. An excerpt from one lecture served as an example of many such comments: "This man is sick, and he can't take care of himself. That's your job".

Students perceived this as an important part of their future role as physician. They were supposed to help patients and that required knowing the answers to problems. One student asked in a small group session during the course on human sexuality: "If homosexuality is normal, why do we
need to take time in medical school to study it?"

At the same time that they were supposed to act on behalf of patients, students perceived their role as agents of social control. Faculty members rarely if ever made this expectation explicit. It was communicated to students primarily by modeling behavior when faculty members related to individual patients. Examples of student comments expressing such role expectations were:

1. There are some things that are right, and some things that are wrong [sexually], and a doctor has to make a stand somewhere.

2. I don't think the preacher [who lectured in the human sexuality course] gave a Christian point of view. Christianity is important to me in dealing with people's problems.

3. I don't approve of premarital sex, and I don't intend to tell anyone it's O.K.

Complementary Roles

The role behavior of students did not always conform to that expected of them. Even when it did, students had to balance one expectation against another. At the same time that students were supposed to defer to the authority and expertise of faculty members, they also were supposed to be members of a select group and more knowledgeable on certain subjects than those outside the medical profession. One of these subjects was human sexuality. When faculty members
questioned this special knowledge, the students reacted negatively. In one of the lectures during the course in human sexuality in 1972, the lecturer stressed the low level of accurate sexual information found among medical students. He emphasized that most studies showed medical students to be no better informed than other professionals. Student comments on evaluation forms for that lecturer varied, but over 40% were derogatory, and the majority of these were personal references.

The Human Sexuality course precipitated other difficulties in student-faculty interaction. A large number of faculty members participated in the course. Most had difficulty in readjusting attitudes and practices as they attempted to master their subject in order to present it to the students. Before the course was introduced into the curriculum, faculty members had presented what sexual information was taught in the context of normality and abnormality, and in much the same way as they had presented information about physiological disease. When faculty members attempted to deal with sexual behavior in relative terms, many students resisted. Both faculty members and students felt very uncomfortable in this situation.

The experience of one physician who lectured in the course on human sexuality is characteristic. This faculty member gave a lecture on homosexuality in which he described homosexual behavior as simply one mode of sexual expression. From time to time, students in the classroom shouted anonymous
comments such as "Whatever turns you on". These comments were invariably followed by general laughter and whistling. Finally, and with obvious irritation, the lecturer quoted statistics suggesting that homosexuality was as common among medical students as it was in the general population. This was greeted by loud hisses and the stomping of feet. When approached after the lecture, the faculty member was obviously angry. In response to a question about what had happened he said, "I am going to flunk their little butts". He then turned and walked out of the room.

The Student As Physician

Juniors, seniors, and sophomores to a limited degree, were expected in certain situations to present themselves as physicians. These situations were those in which the student dealt directly with patients. Such a presentation of self was actively encouraged. Faculty members frequently were observed introducing students as "doctor so-and-so" to patients. On two occasions, I overheard physicians on the faculty saying to students, "Who is the doctor, you or the patient?"

After a brief period of concern and anxiety about presenting themselves as physicians, most students adopted the role. One student described his initial discomfort when a patient thought he was a physician and then went on to say: "I don't have any problem with that now. After all, I know a lot more than they do, and they might not feel as comfortable if they thought I was just a student".
Students in the role of physicians were expected to act as final authorities in matters of health and disease, particularly as these related to individual patients. Students saw this authority as legitimizing their interaction with the patient. In clinical settings, there was a good deal of discussion about "how to maintain control of the interview". Faculty members frequently offered students advice on ways to improve their management of interaction with patient.

At times, students had difficulty in appearing authoritative when faced with sexual complaints. When they lacked sexual information, they felt at a disadvantage in the role. The following student comments elicited during the study demonstrate the importance students placed on living up to the authoritative aspect of the physician role.

1. How is the patient going to feel if I say I don't think oral-genital sex is abnormal? She is going to feel different if I just say, "It's normal".

2. I might just as well refer her to the library. What is the point of her coming to the doctor if she doesn't get any answers?

3. Sometimes it's best not to ask questions about sex. That way if you're not sure how to handle the situation you don't lose the patient's trust.

Students acting as physicians also were expected to be competent. This was particularly stressful to the students. They had learned in medical school that students were
incompetent. Competence was the goal they were supposed to achieve somewhere in an indeterminate future. To make it even more difficult, competence was never defined, although faculty members were quick to point out any incompetence and not infrequently did so in authoritative ways. One student interviewed said, "I worry a lot about being a good doctor. There is so much I don't know". When asked if the student knew any faculty members who knew everything about medicine, the student replied, "I never thought of that before".

The students' concern that they be given definitive answers about human sexual behavior may in part be attributed to their concern that faculty members would be quick to point out deficiencies in their information when they were dealing with patients. One female student expressed her concern that "There may not be a right answer, but I will bet Dr. ______ has one".

Students acting as physicians were expected to act on behalf of their patient's interest and to feel a very real sense of responsibility for patients. Faculty members were fond of making such comments as "What are you going to do with your patient?" or "It's your patient, doctor". The student in a physician role was not, however, really responsible for the patient, the faculty member was. This created difficulties when students failed to make the distinction.

When the student represented the patient's interest with the attending and supervising physician, there were problems. One student reported the reaction he received when he
suggested to a faculty member that "frigidity" was not a medical diagnosis. He said the faculty member appeared angry and gave him a "thirty minute lecture" on "psychodynamics".

Students acting as physicians were expected to act as agents of social control. This was never explicit. In one instance I observed, a student reported to his supervising faculty member that an inpatient had admitted to homosexual activity on the ward. The physician asked what the student had done about it. The student responded that he had warned the patient he would be discharged if the behavior recurred. The faculty member said, "Good, and tell the nurses to keep a close watch on him."

**Complementary Roles**

In assuming the role of physician with individual patients, the student was particularly vulnerable to difficulties in interacting with complementary roles. He was a student, expected to act as a physician. As such, he was faced with the task of delicately balancing the role expectations of two very different statuses.

Students at times encountered patients who did not accept their competence. In such cases, students tended to become even more authoritative. The two following examples of this process which demonstrate were taken from outpatient clinic observations.

1. Patient: I don't want you telling me [what is] right and wrong.
Student: Doctors are trained to deal with homosexuality. (Pause) So do you want my help or not?

2. Patient: I still think it's not healthy for that child to be playing with himself that way.

Student: Who's the doctor, you or me?

Because students expected faculty members to support their role as physician, they frequently felt angry when that did not occur. One student was overheard venting his anger to a friend after an interview during which a faculty member told a patient the student's advice was wrong. The faculty member allegedly said, "Listen to what I am telling you. He is just a student".

Student dissatisfaction was also evident when faculty members failed to provide them with information they felt they needed in maintaining a physician's image with a particular patient. This dissatisfaction was reflected in an excerpt from a student's journal: "I asked Dr. _____ how you could tell if this patient's child masturbated excessively. He asked me what I thought. Well, if I knew I wouldn't have asked--so I just shut up".

In another situation in which I observed difficulties arising in complementary roles, students acting as advocates for patients presented themselves as authorities in interactions with faculty members. On such occasions, conflict and friction characterized the exchange. For example, I observed a student confronting a faculty member about a diagnosis. The student considered himself very liberal and knowledgeable
in relation to human sexuality. When the faculty member said that the multiple sexual partners the patient described were evidence of her difficulties with intimacy and symptoms of an "immature personality", the student took exception. The student said, "Whether she has her head together or not has nothing to do with how many guys she sleeps with". The faculty member paused. There was a strained silence, and then the faculty member said, "I am not going to argue with you".

Gender

As previously noted, medical students were predominantly male. Only 11% of the freshman class in 1971 and 18% in 1972 were female. All had learned to deal with their sexual impulses vis-à-vis others. This learning had taken place within a family of origin and was reinforced by social institutions structurally arranged to interface with the family. Such institutions included schools, churches, and childhood peer groups such as Girl Scouts and Little League. As a result of this process, any given student was either a male or a female, categories with significant implications for behavior. The male student examining an attractive young female made decisions not just as a student but also as a male.

Expectations for Males

Males who were students at Overland Medical School were expected to be heterosexual. I was unaware of a single male student who was admittedly homosexual, despite the fact
that I knew from other sources that there were males in the medical school who engaged in homosexual activity. On one occasion, while interviewing members of a homosexual activist group from a nearby metropolitan area, I was told of two students who maintained a heterosexual appearance in Overland Medical School at the same time that they were active in homosexual circles in other towns.

The emphasis on heterosexuality was evident in the sexual humor observed in Overland Medical School. Homosexuality was treated with disparagement. Even in lectures dealing with homosexuality it was treated in a negative manner. In one lecture I observed, in which the topic was venereal disease, the lecturer, when discussing gonorrhea of the rectum, pranced about the podium on his toes gesturing with a limp wrist.

Excerpts from student journals documented the more prevalent human behavior at Overland Medical School based on heterosexuality:

1. One slide demonstrated an eel which retracts into a hole. When the lecturer said something about putting your hand in the eel's home everybody laughed.

2. A resident who had trouble getting an I.V. (intravenous transfusion) started said when he came back to the nursing station, "It's always harder to get it in a virgin".

3. In OB-Gyn (Obstetrics and Gynecology), a hysterical patients was said to have the "NAGS Syndrome -- needs a good screw".
4. An instructor pointed to the nipple on a slide demonstrating a skin lesion on the chest and said "This lesion is not the one I am talking about".

In one of the student journals, there was a report of a conversation overheard after a lecture on homosexuality in the course on human sexuality. One of the participants allegedly said, "We should have run those queer sons of bitches out of the auditorium". Another student was reported as saying in him small group after the same lecture that the films on male homosexuality were the "most repulsive thing" he had ever seen.

Males in Overland Medical School were expected to be knowledgeable about sexuality. This, in part, explains the student's response described in the first part of this chapter to the lecturer who questioned the student's knowledge. A young but sexually experienced nurse told me that the way to get lots of dates with medical students was to "act naive" and "pretend you're learning a lot about sex" from them. In the comments from students on the evaluation forms filled out at the end of the course on human sexuality, there were 30 responses indicating that the student was already knowledgeable in one area of human sexuality or another. All of these comments were from male students.

Males in Overland Medical School were expected to be sexually active. This was not as important as being sexually knowledgeable, and there were male students who openly admitted and defended their lack of sexual activity. The most
common defense I heard during the research period was the importance of studying. One student told me, "I haven't had a date since I came here because the most important thing to me right now is getting through school".

Males in Overland Medical School were expected to respond with increased attention to helplessness in females. This was harder to define and document than any other expectation. It was most evident in the way male students related to females, both in social and in clinical situations.

I systematically observed the interactions between male students and male and female patients during a four-month period on an inpatient unit. Students found it difficult to leave the rooms of female patients who presented themselves as frightened or troubled. Even when the students found the patients irritating, they had the same difficulty. One student, when asked why he had spent two hours with a female patient, said "She kept crying and I just felt guilty walking out on her". He added a few minutes later, "God, that woman drives me up the wall". Students experienced less difficulty leaving the rooms of male patients who presented themselves as helpless. The same student told me on another occasion, "If that guy thinks I am going to just sit there and listen to him complain, he's crazy".

The same phenomenon was noted in social situations involving male students and females. During the human sexuality course, I observed male students asking questions of the lecturer for their wives. On one occasion, I overheard
the conversation of a couple sitting directly in front of me:

Female: I'm embarrassed to ask.
Male: Why?
Female: Well, I just am.
Male: Hell's Bells! I'll ask him for you.

On another occasion, I talked with a male student who had spent the previous afternoon and night with a female acquaintance who was depressed. The student described himself as "being in a bind" since he had needed to study for an examination the next day. When asked why he had stayed with the girl rather than study, the student responded in almost the same words as the student interviewed after spending two hours with the female patient. He said, "She was really upset, and I just couldn't leave".

Males in Overland Medical School were expected to be suspicious about the sexual intentions of female patients. Clinical instructors, both explicitly and by their behavior, conveyed to students the idea that female patients were out to seduce the students. When this message was conveyed explicitly, it was usually done in such a way as to suggest that such behavior was a symptom of a disease. In a clinical seminar I attended the instructor said, "Now, hysterical females can be very seductive. If you aren't very careful, they will get in your pants".

A student expressed his concern that a particular patient was having sexual fantasies about him. When I asked
what had happened to give the student that idea, he said, "Nothing in particular", but then went on to describe several questions she had asked him about sexual behavior. He was obviously uneasy and asked me to sit in with him when he talked to the patient.

Expectations for Females

Females who were students at Overland Medical School were, like males, expected to be heterosexual. This expectation was not as clear for females as it was for males. There was occasional gossip about males who shared living accommodations off campus and did not date actively. I found no evidence that such gossip occurred in relation to female students in similar situations. However, a female student did express to me the pressure she felt to be seen in public places with a male escort. She stated that she did not want people to think she was not heterosexual, and that she "knew" many of her female peers felt the same way.

Females who were students at Overland Medical School were expected to be less experienced and knowledgeable in relation to human sexuality than their male counterparts. Approximately 90% of the students in 1971 described the visual aids used in the human sexuality course as "not offensive" to them personally. In 1972, the percentage was 81%. While the vast majority of students felt the visual aids to be inoffensive, the majority of male students interviewed felt the visual aids had been offensive to their female peers. Four comments served to illustrate typical responses when male students
were asked if the visual aids had been offensive to the female medical students.

1. I think they (movies) probably made most of the women pretty uncomfortable.

2. Sure, some of them (female students) have been protected.

3. More so than the males.

4. Yes, but you have to expect that.

In a letter I received after I asked for written comments, one female medical student recorded her perception of this expectation in these words:

It's hard to really know how to act sometimes. I am a medical student and have been to school just like the males in my class. I am not without some experience--not excessive. At the same time I get the feeling they're really not ready to accept a woman as having the same knowledge and experience they do.

Females who were students at Overland Medical School were not expected to be suspicious of their patients' sexual intentions. Although much attention was paid to the seductive female patient in the curriculum, I could find no evidence that the seductive male patient was considered a problem.

During the deliberations of the planning committee for the course in human sexuality, the idea of including material on how to deal with seductive male patients was brought up on one occasion. A female physician said:

I demand equal time. If we are going to tell these students how to deal with seductive
patients then we should realize that there are male patients as well as female patients, and there are female physicians as well as male physicians.

After a short discussion, the subject was dropped. On occasion, during later meetings, a committee member would refer to the previous discussion, but no material relating to seductive male patients was included in the course.

Complementary Roles

Students related to each other as males and females as well as peers. This, at times, created problems for them. These problems were particularly acute for female medical students. They were supposed to be knowledgeable in sexual matters by virtue of their status as medical students, while appearing naive and inexperienced at the same time.

Some of the female students I interviewed expressed their anger at the dilemma. Much of this anger was directed at the male students whom they perceived to be the cause of their discomfort. One female student announced in a small group session that she was "sick and tired of male 'prigs' who treat women as if they're stupid". Some of the single female students even refused to date male medical students.

I became acquainted socially with one couple who were both medical students. They had great difficulty with their respective sexual expectations and talked openly about them. The male resented his partner's insistence that she knew "as much if not more" about "sex" than he did. She, on the
other hand, resented his "condescending, patronizing attitude".

With patients, both male and female expectations resulted in occasional problems. Male and female students reacted defensively when patients raised questions about their knowledge or competence in sexual matters. Female students, however, were less prone to escalate any confrontation with patients in such situations than were their male counterparts.

In interactions with faculty members, student gender expectations resulted at times in conflict. Male students were reluctant to appear less than knowledgeable and experienced. This was particularly true in the presence of peers. When female students were present, it was even more accentuated. During a small group session a male student answered a group leader's question about the incidence of "oral sex" among lower socio-economic groups. He indicated the incidence and high and was immediately corrected by his classmates, one of whom was a woman. The group leader confirmed the classmates' opinion. The male student continued to defend his answer without presenting additional evidence. After a few minutes, the session degenerated into a violent argument between the male student and his female classmate. The argument continued to erupt during the rest of the period.

As Family Member

Students in Overland Medical School were cogently aware that they were husbands or wives, fathers or mothers, and sons or daughters at the same time that they were medical
students. Since most students did not live in their families of origin, they could for the most part keep their roles as sons and daughters separate from their role as medical students. Married students, however, had more difficulty. Their perception of the expectations of their role as spouse or parent differed little from that of other groups in the social system with the same amount of education and with similar backgrounds.

Most married students were expected to be loving spouses and to spend time with wives or husbands and children. This posed problems for students who were also supposed to be dedicated to medical school. During the observation period, every married student interviewed expressed this conflict in one way or another. In one case, a student husband said he felt "guilty" if he went to the library to study because he was "leaving S_____ at home", and he felt "guilty" if he stayed home because he was "getting behind" in his school work.

In relating to patients on sexual issues, many students felt some expectation that they should apply sexual values that were a part of their family life to the behavior of patients. This was apparent in comments made to me by students:

1. I can't really ignore her running around. I know how I would feel if ____ (wife) did that.
2. It seems normal to me for her to be concerned about his (son's) affairs. If I was his mother I wouldn't just let him get taken in.

3. We have a good marriage, and we haven't found any need to look around. I think if their marriage was good, neither one of them would feel any need for that sort of thing.

Students often understood the patient's position in a family in terms of their own families and justified their behavior with patients in those terms. This, at times, came into conflict with their perceived role as an advocate for the patient. One student expressed his ambivalence in this way: "It's hard for me to accept the fact that that kind of thing is good for [a patient] when my wife got up this morning, fixed me breakfast and kissed me goodbye".
CHAPTER EIGHT

Ambiguity and Role Conflict as a Result of Change in Status

In Overland Medical School, students confronted with sex-related behavior in the lecture hall and in clinical settings appeared unclear as to what they were expected to do, and how they were to go about it. This confusion appeared to be the result of role conflict and ambiguous role expectations.

When I asked students to explain their confusion, they responded in different ways. Some suggested they wanted to protect their patients from embarrassment, and others denied that they were confused during the interview. Others admitted to confusion in one form or another. One said after a lengthy and thoughtful pause:

I did feel uneasy, maybe confused. I just wasn't sure what to do with what she (patient) was telling me. She kept on and on about their [sexual] problem and describing everything. I wanted to help but what could I do?

Ambiguous role expectations may result from: 1) "uncertainty and vagueness of expectations"; 2) "lack of agreement among occupants of complementary roles"; 3) "incongruity between the role performer's own expectations for his role and the role expectations held by those comprising his audience (Sarbin and Allen 1968, pp. 504-505)". All three
factors played a part in the confusion and uncertainty experienced by medical students at Overland Medical School when confronted with sex-related behavior among patients.

A lack of clearly defined role expectations among freshman medical students was noted by Howard Becker et al. (1961, p. 72). The freshmen studied by Becker and his colleagues had a vague and very idealistic view of what was expected of them. As the students progressed in their medical training, they accepted the faculty members' ideas of what they were supposed to feel, think and do.

This confusion was also apparent among entering students at Overland Medical School. As time passed, the emphasis on "facts" in lectures, examinations and in the ubiquitous information game provided a standard, approved by their faculty mentors, by which the students measured their role performances. Even when they initially held reservations about definitive answers and arbitrary criteria for classifying individuals, they ultimately came to accept the standard as essential and even desirable. The appearance of certainty and the knowledge and use of arbitrary physiological criteria for judging the presence of health or pathology became incorporated into their performances as medical students. As such, these factors were important in how the student measured himself in his new role.

Students in Overland Medical School, like their counterparts elsewhere in the nation, learned the importance of appearing certain:
He also adopts a manner of certitude, for he has come to realize that it may be important for him to "act like a savant" even when he does not actually feel sure. From his instructors and patients alike a student learns this lesson: that if he is to meet his clinical responsibilities, he cannot allow himself to doubt as openly or to the same extent that he did. . . . Instead, he must commit himself to some of the tentative judgments he makes and move decisively on behalf of his patients. (Fox 1957, p. 227)

The students learned that pathology rather than health was their appropriate concern. Pathology was defined for them on the basis of physiologic and anatomic criteria they were expected to know, and it was given names. The naming process was called diagnosis, and it was central to the role performance of the medical student. Health was not defined. "Those people who had no manifest need of medical care could be considered healthy or normal (Offer and Sabshin 1966, p. 5)". Although enlightened medical thought has pointed to the arbitrary nature of defining disease in this way (Wolff 1968, pp. 244–247), the importance placed on facts and definitive judgments in regard to disease in Overland Medical School led students to assess their role performances on the basis of their knowledge of pragmatic but arbitrary physiologic criteria and their certainty in diagnosis and treatment.

The approval and praise medical students at Overland Medical School received from faculty members when they mastered the criteria that defined physical disease and when they were able to adopt the persona of medical
certainty in the use of those criteria was important in the students' acceptance of their prescribed roles. Singer (1961, p. 43) and Scott (1959, pp. 219-229), among others, have described the importance of such approval in changing the attitudes of individuals. Though some students at first questioned the behavior expected of them, they ultimately came to accept it. Those who did not dropped out of school.

The "credibility gap" between the students and their teachers was one of the factors fostering the students' acceptance of their roles (Howland 1959, pp. 8-17). Despite a multitude of complaints about their instructors, medical students at Overland Medical School saw them as highly credible in comparison with themselves. Many of their instructors knew what it meant to be a physician. The students did not know.

The students at Overland Medical School were students in order to become physicians. They sincerely and fervently desired to become members of the medical guild. Physicians as a group provided them a reference for their own identification. Both their "membership group" and "reference group" served to promote the acceptance of the behavior expected of them in their roles as students in Overland Medical School (Siegel and Siegel 1957, pp. 360-364). Their motivation to remain medical students and achieve admission to the "medical fraternity" served to make them less accepting of communications advocating behavior differing
from the norms and values of the medical school (Kelley and Volkart 1952, pp. 453-465).

When students in Overland Medical School confronted a patient's behavior as a medical problem, they sought to make a diagnosis. If, in fact, physicians dealt with pathology, then the behavior must represent disease—so their reasoning went. Only by labeling it a pathologic condition could they incisively move forward to alleviate the patient's distress. The category of pathology available for use in such situations was "mental illness". Sexual behavior, as well as other types of human behavior that did not fit as symptoms of a physiologic disease that could be measured in terms of physiologic criteria, was usually dealt with as mental pathology.

The question of whether "mental illness" is qualitatively the same as physical disease (Ausubel 1961, pp. 69-74; Stuart 1970, pp. 1-20), or whether it exists at all outside of culturally defined categories (Wallace 1961, pp. 164-198; Szasz 1961), has been hotly debated. For students at Overland Medical School, however, mental illness was the same type of phenomenon as the physiologic and anatomic dysfunctions they accepted as pathologic. Behavior presented for medical attention was symptomatic of disease.

Students attempting to diagnose behavior discovered that there were no quantifiable criteria available for use in the diagnostic process. The only criteria that were
available were subjective and open to varied interpretation. At first, students appeared confused by such situations, and some became angry and demanding. What they asked of faculty members at that point was knowledge of the criteria for establishing certainty, the conceptual tools to "behave" as medical students were "supposed to behave".

Sex-related behavior posed a particular problem for students in Overland Medical School. Even the more or less subjective categories of pathology provided by psychiatry often failed to conform with the kinds of sexual behavior patients presented to them as problems. In addition, in their own development they had learned that disclosure about sexual matters or interrogation of patients on this subject were taboo. They were to act as medical students in relation to behavior for which their learned roles provided no adequate or clear course of action, and they must, at the same time, deal with matters that were dangerous and "sensitive".

Like medical students elsewhere in this regard (Green 1975, p. 10) when taking sexual histories, the students at Overland Medical School were uneasy and hesitant. They approached sexual behavior as they approached all clinical material, as being pathological. Health or normality were not their concern. Henry Messer (1975, pp. 75-76) has described how he as a medical student responded to and understood his own sexuality as being pathological.

Harold Lief (1968, p. 31) has stated that medical
students "may claim that a relatively normal or frequent form of sex behavior is perverse, or that a genuine perversion is normal, depending on the relative strength of their beliefs and guilty fears". It was my conclusion with reference to the students of Overland Medical School, that although "beliefs and guilty fears" played a part in determining what sexual behavior students would perceive as normal and what behavior they would perceive as abnormal or pathological, the need to make such a distinction always existed and was an integral part of the roles they learned as medical students.

For the student in Overland Medical School confronting sex-related behavior in patients, role expectations were ambiguous. He had developed a clear idea of how one dealt with patients and their pathologies only when these could be related to quantifiable parameters, and he lacked criteria for diagnosis when sexual problems were presented to him.

Still other difficulties existed for the students dealing with patients' sexual behavior. On the surface, it might appear that faculty members and students would be in agreement as to the appropriate role of the student when dealing with a patient's sexual complaints. This agreement was not always the case. A faculty member might, for example, deal with sexual behavior in a perfunctory manner in the presence of a student and later reprimand the student for taking an incomplete sexual history. In other instances, a faculty member might define sex-related behavior as pathological
and still question the accuracy of a student's diagnosis. Such discrepancies in role behavior expectations of students and faculty members appeared to be inevitable in the absence of shared arbitrary criteria, such as were available in dealing with physical diseases. The circumstances are illustrated in the comment of one medical student:

Dr. ____ says hysteria is a reaction to a poor sexual identity. Dr. ____ says it's a personality variant and I say: "Gentlemen will you please decide".

Without arbitrary criteria, the student was at the mercy of faculty members' subjective judgments and biases. The student might be expected to apply the faculty member's values and biases in making a diagnosis even when the student had no way of knowing what they were. The student, while accepting the necessity of diagnosis, might also find his values and biases at variance with those employed by the faculty member. In such situations the student was liable to respond with confusion and even anger. This process has been described by Becker and Geer (1963, p.178):

Since a staff physician may ask whatever he wishes--unconstrained, as he would be in the formal teaching situation . . . students regard the faculty as unpredictable and capricious.

Mary Jean Huntington (1957, p. 181) has written:

Because they find themselves in situations calling for widely disparate attitudes and behavior, students at any one stage in their
training tend to think of themselves now as students, now as physicians, as they work in diverse social contacts.

Also like medical students elsewhere (Becker 1961, p. 315; Huntington 1957, p. 183), the students in Overland Medical School more frequently perceived themselves to be physicians vis-à-vis patients than with any other group. Patients accepted this definition of the situation and responded accordingly. Talcott Parsons (1972, p. 117) defined both illness and health in terms of "institutionalized role types". The expectations of the patients were the same or similar when they interacted with students as they were vis-à-vis physicians. Although both the patient and the students understood the mutually expected role behavior, the patient understood his own symptoms, not from the esoteric perspective of the student physician, but "in terms of his own experience (Tocantin 1970, p. 97)".

When a patient presented sexual matters for medical attention, he expected the student to act as physician, to have answers to his questions and to provide solutions for his problems. The patient usually perceived the problem as having a physical base, or at least hoped it had. Some patients brought sexual problems to students and physicians at Overland Medical School only as a last resort. They generally perceived the problem from their own experience as bad or willful on their part or alternatively as a symptom of physical dysfunction. For example, one patient
told a student in my presence:

When we have sex I get excited but then something happens. It's like someone turned off a light bulb—it's all over—there is just nothing. I think there has to be something I'm missing inside.

Although the students at Overland Medical School attempted to meet role expectations held by patients, they were handicapped by lack of information about human sexuality and lack of confidence in making diagnoses and prescribing treatment (Greenbank 1961; Woods 1969, 1972). The only behavior appropriate to the student's role that was still accessible was seeming certain. As a "certain" physician without criteria for his certainty, the student felt insecure in his adopted role.

Becker et al. (1961, pp. 107-134) have described medical students striving to fulfill the expectation that they must "learn it all" if they are to be competent physicians. The account goes on to describe their disillusionment when they become aware of the alternative expectation, that students study only for examinations, and also describes students' attempts to resolve the conflict in their perceived expectations for their role. Other observers have noted the conflict between "cynicism" and "humanitarianism" that medical students must deal with (Eron 1955, pp. 559-566; Beale 1959, pp. 1447-1448). However, the conflicts in role expectation students experience when confronted with behavior unrelated to physical disease, and sex-related behavior
in particular, have not been described.

Among students at Overland Medical School, their gender role in the medical context was perhaps the first new social role they learned and is a role that is reinforced throughout their later lives (Money and Ehrhardt 1972, pp. 15-21). All of the students came to understand their gender behavior as a function of their sex, as do the vast majority of individuals growing up in this society (Prince 1973, pp. 20-21). Like other people, the medical students learned more than one gender role in their families of origin. They had such roles vis-à-vis parents, siblings and still other people (Spiegel 1975, p. 447). Little has been written about developmental role theory (Flavell 1968; Brim 1974), but it appears that the concepts of what it means to be a man or to be a woman are powerful determinants of behavior.

The medical students were not undifferentiated students. They were male and female; that is, they were members of a gender group and a student group. The role expectations of individuals in the two groups were at times incompatible, as described in Chapter Seven.

Students were supposed to study. The expectations of the medical school were supposed to hold highest priority in activities of the students, and yet, male students would forego studying even just before examinations if they perceived that a "helpless" female needed them. Students were supposed to be knowledgeable about sexual matters, and yet,
female students attempted to appear naive and inexperienced in contexts relating to their personal sexual experiences.

The incompatibility of the gender and student roles was also apparent in the medical students' transactions with patients. Some male students found themselves uncomfortable in the objective, non-judgmental role of physician when confronted by homosexuality. In their past experience as heterosexual males, the role they played was one of judgment, if not retribution. Female medical students at times found themselves anxious and embarrassed when confronted with explicit descriptions of sexual prowess, a behavior inappropriate to their role of student-as-physician.

The principal conflict facing all of the students was one of lack of clearly defined procedures in dealing with the sex-related behavior of patients. Without such physiological criteria, they looked to the subjective criteria of faculty members and to their gender role, with its normative definition of sex-related behavior. Female students appeared to have more difficulty than male students in resolving problems of role expectations vis-à-vis patients. Enrollment at Overland Medical School had been almost a male monopoly since the beginning of the school. In transactions with medical students, faculty members dealt with sex in the back alley or locker room fashion characteristic of males in the larger society. It appeared reasonable, in view of the long male hegemony in Overland Medical School, that student role behavior would be more in accord with male gender role
behavior. If that were true, then females adopting the student role would be expected as a result of their student status to adopt what they had learned was male behavior. This tendency was observed.

Although it has been suggested that it is easier for female students to accommodate to male role behavior than the reverse (Coombs 1968b, p. 277), doing so posed problems for the females. A female student recognized this conflict when she told me: "I really admire ____. She is the only faculty member I've met who comes across as really competent and feminine at the same time." In Goffman's words the female students at Overland Medical School found themselves "normal deviants (1967, p. 267)". "Defining themselves as persons who will run in a particular race, they come to find that they have been partly disqualified and involuntarily re-identified in terms of their disqualification (p. 268)".

The fact that students at Overland Medical School move back and forth between the student role and the physician role has already been discussed. This movement potentially engenders conflicts of roles. As William Caudill (1958, p. 160) pointed out in his study of a psychiatric hospital, different subcultures in the hierarchic structure of the hospital perceive "the world of the hospital" differently. Stanton and Schwartz (1954, pp. 142-168) observed a similar phenomenon. Although more complex, the hierarchy of Overland Medical School was similar to those of the institutions studied by Caudill and Stanton and Schwartz.
Not all students were able completely and comfortably to change their views. As students, they perceived their clinical supervisors as competent and knowledgeable when dealing with sex-related behavior, as well as any other problem presented for medical attention. Whereas faculty members might experience "discomfort" when talking about sex (Coombs 1968, p. 66), students were likely to perceive faculty members as being comfortable while talking about any human activity. A faculty member simply avoided talking about subjects that made him uncomfortable, and students were left with the supposition that the faculty member would have been comfortable had he decided to discuss the matter.

When students adopted the role of the physician in relation to sex-related behavior of patients, they had many of the elements that composed what Goffman (1966, p. 201) called "personal front", the white coat, office, and paraphernalia identifying the student as a physician. The manner assumed by the student, however, might portray his underlying uncertainty in the role of physician, a role in which certitude was an outstanding trait.

I observed an example of "communication out of character" (Goffman 1959, pp. 165-9) that portrayed the discomfort and uncertainty of a student as he changed roles. The student blurted out in response to a question asked by a patient: "I don't think you should worry [about your child's masturbation]--what I mean is, you shouldn't worry. It's normal. All kids do it." The tentative nature of the
first phrase in the response reflected the uncertainty of a student rather than the certitude expected of a physician. The student moved to correct the manner of his presentation when he became aware of his lapse.

When asked to interview patients in the presence of a faculty member, students were faced with the difficult task of relating to the patient as physician and at the same time to the faculty member as student. The fact that they were able to carry this off at all was surprising. Mutual understanding previously gained from the relationship with the faculty member before the interview might, in part, explain the student's degree of success (Kahn et al. 1966, pp. 280-282). Equally important was the difference in cues used by physician and patient in identifying the student (Taguiiri 1969, p. 419). For example, faculty members offered ideas and asked questions from time to time in such interviews, and students stopped talking when faculty members spoke and rarely interrupted them. During the same interview, however, students were the principal actors in the transaction with the patient. They not only elicited information, but provided the remedial prescription that patients expected of physicians.

When the concern was sex-related behavior, this relatively smooth balancing of roles was frequently disrupted. Faculty members tended to interrupt to correct the "subjective biases" of the student and bring those biases into line with their own views. When this occurred, the relationship
between the student and patient would break down, and the student would become less assured and more hesitant. In many cases the student would finally become an observer of the interaction between faculty member and patient.

Students in Overland Medical School also experienced conflict in their roles as family members and medical students. As a spouse or as a son or daughter, they felt a sense of responsibility for the values and attitudes of their families in relation to sexual behavior. As noted earlier, whatever conflict in values and attitudes arose around physical disease could be resolved by the ultimate authority of physicians as a reference group, but without the clearly defined criteria applied to diagnoses of such diseases, the students were caught between the values and attitudes of various faculty members and those of their families.

We have noted that students at Overland Medical School as a group had relatively conservative sexual values as these were reflected on the SKAT and as they were observed by me. These values were not substantially altered by the years in Overland Medical School, but these values and the role behaviors associated with them did not necessarily conform with those of various highly credible faculty members.

Robert Merton (1957, p. 372) has described variables of importance in the selection of potentially conflicting role behavior. One of these variables is the "intensity of involvement" of individuals in their statuses and roles.
Students at Overland Medical School were deeply involved in their roles as medical student and physician. They also were committed to their roles by gender and as family members. Because of the vague and ambiguous expectations associated with the role of medical student when dealing with sex-related behavior, it is possible that the students more frequently used the role of family member vis-à-vis others as a reference in judging sex-related behavior. The comments of a sophomore student beginning his clinical rotation, as recorded in his personal journal, seem to support this interpretation:

One of our teachers in the small group sessions asked: "What is going to happen when a good Catholic housewife with ten kids comes into your office? . . . are you going to pressure her to take birth control pills and feel guilty or let her get pregnant and be even more depressed?" My immediate reaction was to give her birth control pills--the old feeling "if it's good enough for us, it's good enough for her".

Another source of role conflict for the students at Overland Medical School was, at best, dimly perceived by them. Students acting as physicians sometimes found themselves expected to act as both patient advocate and agent of social control, as may be inferred from the circumstances described in the preceding quotation about birth control. Although few if any of them could have articulated the conflict, most appeared to experience it in working with patients. The physician's efforts, as the student perceived them, were aimed at returning the functions of the patient to "normal".
Since the students at Overland Medical School thought of pathology and normality as absolutes, they perceived their efforts as being directed toward the "restoration of health" in much the same way as is described by Henry Sigerist (1960 pp. 68-74). At the same time, they felt an obligation to comply with social norms of the larger system, but their role in enforcing social norms was covert and rarely expressed openly.

Talcott Parsons (1970, p. 265) has expressed the dilemma the students faced:

Health and illness, however, are not only "conditions" or "states" of the human individual viewed on both personality and organic levels. They are also states evaluated and institutionally recognized in the culture and social structure of societies.

Ronald Leifer (1969, p. 76) has stated the issue even more clearly:

In medicine, the concepts of health and disease represent positive and negative ideals, rather than objective, scientifically discovered states. Medical interventions are organized social efforts to realize these ideals.

When confronted with sex-related behavior, the students under observation were required to deal with the conflict between patient advocacy and social control. Some of the behavior, such as homosexual acts, could be forced into diagnostic categories and dealt with as disease, but other behavior could not. The conflict experienced by the students was mirrored in debates as to the normality of various
sexual behaviors that were taking place in the larger social-cultural system (Simon and Gagnon 1970, pp. 137-149; Rossi 1970, pp. 91-106). The students, however, did not perceive their role as acting to enforce social norms. Faced with sex-related behavior in their patients, frustrated in their attempts to arrive at medical criteria to use in making judgments, and angry at members of the faculty who had nothing to offer but their personal views, the students frequently saw no recourse but to ignore the sexual complaint or fall back on their own previously learned values and attitudes. In so doing, they may be seen as agents of social control, bringing to bear on the problems of their patients the norms of the segment of the society they represented. In the words of one student who, in the course of an interview, was asked what he would do if there were really no such thing as pathological sexual behavior: "If nobody has the answers, then I will just have to use my own judgment--what's right or wrong. That might not be such a bad idea anyway".

Many students were observed "using their own judgment" in dealing with the sexual behavior of their patients. The fact that they had their own sex-related behavior to deal with, and sometimes also had sexual problems to resolve, might appear to make them a potential resource of reassurance for patients because of shared problems and concerns. The roles of patient and student vis-à-vis each other, however, made the sharing of problems difficult if not impossible. While acting as a physician, the student's role was to give
answers, not to share problems. In this context the student was "discreditable" (Goffman 1963, p. 42) because he too had a sexual life. The possibility that his own sexual problems might be revealed was negligible, if he convincingly presented the image of a physician. Students at Overland Medical School generally presented themselves to patients with certitude but this assurance appears to have been constantly open to self-doubt because of the student's fragmentary knowledge of human sexuality. Only an attitude of conviction of the validity of their sexual values and attitudes was appropriate for their adopted role, and such values and attitudes usually contained a flavor of righteousness that was communicated to patients.

Female patients were thus labeled as "castrating bitches" and homosexual male patients as "fags". The patients were defined as being under stigma, and the students avoided the danger of stigma by maintaining a social distance, that is, by treating the patients' sexual complaints as somehow different than their own (Goffman 1963, p. 73).

The preceding passages of this chapter have discussed various ambiguities and conflicts experienced by men and women assuming the role of medical student. In this role, the students were functional elements of Overland Medical School, which in turn was a functional element of the larger social system. Overland Medical School was composed of diverse groups organized around a set of related tasks, and therefore constitutes a social institution (Spiro 1961, p.97).
Role behavior in the social institution theoretical occurred because it was "rewarding". The rewards may have varied, but the attainment of culturally stipulated goals was considered reward enough (Spiro 1961, p. 105). The ambiguity and conflict experienced by students in Overland Medical School, when confronted with sexuality and sex-related behavior in their patients, was displeasurable to the students. Role behavior in such a case was rewarding only in forwarding the goal of achieving the full status of physician.

Students at Overland Medical School had many goals. Some of these related to collectively-held social values. Some values were "private interest" and became "relevant possibilities" in a given interaction with a patient or faculty member (Parsons 195, p. 61). Such private interest were frequently observed when, for example, students interacted with patients presenting sex-related problems. The commitment the students made to their personal values while dealing with sexual matters appears to have important bearing on their future dealings with the sexuality of their patients. According to Kluckhohn (1951, p.396), personal values are more than just preferences "felt and/or considered to be justified". They are "ideas formulating action commitments." The very act of committing themselves to their sexual values in the presence of patients may have served to reinforce the students' values so that they become less likely to reassess their ideas and understanding of sexuality on the basis of further clinical experience (Cohen 1964, p.10).
The student in Overland Medical School thus had available an option that provided a solution to dilemmas concerning the sexual behavior of his patients. He might, as many of his faculty mentors did, substitute his own attitudes and values to fill the gap in medical criteria. His commitment to these values in the presence of patients served to increase his conviction of their validity, and thus increased his comfort in presenting them with certitude. In other words, by coming to believe in his attitudes as absolutes, comparable with the "facts" he had learned to use in identifying physiologic pathology, he might proceed comfortably in the role of physician.

This mode of resolving the ambiguity and conflict implicit in the role of medical student provided two other benefits. If the student's values were comparable with medical "facts", then he need not worry because he knew little about human sexuality and sex-related behavior. In his own mind, he was knowledgeable. Moreover, he need not struggle to reconcile the values and attitudes associated with other roles in his status-set to his roles as medical student and physician. He need merely make them into absolutes.

Most, but not all, students in Overland Medical School resorted to reliance upon personal values and attitudes in relation to sexual behavior in the same way as they adopted physiologic criteria for physical disease. Some students were graduated from Overland Medical School still consciously
struggling with some of the dilemmas described. Others had firmly accepted their sexual values as "facts" by the end of the first year. The important factor influencing the mode of action was the process of socialization within the school, a process that strongly encouraged the adoption of personal values as valid absolutes.
CHAPTER NINE

The Social Functions of Ambiguity and Role Conflict

Medical students observed during this study rarely questioned the appropriateness of their patients' bringing sexual issues and problems to physicians for resolution. When students did raise questions, they generally were directed toward a specific patient and his manner of presenting his sexual problems. Both faculty members and students shared the view that the sexual behavior of patients was a medical concern. Their tendency to see sexual problems in terms of health and disease has been described in earlier chapters. This view also appears to be current among the general population. For example, phrases such as "a healthy sexual adjustment" are common in the public media, and the term "sick" is often used in referring to sexual behavior.

In view of this general attitude of the nation, the ambiguity and role conflict experienced by students at Overland Medical School, when confronted by problems of sexual behavior of patients, has implications of importance with regard to health care for the entire society. The ambiguity and role conflict appeared to be a part of the process whereby students in Overland Medical School "... came to acquire in patterned but selective fashion the attitudes and values, skills, knowledge and ways of life
established in the professional subculture" (Merton et. al. 1957, p. 288).

Overland Medical School is a social institution providing adult socialization. Our society has a large number of such institutions that modify and shape attitudes and values as well as provide new skills for adults (Brim and Wheeler 1966, p. 18). These institutions of adult socialization provide access to desirable statuses. These statuses can be achieved, however, only by submitting to the socialization process. The motivation to achieve the desired status provides the impetus for students in Overland Medical School to adopt "appropriate" values and attitudes, as well as skills and knowledge (Lewin 1951, p. 250).

Since sexuality and sex-related behavior were considered in Overland Medical School in terms of health and disease, it appeared important to the author to approach the issue by first exploring the nature of disease.

Social scientists have been concerned for some time with the nature of disease and particularly with behavior or attitudes that are defined as mental illness or mental disease. Anthropologists have observed the importance of the social implications of the definitions of disease or illness and the prescribed healing practices of other cultures (e.g., Polgar 1963, pp. 401-408). Concepts of disease and illness are diverse. Even death may be understood in some cultures as the same event or phenomenon as
"near death" (Murphy and Leighton 1965, p. 96). The manner in which the members of a society perceive their world not only determines what they will regard as disease, but also includes meanings imposed on the phenomena of the physical and social world. Individual behavior is a function of such meanings, as are the values and attitudes of participants in a social system. In discussing schizophrenia, Paul Roman and Harrison Trice (1967, p. 2) describe the complex intertwining of these factors: "A social system's most basic characteristic is the interdependence of values, structure, and action." They continue, "... a simple one-way causal explanation of any phenomena is inadequate."

In some societies, illness may be considered along with other misfortunes as something willfully imposed by others for reasons that are understandable only in the cultural context (Marwick 1967, p. 125). In other societies, illness may be understood as the result of a supernatural occurrence involving a deity that concerns itself with social ideals (Madsen 1964, p. 77). What is understood as illness in different societies may overlap, but is hardly likely to coincide precisely. How disease is defined, what is appropriate behavior for the ill person, and what the social response will be are all integral parts of the social system as a whole (Clark 1959, p. 183).

Those illnesses identified in Overland Medical School on the basis of physiologic parameters would be more likely to
be labeled as illness in non-western cultures than those for which no such measures are available. It has long been known, however, that views of sexual behavior differ greatly among the societies of the world. Charles Savage et al (1965, p. 21) describe this circumstance: "Thus the man or woman who in America is hospitalized for hearing voices or jailed for his sexual activities might have this behavior ignored, accepted, or even venerated in some other cultural group." It thus seems obvious that the ambiguity and role conflict observed among students at Overland Medical School in relation to sexual behavior and the ways in which students resolved their conflict are important issues to our entire society in connection with health and well-being.

Behavioral scientists have sometimes tended to equate the concepts of "illness" and "health" with the concepts of "deviance" and "conformity". In relation to physical dysfunction, this equation poses difficulties (Kennedy 1961, p. 409). An individual may be physically ill but not deviant in western society, and as in the case of arteriosclerosis in the elderly, conformity may be considered an illness. The focus on physiologic parameters of modern medicine removes the physician from the pressures of changing cultural values and norms. It provides a framework for empirical observation and a fixed reference for such observations. The social role of physician, however, is not
defined in its entirety by those parameters, and he must be prepared to deal with matters for which no physiologic parameters are available. The example this dissertation has discussed is sexual behavior and sexual problems of patients. "Deviance" and "conformity" may be distinct from "illness" and "health", but the physician is expected to deal with both. He is expected to do so under the rubric of "illness" and he must be socialized to perceive his task in such a manner. Horacio Fabrega (1975, pp. 969-975) has written a particularly cogent article calling for an ethnomedical science. It is his contention that "The real problem has been that a truly social formulation of disease and its related phenomena has not been pursued." Fabrega (p. 973) points out that "a mixing of the 'language' of biomedical disease with that of social maladaptation" can result in conceptual problems. The two examples he offers are homosexuality and alcoholism.

Studies such as that of Joseph Eaton and Robert Weil (1967, p. 92) among the Hutterites provide evidence that concepts of disease in relation to human behavior are not the same among all western societies and subsocieties. Considerable variation was seen to exist even among the views of the medical students of this study. There is no clear agreement among the graduating medical students of Overland Medical School that certain kinds of sexual behavior are ill or deviant and others healthy. In many
small and culturally simple societies, interpretations of such matters appear generally to be uniform, but the size and cultural diversity of our own society have led to the existence of many and varied views. Where there is agreement among the students of Overland Medical School, it appears to be in the assumption that any specific sexual behavior is either healthy or sick; disagreement exists on the question of "deviance" versus "conformity".

In recent years in western society, an increasing number of behavior patterns once regarded as moral failings or as unrelated to disease have been redefined as symptomatic of or synonymous with disease. This trend has developed to the extent that whole social systems have been characterized as ill or diseased, and at least by implication so has the behavior of all the individual participants in the systems (Dunham 1969, p. 58). This tendency to redefine behavior as disease was noted by the author in a previous study of adolescents in a hospital setting (Creson and Blakeney 1970, pp. 407-426; Blakeney and Creson 1970, pp. 756-762). Although greatly accelerated in recent times, the trend toward redefinition is not new. Fabrega (1975, p. 973) points out that "social behavioral changes" served as the principal indicators of disease until the biomedical sciences "matured" in the last two hundred years. The modern trend has been to redefine as illness, many kinds of behavior that have not previously been so considered.
The observed agreement among students at Overland Medical School that sexual behavior is normal or abnormal leads to some remarkable contradictions in the conclusions reached by them in relation to the expanding definition of disease, which makes it include individual behavior and also the social systems in which that behavior occurs. Two examples, the first taken from a student interview and the second from a letter written by a student to me, illustrate this point:

1. The sexual permissiveness is a warning that American society is sick . . . . the Romans didn't notice and look what happened to them.

2. Sexual repression is everywhere. Everybody I know has sexual hangups. It's not people that are the problem, it's the fucked up country in which we live. What the society needs is a dose of castor oil to clean it out and start over.

The disparity in student attitudes and values in relation to human sexuality that we have described poses questions and problems. If the ambiguity and role conflict experienced by students in Overland Medical School is functional in preparing them for the social role of physician, then how can the disparity in their attitudes and values be explained? Most students resolved the conflict by reliance upon personal biases and attitudes as
being comparable with the physiologic parameters they had learned for diagnosing physical disease. This course of action, however, did not result in a unanimity that coincided with general social ideals in relation to human sexual behavior. In fact, the result was quite the opposite. It created certainty in relation to the judgments of the normality and abnormality of sexual behavior that was, from individual student to individual student, contradictory. The question arises of how a system that promotes among physicians, who must deal professionally with sexual matters, clashing views of socially and psychologically appropriate sexual behavior can effectively serve the society.

In order to understand the genesis of this contradiction, examination of the social role of the physician appears to be a key. In sociometric studies of occupations in the United States, physicians consistently rank at or near the top in hierarchic ratings. Even law students rank physicians above lawyers as having more prestige (Thielens 1957, p.136). Special endowments and unique qualities attributed to physicians underlie the elevated position assigned to them. The elevated position assigned to physicians is relatively recent, and did not exist until the turn of the century (Friedson 1963, p. 300). The rise in status was in large part a function of technological advances that provided means for efficient identification and treatment of infectious diseases and at the same time provided a general
affluence that could support health care for the general population, based on the new technology.

The relatively recent elevation of physicians in the social hierarchy does not correspond with the general view of the physician's historical role. Physicians themselves, and most other people, see continuity in the unique endowments attributed to physicians. This continuity is perceived as extending from Hippocrates through the country doctor of the frontier, and it is typified in the medical heroes of modern television. The physician is perceived as an altruistic hero who sacrifices his own welfare for the welfare of others. Burdened by the needs and difficulties of those who seek his help, he patiently, and without complaint, takes responsibility for resolving their problems. His unique endowments give him, and him alone, the answers to human misery.

Recent disaffection with physicians among the general population has resulted in criticisms which range from "maldistribution" of medical manpower (Presser 1975, p.16) to insensitivity (Meyer 1974, p. 31). Such criticisms, however, are always aimed at "bad" doctors, and the ideal image of what a physician should be remains intact. The majority of the general population still expresses confidence in physicians. Of all groups of professionals considered in a recent poll, physicians stood first in inspiring confidence, followed by Supreme Court Justices (American Medical News, October 14, 1974).
There is, of course, more to the role of physician than the sociocultural ideal. There are pragmatic and behavioral aspects to the obligations, responsibilities and prerogatives of his role. No physician fits the ideal; rather the ideal is, for the physician, a way of perceiving himself. The adoption of pragmatic behavioral norms is a part of the necessary adult socialization process to which medical students submit themselves. Elliott Krause (1971, p. 114) has pointed out the discrepancy: "The layman's view of the work of the health professions and the actual experience of the day-to-day work form a contrast of major proportions". Krause goes on to say: "Since all health workers start out as laymen, they must undergo a set of conversion experiences, a set of 'rites of passage'". Medical students at Overland Medical School must then find a way to adjust to the requirements of the ideal of physician and the pragmatic realities of medical practice.

It was noted earlier, that one of the role conflicts experienced by students at Overland Medical School was that of patient advocacy vs. social control. This conflict was poorly articulated and vaguely conceived by most students at Overland Medical School. The conflict may be described as lying between the "particularistic obligations" the students felt toward an individual patient and the "universalistic obligations" they felt in relation to the society in which they participated (Stouffer and Jackson
1951, pp. 481-495). Ideally, the physician is the advocate for the patient, but he also responds to ideas, values, and attitudes prevailing in the whole social system. Where physiologic parameters are available, he has little problem in acting as both patient advocate and agent of social control. The shared assumption of both roles that makes this possible is that physical health is "good". It is "good" both for the patient as an individual and for the social order.

When confronted with sexual behavior, however, the student physician or physician has a somewhat different problem. He may resolve the dilemma by making a further assumption, which is, "What is good for the physician is good for the patient". This assumption is, however, not very different from the assumption made with regard to physical disease. The only difference is that the student or physician can feel certain that such is the case in dealing with physical disease.

The characteristic resolution of the medical student's dilemma with regard to sexual matters provides an example of Stouffer's (1949, pp. 707-717) contention that role conflict is a convenient way to get at "informal social controls" in a given institution. The student is preparing for the social role of physician, and the informal social controls prevailing at the school foster a mode of resolving the dilemma that will enable the student to function in the
manner expected of him, as an authority on health and disease.

If the physician is thought of as a final social authority in the training of medical students, a number of things become clear. Peter Blau (1955, p. 226) states, "Authority implies firm social control, but it also implies voluntary compliance with directives." Compliance is, in Blau's terms '. . . as voluntary as our custom of wearing shoes.' The physician as a final authority is the repository of social values and ideals in the same way as the shaman or priest in culturally simpler societies. In this light, the assumption that what is good for the physician is good for the patient makes sense. It appears reasonable for students to equate personal biases and values, with regard to human sexuality, to the physiologic parameters used in relation to physical disease. In the absence of a consistent point of view in Overland Medical School for judging and classifying sexual behavior, he has no other choice if he is to remain a social authority and perform his role satisfactorily.

The ambiguity and role conflict experienced by students in Overland Medical School did not lead to consensus in diagnosis, as we have noted, but it did generally lead to certitude. Faced with the expectation that they would act as final authorities, they did so, at the expense of a consensus, with regard to judgments of the normality or abnormality of sexual behavior.
Before 1971, the lack of courses providing sexual information was obviously one of the factors allowing the absence of consensus. The training at Overland Medical School did promote the development of an attitude of certainty. In the absence of expertise in dealing with sexual matters, this attitude may be seen as detrimental to the development of medical practices relating to sexual behavior.

To understand the circumstances fuller, the nature of norms and values of American society must also be understood. Francis Hsu (1972, p. 245) describes the difficulties of this task:

Thus our understanding of American values is today no better that it was several decades ago. Periodically we note the conflicts and inconsistencies among the different elements, but we leave them exactly where we started.

Consideration of the great complex of American norms and values is beyond the scope of this study. It does seem relevant, however, to note that the manner in which the student at Overland Medical School relates as a final authority to his patients is characteristic of final social authorities in other cultures. Clark (1959, p. 207) notes that Mexican-Americans avoid physicians because physicians do not behave in the manner that the Mexican-Americans feel healers should behave. Even though curanderos may perceive complaints in diverse ways and prescribe different remedies, they tend to relate to their patients as intimates and obey
the rules for healing of the social system in which they participate. The most important attribute of the curandero is not what he does, but how he goes about it vis-à-vis others in the sociocultural system. Such information about other cultures suggests that in roles such as those of the curandero and physician, the manner of relating to others takes precedence over the actual content of communication in the interaction.

In relation to sexual behavior, Overland Medical School teaches students how to be authorities rather than instructing them as to the specific sexual norms to be enforced. These circumstances appear to be congruent with the size and cultural heterogeneity of American society, where consensus about all behavioral norms cannot be expected. A brief review of recent publications reveals tremendous diversity in the sexual ideals and behaviors of Americans, a diversity that is mirrored to some extent among the medical students at Overland Medical School. In a recent survey undertaken by the Research Guild Inc., under contract to The Playboy Foundation (Hunt 1973, p. 88), the heightening of this diversity in recent decades is documented.

In Overland Medical School, the priority given to how to respond to matters concerning the human sexuality of patients rather than to what attitude one should hold in relation to specific sexual behaviors is, of course, practical from one point of view. Attitude change does not
necessarily modify subsequent behavior (Cohen 1964, pp. 137-138). Eleanor Maccoby (1968, p. 255) describes a study in which expectant mothers were instructed differently in the importance of toilet training of children. Although a marked divergence was observed in the attitudes about toilet training of mothers in different groups, this did not influence subsequent behavior of the mothers during the actual toilet training of their children. Given the diversity of sexual attitudes in the larger social system which was mirrored in the group of students entering Overland Medical School in both 1971 and 1972, it may well be that sacrificing consensus in attitudes for consensus in manner of presentation was a practical if not the only course of action possible in medical student socialization.

The ambivalence and role conflict experienced by students at Overland Medical School in relation to the sexual behavior of their patients appears to be functionally viable in the field of medicine, if not ideally so. It prepares students to assume a position of social authority in dealing with the behavior of patients, a matter of importance to the success of medical practice. In a society with diverse and changing sexual values and norms, it is perhaps desirable that the student could authoritatively prescribe courses of action, even if these prescriptions varied from student to student.

An additional question arises. Does the lack of consensus as to the normality and abnormality of sexual behaviors
among students graduating from Overland Medical School represent a limited, transitional period in medical education, or has it been the nature of medical education over time to socialize students simply as authorities rather than as authorities supporting specific and shared views of the sexual world that are based on social ideals?

Talcott Parsons (1951, pp. 280-283) has emphasized the importance of role conflict in bringing about institutional change. There is evidence in Overland Medical School that the role conflict experienced by students is bringing about such change. The introduction of a course in human sexuality is one example of such change. The context in which the human sexuality course was adopted suggests that the role conflict described in this study was a major result of that change.

At the time of the adoption of the course on human sexuality, Overland Medical School was subject to unusual pressures to do so that were shared by medical schools elsewhere in the nation. These pressures can be best understood as a result of changes in the larger sociocultural system in recent years, a subject that is discussed in the following chapter.
CHAPTER TEN
Medical Education and Changing Sociocultural Norms

The development of the medical sciences led to major breakthroughs in effectively treating physiologic disease in the early part of this century (Freidson 1963, p. 300). These technological advances led to concepts of disease removed from older social and religious views that linked disease with willfulness and deviance. These concepts provided the means for developing quantifiable physiologic criteria that could function as a reference system for determining the effectiveness of physical medicine. This development, to a large degree, freed medicine from the recurrent need to re-interpret disease in the light of changing sociocultural values. The spectacular success of medicine, organized in this way in dealing with a broad range of physical aberrations, was important in achieving the current prestige given to medicine and related scientific disciplines.

The success of medicine based on new technologies led to a social insulation of the system of medical education. The School of Medicine of the University of Kansas, as described by Becker (1961, p. 49) in 1958, resembles Overland Medical School. Although the form of instructions for medical education changed slowly since the turn of the century, the expansion of the system accelerated.
Recently there has been increasing pressure toward change in medical education (Tyler 1969, pp. 1-6). The pressure has come from several sources including: 1) increase in size of the medical education subsystem; 2) increase in complexity of medical technology; 3) enlarged definition of the medical mandate; and 4) rapidly changing norms in the larger social system (Van Matre 1969, p. 49).

Medical education has expanded rapidly in the last two decades, and expansion has accelerated in the last few years. In one year, 1973-74, the number of students graduating from medical school in this country increased by 15%. In 1973, American medical schools graduated 11,613 students. In 1974 the number of graduating students was 13,595 (American Medical News, September 8, 1975). New medical schools came into being at an accelerated rate. Until seven years ago Overland Medical School was one of three medical schools in its state, which now has six schools, and another scheduled to open its doors in the near future.

The increased number of students passing through Overland Medical School disrupted the traditional close relationship between faculty members and students (Smith 1974, p. 103). As Overland Medical School became larger and more impersonal, the informal system of controls was replaced increasingly by bureaucratic procedures and policies, an effort to reduce emerging problems "into routine duties...and to effect the coordination of specialized
tasks (Blau 1955, p. 251)."

The problems attendant upon handling an increased flow of medical students were made more difficult as a result of new technologies for diagnosing and treating physiologic disease. The new technologies resulted in a better understanding of the complexities of various disease processes. The "knowledge explosion" was so extensive that medical schools throughout the country reassessed their curricula and attempted to define a "core curriculum" composed of essential knowledge necessary for all medical practitioners. Overland Medical School adopted a "core curriculum" in 1970.

The concept of core curriculum did not successfully alleviate the pressures on medical schools resulting from increased complexity of medical technology. At Overland Medical School during the period of this study, there was little agreement as to what material properly constituted a "core". Competition among subfields for teaching time was intense, and student support was actively solicited by the various departments in efforts to increase the teaching time available to the department.

As a result of the enlarging definition of the medical mandate, the stress on medical education was increased further. Phenomena such as sexual and even criminal behavior were undergoing redefinition as medical problems and medical care itself was coming to be considered a "human right". This position was clearly stated by Senator Edmund Muskie, who in 1972 called for a "medical bill of rights" (Modern
There were increasing calls for accelerated medical education to provide the manpower to meet the expanding demands. The increased number of graduates remained insufficient. Internships were no longer required for residencies in most major specialties and many medical schools developed three-year programs. Overland Medical School provided a three-year optional program when it introduced its core curriculum in 1970.

All of these factors in one way or another reflected changing sociocultural values. The definition of a medical problem and judgment as to who deserved medical care were a part of the ethos of the society. Because of the reduced teaching time available in Overland Medical School following the introduction of a three-year curriculum and the curtailment of instruction in traditional subjects necessary with the implementation of a core curriculum, it was surprising that Overland Medical School provided instructional time for a new course. This was done, however, when the course in human sexuality was introduced in 1971. The new course took 30 hours from the already crowded curriculum of freshmen. In view of the difficulty in modifying the substance of medical education (Editorial: *Journal of the American Medical Association*, April 12, 1971) and in view of pressures on teaching time, the institution of the new course appeared significant of change in national values and attitudes. It appeared even more significant as part of a national trend. Medical schools throughout the country
were generally developing and implementing instruction in human sexuality (Lock 1968, p. 18).

The establishment of these new courses deserves attention. The traditional insulation of medical education had allowed efficient management of the socialization of physicians. This "boundary control", as described by Miller (1967, p. 262), provided for selection of the applicants most amenable to socialization. Following the increased public demand for health care, the increased complexity of medical technology, and the broadened definition of what constituted medical problems, the institutions for medical education responded under political and economic duress. The influx into medical schools of increased numbers of students was accompanied by measurable changes in student attitudes and values (Ondrack 1971, pp. 8-17), and at the same time an increase in the discussion of human sexuality and sex-related behavior in the public media.

Arthur Stinchcombe (1965, p. 143) has pointed out the tendency of organizations to perpetuate patterns of operation which were prevalent when they were founded. In view of his observation, it is interesting to note that the course on human sexuality at Overland Medical School resembled in many ways traditional courses of the medical school. Information was presented as factual by a series of lecturers with special expertise. Examinations were true-false or multiple choice, and the course was taught as a self-contained package. Students completing the course could be
expected to feel that they "knew" sex in the same way that they "knew" physiology. The remarks of one lecturer suggested that in fact the course was intended to accomplish just that. The lecturer said to the class: "When you finish this course you will be experts on human sexuality and you will know more than 99.999% of the population". It seems plausible to conclude that the role conflict and ambiguity experienced by students as a normal part of their training at Overland Medical School played a part in the development of the human sexuality course. To see this as the lone influencing factor, however, is to ignore the complexities of change in the sociocultural system that appear also to have exerted influence. The conflict experienced by students at Overland Medical School and the introduction of sex education were the result of national changes in culture, much of which had little, if anything, to do directly with human sexuality.

Ian Hogbin (1958, p. 125), among others, has described the "chain reactions" that take place in a given social system when something transpires to effect institutional change. It is easy to see signs of change such as the disappearance of "nude girlie pictures slipped among the anatomy slides" in medical school courses, as reported by *Time* magazine (May 26, 1975), but the changes Hogbin refers to are basic alterations in the way participants in sociocultural systems perceive their world. The precipitating factor for social change is not infrequently a
technological advance. The success of organized medicine predicated upon new technologies led to the elevation of the physician's status to one of preeminent authority. In this position, the physician was allocated an ever-broadening mandate that reached beyond the limits of the available "medical model". The ambiguity and role conflict experienced by students in Overland Medical School was in part a function of that broadened mandate.

The development of sex education in medical schools in this society may be understood in part as an attempt to deal with the discrepancies and contradictions in the roles of physicians then graduating from medical schools. It seems unlikely that such discrepancies and contradictions in the performance of their roles will be tolerated for very long among people holding authoritative statuses.

John Gagnon (1975, pp. 111-141) has reviewed the circumstances of the recent acceptance and application of research technologies to give better understanding of human sexual responses and sex-related behavior. Research leading to the formulation of physiologic criteria has been very useful in diagnosing and controlling physical disease. Now that research is being extended to human sexuality, the result may be criteria of the same type for use in dealing with sexual matters. Only time will tell whether the results of research and instruction on the subject of sex in medical schools will be as effective as the research and training that concerns physical disease.
The research upon which this dissertation is based has attempted to understand the behavior of individual medical students and medical students as a group when confronted with human sexuality and sex-related behavior in the course of their medical training. It has also attempted to understand this behavior in the context of the institution in which it occurred and in American society as a whole. The medical students in Overland Medical School behaved in complex ways and with much diversity, so that this dissertation presents too simple a picture of them. The complexity of the status-sets and concomitant roles of each individual student and faculty member defied description. Only such behavior in a context of medical training as seemed both observable by techniques available to me and closely relevant to the goals of this research has been discussed here. In describing why individuals perform as they do, Nadel (1968, p. 402) attributes recurrent individual behavior to the fact that it "happens...to be safe, known routine". Students and faculty members at Overland Medical School appeared to me to have persisted in following patterns of behavior with which they were familiar and which presented little immediate risk. The changes on a national scale, however, required adaptations and modifications in such safe behavior that cumulatively may result in major redefinitions of the social roles of physicians and of the scope and nature of medicine as it applies to sexual matters.
In conclusion, cognizance must be taken of the third stated goal of this research of gaining an understanding of "potential and observed problems arising because of cultural incongruences between the attitudes and values embodied in medical practice, as learned by the students, and the attitudes and values of the society at large".

In the preceding pages, little or no discussion is given to such problems which explicitly labels them as problems. This apparent omission has been deliberate; I think that explicit labeling is unnecessary or redundant. By conscious implication, however, the problems have been described in considerable detail. It seems to me that this account allows, and perhaps compels, the reader to see certain incongruences and to infer that various features of the present programs of training of medical students operate in ways that do not serve the best interests of the practice of medicine. These observations apply especially to certain features of the social organization of medicine. This research, then, points to problems relating to the status and roles of physicians, and thus also of medical students, that may properly be regarded as one kind of medical problem.

Although the formulation of recommendations for remedial action is beyond the scope of this study, perhaps I do not go too far in stating that such recommendations are also implied herein.
BIBLIOGRAPHY

American Medical Association

American Medical News

Ausubel, David P.

Barnouw, Victor

Beale, Lathrop V. and Louis Kriesberg

Becker, Howard S. and Blanche Geer

Becker, H. S., Blanche Geer, Everett Hughes and A.I. Strauss

Blakeney, Patricia and Charles Powell

Blakeney, P. M. and D. L. Creson

Blau, Peter M.

Brim, Orville G.


Green, Richard

Greenbank, R. K.

Gross, Neal, A. W. McEachern and Ward S. Mason

Group for the Advancement of Psychiatry
1965  Sex and the College Student. New York: Mental Health Materials Center.

Halleck, S. L.

Hogbin, Ian

Homans, George C.

Hovland, C. I.
1959  Reconciling Conflicting Results Derived from Experimental and Survey Studies of Attitude Change. American Psychologist 14:8-17.

Hsu, Francis L.

Hunt, Morton
Huntington, Mary Jean
1957 The Development of a Professional Self-Image.
      In The Student-Physician. Merton, Reader and
      Kendall, Eds. Cambridge: Harvard University
      Press.

Kahn, Robert L., Donald M. Wolfe, Robert P. Quinn, J. D.
Snoek and Robert Rosenthal
1966 Adjustment to Role Conflict and Ambiguity in
      Organizations. In Role Theory: Concepts and
      Research. Biddle and Thomas, Eds. New York:
      John Wiley and Sons.

Kelley, H. H. and E. H. Volkhart
1952 The Resistance to Change of Group-Anchored
      Attitudes. American Sociological Review
      17:453-465.

Kennedy, Donald A.
1961 Key Issues in the Cross-cultural Study of
      Mental Disorders. In Studying Personality
      Cross-Culturally. Kaplan, Ed. Evanston,
      Illinois: Row, Peterson and Company.

Kinsey, Alfred C., W. B. Pomeroy, and C. E. Martin
1948 Sexual Behavior in the Human Male.
      Philadelphia: W. B. Saunders Company.

Kinsey, Alfred C. W. B. Pomeroy, C. E. Martin and P. H.
Gebhard
1953 Sexual Behavior in the Human Female.
      Philadelphia: W. B. Saunders Company.

Kluckhohn, Clyde
1951 Values and Value-orientations in the Theory
      of Action. In Towards a General Theory of
      Action. Parsons and Shils, Eds. New York:
      Harvard University Press.

Kobben, A. J. F.
1967 Participation and Quantification: Field Work
      Among the Djuka. In Anthropologists in the
      Field. Jongman and Gutkind, Eds. Netherlands:
      Royal Van Gorcum.

Krause, Elliott
1971 The Sociology of Occupations. Boston: Little,
      Brown and Company.

Laing, R. D.
1964 Sanity, Madness and the Family. New York:
      Basic Books, Inc.
LeVine, Robert A.


Lewin, Kurt

Liebow, Elliot

Lief, Harold I.

Lief, H. I. and David M. Reed

Liefer, Ronald
1969 In the Name of Mental Health: The Social Functions of Psychiatry. New York: Science House.

Linton, Ralph

Lock, Frank R.

Maccoby, Eleanor E.

Madsen, William

Marmor, Judd (ed.)
Marwick, M. G.  

Masters, W. H. and V. E. Johnson  


Mechanic, David  

Merton, Robert K.  


Merton, R. K., G. Reader, and P. Kendall  

Messer, Henry D.  

Meyer, Carolyn  

Miller, E. J. and A. K. Rice.  

Modern Medicine  

Money, John and Anke A. Ehrhardt  

Murphy, Jane M. and Alexander Leighton  

Nadel, S. F.


Offer, Daniel and Melvin Sabshin

Ondrack, Daniel A.

Overland Medical Branch
1968- Catalogue.
1970

Parsons, E. C.

Parsons, Talcott


Pelto, Pertti J.

Polgar, Steven

Presser, Carole S.

Prince, Virginia
Stanford University Medical Center.

Roman, Paul M. and Harrison M. Trice

Rossi, Alice

Sarbin, T. R. and Vernon L. Allen

Savage, Charles, Alexander Leighton and Dorothea Leighton

Schofield, Michael

Scott, W. A.

Sheppe, W. M. and Jack Hain
1966 *Sex and the Medical Student.* *Journal of Medical Education* 41(5):

Siegel, Alberta E. and Signey Siegel

Sigerest, Henry E.

Singer, R. D.

Simon, William and John H. Gagnon
Chicago: Aldine.

Smith, Gerda H.

Spiegel, John P.

Spiro, Melford

Stanton, Alfred H. and Morris S. Schwartz

Stinchcombe, Arthur L.

Stoller, R. J.

Stouffer, Samuel A.

Stouffer, Samuel A. and Jackson Toby

Stuart, Richard B.
1970 Trick or Treatment. Champaign, Ill: Research Press.

Szasz, T. S.

Tagiuri, Renato

Thielens, Wagner
1957 Some Comparisons of Entrants to Medical and


Time Magazine 1975 Women: Still Number Two But Trying Harder May 26:41.


Woods, S. M.

APPENDICES
PLEASE NOTE:

Pages 247-277, "Sex Knowledge and Attitude Test," copyright 1970 by Harold I. Lief and David M. Reed not microfilmed at request of author. Available for consultation at Rice University Library.

UNIVERSITY MICROFILMS.