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## An Investigation of Gender Differences in Factors Associated with Low Sexual Desire

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AN INVESTIGATION OF GENDER DIFFERENCES  
IN FACTORS ASSOCIATED WITH  
LOW SEXUAL DESIRE

by

Karen Mangen Donahey

A Dissertation Submitted To  
the Faculty of the Graduate School  
of Loyola University of Chicago in  
Partial Fulfillment of the Requirements for the Degree of  
Doctor of Philosophy

January

1992

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## VITA

The author, Karen Mangen Donahey, was born July 24, 1956, in Chicago, Illinois.

Her Bachelor of Arts degree in Psychology was conferred in April, 1978, by the University of Michigan in Ann Arbor, Michigan. In 1980, she obtained a masters degree in Social Work from Michigan State University in East Lansing, Michigan.

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In August 1986 she entered the doctoral program in psychology at Loyola University. While at Loyola, she was awarded graduate assistantships for three years. Her clinical training included work at Northwestern Memorial Hospital in the Eating Disorders Program, the Loyola University Counseling and Developmental Services Center, and the Wexler Outpatient Psychiatric Clinic at Michael Reese Hospital. She completed her clinical internship in the

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## CHAPTER I

### INTRODUCTION

It has been reported that over the past decade, the incidence of individuals seeking help for low sexual desire has significantly increased. In fact, it has been found that low sexual desire has become the most common presenting complaint in sex therapy clinics today (Lief, 1977, 1985; Schover & LoPiccolo, 1982; Rosen, Leiblum, & Hall, 1987; Leiblum & Rosen, 1989).

What makes this particularly noteworthy is that sexual desire disorders were not specifically identified in the literature as a problem until 1977 when both Lief (1977) and Kaplan (1977, 1979) independently suggested that sexual desire disorders be viewed as a separate clinical entity. Lief (1977) noted that significant numbers of patients presenting for treatment at sex therapy clinics could not be adequately diagnosed according to the categories provided by Masters and Johnson (1970). He, therefore, proposed that the diagnosis of "inhibited sexual desire" be viewed as an independent type of sexual dysfunction to be applied to patients who consistently failed to initiate or respond to sexual stimuli. Kaplan (1977, 1979) also proposed that

sexual desire disorders be categorized as a separate clinical entity, having observed that disorders of desire did not respond as favorably to the sex therapy techniques employed for excitement or orgasm phase disorders. She suggested that the sexual response cycle, first developed by Masters and Johnson (1970), be reconceptualized as consisting of three phases: desire, excitement, and orgasm. Her position was that the high prevalence of desire phase disorders substantiated this need for a triphasic model of sexual arousal.

In 1980 the Diagnostic and Statistical Manual of the American Psychiatric Association (DSM-III) classified "inhibited sexual desire" as a separate diagnostic entity. It was later renamed as "hypoactive sexual desire disorder" in the DSM-III-R (American Psychiatric Association, 1987), in response to those who opposed the psychodynamic connotations of the term "inhibited" (Rosen & Leiblum, 1989).

Speculations as to the increase in incidence of reports of low sexual desire problems have primarily centered around the changes in our cultural values regarding sexuality (Friedman, 1983; Weeks, 1987). Sexual functioning has become highly valued in our society. As a result, individuals with low sexual desire are more frequently labeling themselves, or are labeled by their partner, as having a problem, and may be feeling increased pressure to

seek help in order to enjoy a more active sex life. What is unclear, however, is whether there is an actual increase in the incidence of low sexual desire, or whether there is simply a greater likelihood that an individual or couple will define this as a problem.

While originally this was considered to be a problem affecting primarily women, it has been noted that increasing numbers of men are presenting with this problem as well (Spector & Carey, 1990). One speculation for this is that as women have come to value their sexual functioning and become more sexually assertive, men's responsiveness has come under greater scrutiny. Thus, this increased incidence of low sexual desire in men may be in response to the growing freedom on women's part to initiate more frequent and varied sexual activity. That is to say that, rather than deal with the anxiety associated with performance fears, desire will be lost instead (Schover & LoPiccolo, 1982; Weeks, 1987; Leiblum & Rosen, 1988).

Apart from what may be the societal factors associated with a higher incidence of reported low sexual desire, there have been a number of biological, psychological, and interpersonal factors which have been associated with the etiology of low sexual desire. These factors include hormonal abnormalities, drug reactions, medical illness, current or past depression, anxiety, stress, the presence of another sexual dysfunction, reactions to past sexual

traumas, guilt and religious prohibitions, relationship conflict, and avoidance or fear of intimacy (Lief, 1977; Kaplan, 1977, 1979, 1985; LoPicollo, 1980).

It has been assumed that these factors appear equally among men and women reporting low sexual desire; however, there is little empirical validation for this. One consideration is that this disorder may not be the same for men and women. That is, certain factors may be more likely to appear or exist in one sex than the other. This has important treatment implications; in that treatment of low sexual desire cases are considered much more difficult, and have a lower success rate when compared to treatment of other sexual dysfunctions. This may, in part, be due to earlier treatment methods which focused on increasing physiological arousal; assuming that this would then result in increased sexual interest. However, as it has been pointed out elsewhere in the literature (Friedman, 1983; Zilbergeld & Ellison, 1980), this increase in interest has not always occurred. This may be because the subjective element of sexual desire has, until recently, been neglected in treatment planning. The complexity and diversity of psychological and interpersonal factors which have been associated with the etiology and/or maintenance of low sexual desire suggests a multidimensional treatment approach which is tailored to the individual. By being able to identify possible differences in the way low sexual desire

is manifested in men and women, successful assessment and treatment of low sexual desire may be increased.

The overall purpose and focus of this study, therefore, is to explore whether psychological and interpersonal factors associated with low sexual desire manifest themselves differently in men and women within a clinical population. Implications related to assessment and treatment will then be addressed and discussed.

The remainder of the study is organized according to the following format. Chapter II consists of a review of the literature and the research hypotheses to be explored in the study. Chapter III provides information regarding the research design, instrumentation, and statistical procedures employed to analyze the data. Chapter IV reports the results of the study. Chapter V discusses the results of the study, limitations, implications for assessment and treatment, and suggestions for future research.



## CHAPTER II

### REVIEW OF THE RELATED LITERATURE

#### Introduction

Chapter I provided a rationale and brief outline of the study. In this chapter an examination of the various dimensions of sexual desire and a discussion of the biological, psychological, and interpersonal factors which have been identified as being associated in the etiology of low sexual desire will be presented.

#### Definitional Issues

Desire disorders are among the most difficult of the sexual dysfunctions to define or diagnose, primarily because of the lack of consensus regarding a definition of sexual desire or measurement approaches (Leiblum & Rosen, 1989). At present, there is no accepted standard of what constitutes normal sexual desire. This is primarily due to the difficulty which exists in determining what constitutes "normal" and "abnormal" levels of sexual functioning in general, and, specifically, in how to define the very subjective experience of sexual desire. Whereas other aspects of sexual functioning (i.e., arousal, orgasm) can be operationally defined and measured, the construct of sexual

desire is much more varied in its manifestation and expression. One of the reasons for this is that there are no physiological markers for sexual desire, while there are for arousal (erection or lubrication) and orgasm. Furthermore, what may be considered "normal" sexual behavior at the current time may not have been perceived as such in the past, or will be viewed as so in the future. According to some researchers (Leiblum & Rosen, 1988, Friedman & Hogan, 1985), this is because definitions of normality, and conversely, abnormality, depend both upon the sexual attitudes, values, and behaviors of a particular society within any given period of time, as well as upon the values, beliefs, and behaviors of the person proposing the definition. For example, Leiblum and Rosen (1988) point to how the sexual permissiveness of the late 1960's through 1970's was replaced in the 1980's by a more conservative attitude; generated in large part to the epidemic increase in sexually transmitted diseases, unplanned pregnancies, and growing prevalence of sexual abuse and incest. What thus constituted "normal" levels of sexual desire and behavior in the 60's and 70's could be perceived as "abnormal" in the 1980's. In view of these considerations, one can begin to understand some of the difficulties involved in attempting to define this construct.

#### Definitions of Sexual Desire

Sexual desire was initially understood as a drive akin

to hunger or thirst (e.g., that it was an inately determined, instinctive source of motivation). Freud's (1905/1962) belief was that sexual desire, or, as he referred to it, "sexual instinct", was a result of chemical substances in the blood stream which caused a portion of the central nervous system to be charged with sexual tension. From Freud's perspective, as sexual tension increased, so did the motivation, or desire, to pursue sexual release. With sexual release, sexual tension was relieved, and the individual could return to a state of emotional homeostasis.

Kaplan (1979) has also ascribed to this drive-reduction theory of sexual desire. She defined sexual desire as an "appetite" which originates in the limbic systems of the brain and is dependent on testosterone for its functioning in both men and women. Kaplan (1979) stated that sexual desire is experienced as "specific sensations which move the individual to seek out, or become receptive to, sexual experiences. These sensations are produced by the physical activation of a specific neural system of the brain" (p. 10). Kaplan's (1979) premise is that when this system is active, the individual feels desire. When the system is inactive, or under the influence of inhibiting forces, (i.e., illness, drugs, conflict, fear, etc.) a decrease in desire occurs.

In contrast to assuming a strictly biological conceptualization of sexual desire, other theorists have

sought to understand sexual desire as a combination of both biological and psychological, or experiential, factors. Beach (1956, 1976) was one of the first to do this. While acknowledging the significance of hormonal factors, particularly in determining the individual's threshold for sexual attractivity or receptivity, an emphasis was also placed on the role of individual learning and experience in shaping sexual interest and desire. Beach (1956) argued that "sexual appetite is a product of experience, actual or vicarious. To a much greater extent than is true of hunger or thirst, the sexual tendencies depend for their arousal upon external stimuli" (p. 4-5).

Whalen (1966) also believed that sexual desire was determined by both biological and experiential components. Whalen (1966) proposed that sexual desire, or "sexual motivation," was the product of both hormonal and learning factors. He purported that sexual motivation was comprised of sexual arousal (the current level of sexual excitation) and sexual arousability (the propensity for arousal). According to this viewpoint, arousal is modulated by the presence and absence of certain external and internal stimuli which have become imbued with sexual meaning. Arousability, on the other hand, is dependent upon three factors: (1) the effects of hormones on the receptor sites for sexual stimulation, (2) the feedback effects of sexual stimulation, and (3) the experiences which have become

sexually conditioned.

Levine (1984) suggested that sexual desire be conceptualized as incorporating at least three dimensions: (1) a biological drive component based on neuroendocrine mechanisms, (2) a cognitive or attitudinal component that typically reflects the norms of the peer group, and (3) the affective or interpersonal component, which is characterized by the willingness to engage in sex. Levine (1987) defined sexual desire as "the psychobiologic energy that precedes and accompanies sexual arousal and tends to produce sexual behavior. It is the product of the interaction of the neuroendocrine system that produces drive, the cognitive processes that generate wish, and the motivational processes that result in willingness to behave sexually" (p. 44). This willingness, or psychological motivation, is considered by many clinicians to be the primary component in understanding and evaluating sexual desire, and conversely, low sexual desire.

Most present day definitions of sexual desire have included this subjective component, recognizing that sexual desire is not solely dependent upon biological factors, but is instead, a multifaceted phenomenon in which feelings, thought processes, perceptions, and environment also play an important role in determining what is perceived as sexually stimulating by an individual and, as LoPiccolo (1980) pointed out, in ultimately determining the subjective

experience of pleasure. It is this subjective nature of sexual desire, however, which makes it difficult to measure and assess.

### Measurement of Sexual Desire

Earlier approaches which have relied on indirect measures of desire, such as frequency of intercourse, masturbation, etc. have been found to be greatly influenced by factors other than sexual desire (Rosen & Leiblum, 1987). For example, a person could engage in sexual intercourse several times per week due to pressure from his or her partner but never desire it, or engage in masturbation but never desire sex with a partner, or be comfortable in having sexual intercourse only once every two weeks with a partner who desires sex more frequently. Sex could also be occurring infrequently, not because of low sexual desire, but because of the presence of another sexual dysfunction or a chronic medical condition, which might be inhibiting sexual activity.

It is also necessary to differentiate between actual frequency of sexual activity and desired frequency for sexual activity (LoPiccolo, 1980). Friedman and Hogan (1985) found that clients with low sexual desire will often, from an abstract viewpoint, express a desire to have sex two or three times a week, but in actuality, only feel sexual desire every two weeks. In their study, it was demonstrated that even a questionnaire item developed specifically to

measure low sexual desire (How frequently do you feel sexual desire? This feeling may include wanting to have sex, planning to have sex, feeling frustrated due to a lack of sex, etc...." with multiple choice answers ranging from "more than once a day" to "not at all") did not discriminate men diagnosed as low desire from non-low desire men. Their recommendation, in view of this, is that the clinical interview is the most successful and most accurate way of assessing low sexual desire. They proposed that the interview should include questions concerning desired and actual frequency of sex with the person's regular partner and with other partners and potential partners, masturbation, the person's subjective feelings in reaction to these sexual activities, fantasies, dreams, reactions to attractive people, frequency of viewing or reading erotic material, and subjective reaction to such material. They stressed that it is particularly important to interview the partner of the low desire client, who will often provide more accurate information on some aspects of the desire problem. They pointed to the observation that it is not uncommon to encounter couples in which a low desire client says that he or she has not had intercourse for about six months, while the partner says that they have not had intercourse for three years.

Hence, measuring the frequency of sexual behavior has not been found to be adequate in defining sexual desire. A

rudimentary count of the frequency of various sexual activities does not always provide enough information to make a diagnosis of low desire (Schover, 1986). Additionally, counting sexual activities engaged in does not provide data on desire in relation to other sexual activities which an individual may be interested in pursuing but is currently not engaged in doing (LoPiccolo, 1980). An outlet measure fails to sufficiently reflect the relative strength or urgency of sexual drive or explain why a person is not having sex, nor does it evaluate the subjective experience of the individual in terms of arousal, pleasure or discomfort. Yet, as Kaplan (1977) pointed out, until valid and reliable norms of human sexual functioning are available, and a method is developed to empirically measure sexual desire, low sexual desire will continue to be diagnosed by comparing the individual's level of desire with frequency norms, as well as from clinical interview and observation. In her opinion, the norms provide one with the information needed to recognize what lies within the so-called normal range, so that deviations from the norm can be identified, particularly if there are significant deviations.

Currently, most researchers tend to use both objective and subjective criteria in assessing sexual desire. For example, Schreiner-Engel and Schiavi (1986) have defined sexual desire in terms of both (1) the frequency of all



sexual activities engaged in and (2) the individual's subjective interest in participating in each activity. Using this criteria, the absence of either external behavior or an internal incentive constitutes a desire disorder. Garde and Lunde (1980) distinguished between spontaneous desire for sexual activity from desire invoked by way of some form of outside sexual stimulation (e.g., partner's touch). Others have also included the patient's self-rating of "ideal" versus current sexual frequency on a number of sexual behaviors as a further measure of sexual desire (Lieblum, Bachman, Kemmann, Colburn, & Swartzman, 1983). Leiblum & Rosen (1988) suggested this is especially relevant when assessing levels of desire in particular populations, such as widowed or elderly women or disabled men, as the availability of partners is often limited. It is also important to note that in the absence of norms for various populations and age groups, it is difficult to specify with any reliability, criteria for what constitutes "normal" levels of sexual desire.

#### Physiology of Sexual Desire

According to Segraves (1988), considerable controversy exists in the scientific literature concerning to what degree biological versus psychosocial factors play in the establishment and maintenance of sexual desire and behavior. While disagreements may exist as to the relative importance of each, there does, nevertheless, appear to be agreement

that both do play a role in human sexual desire and behavior.

While there is not yet a comprehensive understanding of the normal physiology of sexual desire (Horowitz & Imperato-McGinley, 1983, Kaplan, 1983), it is understood that the pituitary-gonadal system plays a major role in sexual behavior. Three principal groups of sex hormones play a critical role in both male and female levels of sexual desire. These three hormone groups are the androgens (e.g., testosterone), estrogens (e.g., estradiol), and progestogens (e.g., progesterone). All three have somewhat similar structures and considerable interconversion occurs. Segraves (1988) cautioned that because of this interconversion, it is not correct to conceptualize androgens and estrogens as "male" and "female" hormones in an absolute sense. For example, it is now understood that for both sexes, androgens play a critically significant role in sexual desire and activity. Without testosterone, there is little sexual desire in either males or females in all species studied so far, including humans (Kaplan, 1979). However, there are some differences in how these hormones affect men and women and sexual desire. These will now be discussed in further detail.

Current evidence suggests that androgens, in large part, determine male sexual desire and activity (Bancroft, 1984, Schiavi, 1985, Segraves, 1988). Most of this evidence

is derived from studies of hypogonadal (androgen-deficient) men. These studies found that in the hypogonadal state, sexual desire was significantly decreased, followed by a reduction in sexual activity. Ejaculation and the capacity for orgasm were also similarly affected. Upon the administration of exogenous testosterone, however, desire and functioning returned within one to two weeks (Bancroft, 1984).

Segraves's (1988) contention, however, is that this evidence is not sufficient to specify the nature of the relationship between sexual desire and testosterone. He argued that it has not been unequivocally established that the relationship between testosterone and sexual desire is a simple linear function. For example, when supraphysiological doses of androgen have been administered to men with previously normal levels of sexual desire, effects on desire have been quite minimal (Bancroft, 1984, Segraves, 1988). This may be due to the lack of knowledge thus far in knowing at what level androgen needs to fall before a change in sexual desire occurs, (e.g., is there a threshold effect). Bancroft (1984) questioned whether "there is a level of available hormone beyond which further increase will have no behavioral effect?" (p. 7). He pointed to the evidence which shows that with increased levels of androgen supply (approaching the normal range of blood androgens), the difficulty in manipulating the

circulating levels of exogenous levels becomes greater. While there may be a transient rise in hormone levels, homeostatic mechanisms cancel it out, either through suppressing the individual's own supply or increasing its metabolic clearance. Thus, unless testosterone levels are markedly low, there are no clear indications as to when androgen replacement should be considered. While it is clear that androgen replacement increases the level of sexual activity in hypogonadal men, the question remains as to whether increases of androgen levels within the normal range augment sexual activity, or where there is a certain minimal level necessary for normal function, above which excess androgen has no effect. Bancroft (1984) reported that most of the available evidence suggests that the effects of testosterone administration to men with normal androgen levels are subtle and of small magnitude if they exist at all. With markedly low levels, however, androgen replacement therapy has been shown to increase the frequency of sexual thoughts and acts in hypogonadal men.

In examining the available evidence on hormones and sexual desire in females, it is understood that while hormones also influence the expression of female sexual behavior, including sexual desire, this influence is not clearly understood nor is it predictable (Stuart, 1985). Most of the current evidence comes from studies on hormonal variations in the menstrual cycle. Segraves (1988) reported

that because of the animal research demonstrating a relationship between sexual activity and the estrus cycle a number of studies have been conducted to determine whether this relationship exists for human females. If this were the case, the expectation would be that sexual desire would peak around the time of ovulation. Studies, however, have demonstrated that this is more the exception than the rule (Bancroft, 1984). In fact, sexual desire has been found to be significantly lower during the ovulatory phase than during the follicular and luteal phases (Bancroft, 1984, Segraves, 1988). Additionally, studies have demonstrated that it is not estrogen which is responsible for this increased sexual interest, but the rise in androgen (Horowitz & Imperato-McGinley, 1983, Segraves, 1988). While a certain amount of estrogen appears to be necessary for maintenance of normal sexual desire (Bancroft, 1984), studies have failed to find a strong association between estradiol levels and sexual desire (Segraves, 1988). It appears that, as for males, androgens may play the major role in female sexual desire.

Progesterone, another one of the major hormones, has been known to, at times, have an inhibitory effect on sexual desire (Bancroft, 1984, Horowitz & Imperato-McGinley, 1983, Segraves, 1988). Most of the evidence for this comes from examining the effect of oral contraceptives and sexual desire. The evidence suggests that for some women, the

increased amount of progesterone in oral contraceptives does account for lowered sexual interest. The evidence for this, however, is inconclusive (Bancroft, 1984, Segraves, 1988) and merits further investigation.

#### Historical Overview of Low Sexual Desire

Low sexual desire was initially understood as a dissociation of the sexual instinct, or libido, as formulated by Freud (1905/1962). Freud postulated that this dissociation occurred during sexual maturation as a defense against the sexual instinct, or occurred as a result of certain constitutional factors within the individual. Freud's belief was that males possessed a higher level of sexual libido than females, and that repression and inhibition were less likely to occur in males than in females.

Kinsey (1965) differed from Freud in that he did not believe in the existence of sexual instinct or drive. Instead, he suggested that individuals possessed an innate capacity to respond to internal and external stimuli and that most aspects of sexual functioning and behavior were the result of learning and conditioning. As a result, Kinsey (1965) stated, this would "have considerable significance in determining subsequent acceptance or avoidance of particular types of overt sexual activity" (p. 649). Kinsey did, however, agree with Freud's position that there appeared to be gender differences in desire. He, too,

believed that males constitutionally had a higher level of desire for sexual activity than females, and that females were generally less responsive than males to sexual stimuli existing in the environment. Individuals with low sexual desire would be unresponsive to sexual stimuli or would not experience positive sexual experiences as reinforcing.

Masters and Johnson (1966, 1970), in their model of human sexual response, did not specifically address the concept of sexual desire, as this was not viewed as a separate and distinct entity. Instead, it was included as part of the physiological process of sexual functioning which could be inhibited or denied. In Human Sexual Inadequacy (Masters & Johnson, 1970), sexual desire is alluded to in their discussion of "low sexual tension" in describing a subgroup of situationally orgasmic women. In their conceptualization of "low sexual tension" they proposed two possible explanations. One is that this condition occurred in those who had little awareness or physical need for sexual expression. The second is that psychosocial influences served to interfere in the individual's capacity to value sexuality in one's life and respond in a positive manner.

In discussing this phenomenon, Masters and Johnson (1970) restricted their discussion to women; making no mention of this in terms of how it might occur also for males. LoPiccolo (1980) reported that this tendency to see

problems of low sexual desire as a condition affecting primarily women was not unusual prior to the late 1970's.

It was not until 1977 that desire disorders were specifically addressed in the literature. Both Lief (1977) and Kaplan (1977) independently observed that patients presenting for treatment at sex therapy clinics could not be adequately diagnosed according to the categories provided by Masters and Johnson (1966, 1970). Furthermore, these patients were not responding as well to the sex therapy techniques employed for excitement or orgasmic phase disorders. In response to this, Kaplan (1977) proposed that the sexual response cycle be reconceptualized as consisting of three phases; desire, excitement, and orgasm. Whereas before, she and others viewed desire as part of the excitement phase (Kaplan, 1974; Masters and Johnson, 1970), she now believed it to be a distinct and separate phase of its own.

Kaplan (1979) defined sexual desire as an "appetite" which originates in the limbic systems of the brain and is dependent on testosterone for its functioning in both men and women. Kaplan (1979) stated that sexual desire is experienced as "specific sensations which move the individual to seek out, or become receptive to, sexual experiences. These sensations are produced by the physical activation of a specific neural system in the brain" (p. 10). Kaplan's (1979) premise is that when this system is



active, the individual feels desire. When the system is inactive, or under the influence of inhibiting forces (i.e., illness, drugs, conflict, fear, etc.) a decrease in desire occurs.

Kaplan (1979) reported that there is no evidence that the sexual desire centers of males and females differ anatomically or physiologically. Both genders have similar neurologic bases for sex and require testosterone for activation. What does differ, however, is the course of development. Until puberty, sexual "appetite" or desire is essentially the same (i.e., both sexes demonstrate some capacity for erotic feelings). At puberty a substantial increase in desire occurs, again for both sexes, although the intensity is greater and less variable for males. After puberty, however, sexual desire in males seems to peak around 17 years and then slowly declines, whereas for females, sexual desire does not decline after adolescence, but slowly increases until it peaks around age 40, and then also gradually declines.

#### Biological Factors Associated with Low Sexual Desire

Naturally occurring physiological processes, such as aging, pregnancy, and menopause may influence sexual desire. Sexual desire may also be influenced by medical disorders, drugs, and mood disorders. These will all be addressed briefly in this next section.

## Aging

There is some evidence to suggest that a decline in sexual interest, and an increased prevalence of sexual difficulties, is related to age (Schiavi, 1985, Se Graves, 1988). Androgen levels decrease gradually in men after the ages of 40-50, although within any age cohort, there is a wide range in sexual desire and activity. One study by Davidson, Kwan, and Greenleaf (1982) proposed that the decline in sexual interest and activity may not be due to a decrease in androgen levels, but to a change in receptor sensitivity to androgens. For women, lowered estrogen production after menopause, and associated changes in the genital tissues (e.g., decreased lubrication, vaginal atrophy) may lead to dyspareunia and a secondary decrease in sexual desire. This is less likely to occur, however, in women who are sexually active on a regular basis (Schiavi, 1985) or who receive estrogen replacement to correct for the decreased vaginal lubrication (Horowitz & Imperato-McGinley, 1983). Evidence thus far does not indicate that changes in estrogen or androgen levels are etiologically related to changes in sexual desire in women (Schiavi, 1985, Se Graves, 1988). Rather, for both men and women, it appears that psychosocial variables associated with aging may affect level of sexual desire. These would include sociocultural expectations related to aging and sexuality, decreased attractiveness or availability of the aging partner, marital

boredom, medical illness, or emotional stress.

### Pregnancy

Although no convincing evidence of hormonal mediation in sexual desire changes has been demonstrated during pregnancy, a decrease in sexual desire and activity has been found to occur in many women during the third trimester of pregnancy (Schiavi, 1985). This decline in interest is likely due to a variety of physical and psychological factors which are beyond the scope of the present study.

### Medical Problems

Medical conditions or illnesses can sometimes affect sexual desire levels. Schiavi (1985) stated that any medical condition associated with pain, distress, and/or generalized weakness or fatigue will likely have some nonspecific effect on sexual desire and activity. At times it may be difficult to differentiate between these nonspecific effects and those specific effects of diseases that can impair sexual desire. Disorders which have often, but not always, been found to have an effect on sexual desire and activity are the following: (1) neurological disorders (e.g., temporal lobe epilepsy, left hemisphere brain tumors and strokes, Parkinson's disease), (2) hormonal disorders (e.g., primary hypogonadism, hypogonadotropic hypogonadism, hyperprolactinemia, thyroid disorders, Addison's disease, Cushing's disease), and (3) metabolic disorders (e.g., chronic hepatitis, hepatic failure, chronic

renal failure, diabetes).

### Drugs

Segraves (1988) reported that information regarding drugs which may interfere or impair sexual desire are mainly limited to questionnaire studies or case reports, both of which are subject to physician and patient bias.

Furthermore, he stated that it is likely that the reported incidence of side effects is less than the actual incidence. His reasoning for this is that most investigators only list sexual side effects if patients have volunteered this information. As is the case with the medical disorders, most of the available information has been limited to research regarding the influence of drugs on male sexual functioning, as opposed to specifically studying the effects drugs may have on female sexual functioning (Schiavi, 1985, Segraves, 1988).

Drugs that are frequently reported to decrease sexual desire and/or affect sexual functioning (so that sexual desire develops secondary to this) include antihypertensive drugs, neuroleptics, sedatives, anticonvulsants, and many of the tricyclic and heterocyclic antidepressants. Among the drugs of abuse, Schiavi (1985) reported that heroin and morphine have the most consistent inhibitory effect on sexual drive in both sexes. Evidence concerning the effect alcohol, marijuana, or other recreational drugs is equivocal, given cultural expectations concerning these

drugs and the difficulty involved in separating the effects of psychological expectancy from true pharmacological effects (Segraves, 1988). Schiavi (1985) reported how learned expectations about these drugs may contradict objective measures of physiological changes. However, there is enough evidence to demonstrate that chronic drug abuse increases the prevalence of sexual dysfunction in both sexes, which in turn can have an effect on sexual desire.

### Depression

Bullard (1988) posited that depression can either be the cause or effect of lowered sexual desire. Both may be present to some degree. LoPiccolo (1980) reported that due to the feedback nature of the neurohormonal system, mood, cognitions, and other inputs can influence physiological functioning as well as be influenced by it. Lief (1977) stated that depression is more frequently associated with desire disorders, rather than with sexual functioning problems. Schiavi (1985) reported that subclinical depression is a frequent determinant of global and pervasive impaired sexual desire. He stated that the effect of depression on sexuality may be nonspecific, reflecting a decrease in self-esteem and energy, which in turn could inhibit initiation of, or response to, sexual activity, or it may be suggestive of biochemical changes that affect both mood and sexuality. Derogatis and Meyer (1979) observed that in some cases, depression and loss of sexual desire may

be the result of another medical disorder, such as hyperprolactemia, etc., or as LoPiccolo (1980) proposed, as a result of a dysfunction in one or both partners or a reaction to some particular life circumstance or stressor. It is thus generally agreed that a comprehensive evaluation should include a medical examination to rule out any organic causes when depression is part of the clinical picture.

### Psychological Factors Associated With Low Sexual Desire

Numerous psychological factors have been identified within the literature as being associated in the etiology and maintenance of low sexual desire. The number of factors and the diversity of ways in which they may interact suggests that there is no single factor which can account for all cases of low sexual desire. In this section, a brief review of some of the more common factors which have been associated with low sexual desire will be discussed.

#### Anxiety

Without ruling out the importance of biological causes, Kaplan (1985) posited that the majority of cases presenting with low sexual desire have a psychogenic basis. She differentiated between hypoactive sexual desire, in which the etiology is as yet undetermined, and inhibited sexual desire, in which psychological factors have clearly inhibited a person's sexual desire. According to Kaplan (1979), desire is unconsciously and involuntarily diminished

because it is suppressed, due to either intrapsychic causes and/or serious relationship problems. Anxiety and/or anger are usually the underlying factors. The sources of anxiety can range from performance fears regarding sexual functioning, to fears of success and pleasure, to more profound fears of dependency, intimacy and/or rejection. Anger can stem from unresolved dyadic conflicts (Bozman & Beck, 1991) which can vary in intensity and depth, or from power struggles in which an angry partner resists giving and receiving pleasure, or from arguments which have been provoked by individuals struggling with fears of intimacy and romantic success. In more extreme cases, anger is derived from infantile transferences. Kaplan's (1979) premise is that anger and/or anxiety interrupts the sexual cycle in its first phase, desire, rather than at a later point, such as excitement or orgasm. Both serve to protect the individual from engaging in a situation which he or she perceives as emotionally dangerous.

LoPiccolo (1980) also acknowledged that anxiety is frequently associated with the establishment and maintenance of sexual dysfunctions in general, and most likely plays a role in many cases of low sexual desire. She is in agreement with Kaplan (1977, 1979) that sexual anxiety can be derived from a variety of sources (e.g., performance fears, fears of intimacy, conflicts around sexuality, etc.). Anxiety is reduced and low sexual desire is maintained

through suppression of sexual thoughts and feelings and avoidance of sexually stimulating stimuli and situations. LoPiccolo (1980), however, contended that the presence of anxiety cannot be accounted for in all cases of low sexual desire.

While Apfelbaum and Apfelbaum (1985) also agree that anxiety plays a major role in many cases of low sexual desire, their conceptualization of the meaning of this anxiety differs from other theorists and researchers. Their premise is that anxiety occurs as a response to the pressure to behave sexually, particularly within a committed relationship. From this perspective, a lack of sexual desire is not always indicative of a mere lack of sexual arousal, but is, instead, a consequence of the pressure to respond sexually. An individual does not feel entitled to experience an absence of sexual desire, consequently feelings of anxiety, guilt, and/or inadequacy occur. They suggested that for sexual desire to develop or increase, acceptance of the negative or neutral responses to sexual activity must first occur.

### Depression

It was noted earlier in this chapter that depression is often associated with a loss in sexual desire. Determining causality is difficult, in that depression can either be the cause or effect of lowered sexual desire. In a study by Schreiner-Engel and Schiavi (1986), comparisons between



subjects with low sexual desire and controls found that a majority of the subjects with low sexual desire had significantly elevated lifetime prevalence rates of affective disorder. Additionally, the initial episode of the depressive episode nearly always coincided with, or preceded, the onset of low sexual desire. Furthermore, it was found that, in comparison to controls, significantly more women with low sexual desire had severe symptoms of premenstrual syndrome. As a result of the significant rate of affective illness in subjects with low sexual desire, Schreiner-Engel and Schiavi (1986) have suggested that depression may be an etiological factor in low sexual desire, or that both depression and low sexual desire occur as a result of the same underlying condition.

### Stress

Although stress has been found to be associated with various psychological disorders, few empirical investigations have been published thus far on how stress affects the sexual response and desire patterns of dual-career couples. In a study conducted by Avery-Clark (1986a), it was found that female subjects who pursued careers (identified in this study as employment of an ongoing, developmental nature), were more apt to experience low sexual desire, and less likely to experience inorgasmia, than were female subjects who were employed as skilled laborers, or female subjects who had never been employed.

Avery-Clark's (1986a) explanation for this was that women who were employed in careers experienced significant demands on their time, both at home and in their jobs, which contributed to schedule overload and, consequently, affected sexual desire.

The findings for men in Avery-Clark's (1986b) study suggested that men in dual-earner relationships did not experience a higher incidence of low sexual desire. In fact, it was found that men in dual-earner relationships were less likely to suffer from low sexual desire and other sexual difficulties than single-earner men. This refutes earlier observations which have suggested that men in dual-earner relationships experience a higher level of stress when compared with men in traditional, single-earner relationships. Possible reasons for this have included confusion about sex-role identity, schedule overload, and interpersonal conflict between the couple. Avery-Clark (1986b) suggested that the female partner's employment, in fact, facilitates the male partner's sexual functioning and desire by neutralizing the unrealistic expectations of traditional sex roles. Additionally, men in dual-earner relationships may be confronting less schedule overload than their single-earner counterparts. It has not been found that these men experience an increase in performing domestic responsibilities. Women, whether employed or at home, still perform significantly more of the domestic chores.

Furthermore, the additional income generated by the working wife often enables the men in these relationships to purchase services that would actually serve to reduce some of these responsibilities; thereby further reducing stress levels.

### Interpersonal Factors Associated With

#### Low Sexual Desire

Low sexual desire can also occur due to factors within the relationship that make sexual desire dangerous and, hence, something to be avoided. These will be briefly reviewed.

#### Relationship Conflict

Friedman and Hogan (1985), as well as others (Lief, 1985; Zilbergeld & Ellison, 1980), have suggested that low sexual desire may not be due to intrapsychic conflict, but to interpersonal factors. From this perspective, the quality and dynamics of the interpersonal relationship are often thought to play a significant role in the etiology and maintenance of low sexual desire (Lief, 1985). A number of interpersonal issues have been identified within the literature. Friedman and Hogan (1985) identified such factors as (1) lack of attraction to the partner, often accompanied by attraction and/or an affair with other lovers, (2) sexual communication deficits, in which one or both individuals are not able to communicate what they find sexually arousing; thus, sex is not experienced as

pleasurable, and desire is consequently lost, (3) fears regarding pregnancy or childbirth, and (4) power and control issues. Lief's (1985) position is that the major components of interpersonal relationships are marital boundaries, power and control, and intimacy. Conflicts in any of these areas, which in turn are often accompanied by feelings of guilt, fear, and/or anger, can consequently produce loss of sexual desire in either partner.

It is Week's (1987) opinion that anger most often causes a person to lose sexual desire. Anger which has not been adequately dealt with, but instead has been suppressed over time, impedes one's ability to feel desire. Weeks (1987) reported that in his experience, this appears to be somewhat more common for men than for women. Men, rather than directly expressing their anger, will instead withdraw sexually. The belief is that a direct expression of anger will either not be effective or will be too dangerous to the relationship. Lack of desire is maintained if the partner in this type of relationship also ascribes to this need to preserve and protect the relationship at any cost. Week's (1987) premise is that these couples do not view anger realistically and often do not have the cognitive or behavioral skills to resolve conflicts. In never reaching a resolution, however, the problem remains.

Schwartz and Masters (1988) hold similar views. They proposed that low sexual desire develops as a result of an

inability to express feelings; most often anger and resentment. Low sexual desire serves to accommodate these feelings by providing the necessary distance for the individual or couple.

#### Desire or Script Discrepancy

Zilbergeld and Ellison (1980) conceptualize desire disorders as a discrepancy in the levels of desire experienced by the couple, which in turn create conflict in the relationship. It is not that one person has too much or too little sexual desire, rather, it is that the levels of desire may not be compatible. From this perspective, neither partner is labeled as having the problem, instead, the differences in the two partners' level of sexual desire is seen as the problem. In assessing sexual desire discrepancies, however, Coleman and Reece (1988) pointed to the importance of differentiating between low-interest partners whose sexual desire level is just generally low from those whose low sexual desire is the result of intrapsychic or interpersonal conflicts.

Rosen and Leiblum (1988) suggested that the discrepancy between partners may not be due to differences in levels of sexual drive or desire but, instead, to a discrepancy in sexual scripts. From this perspective, sexual scripts "both organize behavior and determine the circumstances under which sexual activity occurs. They define the range of sexual behaviors that are acceptable, with whom, under what

circumstances, and with what motives. As such, they have considerable implications for the experience of sexual desire and initiative, since most individuals express a limited repertoire of motives and circumstances for endorsing sexual activity" (p. 168). If the sexual scripts between partners differ significantly, and negotiation does not occur, then sexual desire can be adversely affected.

Rather than view desire disorders as either intrapsychically or interpersonally based, it might be more useful to consider both as contributing to the problem. (Talmadge & Talmadge, 1986; Weeks, 1987). The approach Talmadge and Talmadge (1986) have assumed in understanding this problem is to "focus on the intrapsychic issues within the partners as they intersect with the interpersonal issues between them" (p. 5). Weeks (1987) stated that "the individual experiences a discrepancy in self in the sense of wanting to experience sexual desire but not being able to, and the couple experience a discrepancy in their levels of desire" (p. 184). From these perspectives, desire disorders represent a relational problem, in that each partner, to varying degrees, plays a role in the lack of sexual desire.

#### Gender Differences in Sexual Response

Leiblum and Rosen (1988) noted that for the past twenty years, efforts have been made to minimize gender differences in all aspects of sexual response. They purport, however, that there does appear to be a gender difference in the

experience of sexual desire. From their observations, sexual desire for males is more constant, due possibly to biological factors, whereas for females, sexual desire is more variable, and dependent upon a greater number of factors. This gender distinction is supported by several studies of non-clinical populations (Kinsey, 1953; Garde & Lunde, 1980; Carroll, Volk, & Hyde, 1985; Beck, Bozman, & Qualbrough, 1991).

Apart from what may be, in part, biological factors accounting for this gender distinction, it has been suggested that sociocultural factors also play a role in the experience and expression of sexual desire (Leiblum & Rosen, 1988; Bancroft, 1989). Females are socialized to refrain from active sexual exploration and initiation. As a result, they may not be as attuned to cues which may signify sexual desire. Yet, in a study by Beck, Bozman, and Qualbrough (1991), males and females did not differ in what indicators they relied upon for determining their level of sexual desire. Both groups reported that genital arousal and sexual daydreams were reflective of sexual desire. Thus, the difference may not be in recognition of cues, but, rather, in the freedom men and women feel they have in responding to these cues.

Just as differences have been observed to exist between men and women in their experience and expression of sexual desire, so, too, have differences been observed between men

and women with regard to low sexual desire. Leiblum and Rosen (1989) reported that gender biases affect how low sexual desire is frequently defined for men and women. Failure to initiate sexual activity is more likely to be associated with low sexual desire in men, while lack of responsitivity to sexual initiation is most often associated with low sexual desire in women.

Schover and LoPiccolo (1982) have observed that female desire problems tend to be more global and lifelong than sexual desire problems in men. Because of this, they suggest that there may be a markedly different threshold for acknowledgement of this as a clinical problem (i.e., in women it may be necessary for a desire problem to be far more pervasive and severe before it is considered to be abnormal). Horwith and Imperato-McGinley (1983) concurred with this, stating that because of society's prevailing attitude regarding men and sexuality (i.e., men should be the aggressive partner), failure by a man to initiate sexual activity is more quickly seen as a problem by both men and women.

Rosen, Leiblum, and Hall (1987), however, found that the exact opposite was true in their large-scale follow-up study of 500 patients. Women in their sample presented more frequently with situational desire problems, whereas men presented with more global, rather than situational low desire, and frequently reported the presence of a primary



erectile dysfunction. This degree of overlap between male erectile disorder and low sexual desire has been further investigated by Segraves and Segraves (1990). Their findings suggested that approximately one out of five men with erectile disorder also had a secondary diagnosis of desire disorder.

Leiblum and Rosen's (1988) speculation with respect to their findings on women was that women have been found to be more aware of and less willing to tolerate relationship distress, and consequently, sexual desire in women is more readily affected as a result. This was in congruence with Stuart's (1986) findings, from which she proposed that, for women, it was the quality of the relationship which served to influence sexual desire.

These studies clearly suggest that while low sexual desire is affecting increasingly equal numbers of women and men, not enough is known about how, and in what ways, this problem may differ between the sexes. The review of the literature has provided some evidence to suggest that sexual desire is experienced differently by men and women. In view of this, it is hypothesized that the problem of low sexual desire may also be experienced differently across genders. A number of factors have been implicated in the etiology and maintenance of low sexual desire. Identifying how men and women may differ in these factors may lead to better assessment techniques and more effective treatment

interventions for this hard-to-treat clinical population.

In this study, the following null hypotheses will be tested:

1. There will be no differences between male and female groups with respect to sexual functioning as measured by the Sexual History Form.

2. There will be no differences between male and female groups with respect to psychological distress as measured by the Symptom Checklist 90-R (SCL-90-R).

3. There will be no differences between male and female groups with respect to relationship distress as measured by the Dyadic Adjustment Scale (DAS).

4. There will be no differences between male and female groups with respect to levels of stress as measured by the Stress Inventory.

## CHAPTER III

### METHOD

#### Introduction

This chapter outlines the design of the study, subject selection, subject demographics, instrumentation, and data analysis.

#### Design of the Study

This is a descriptive study in which membership in one of the two subject groups (group 1 = men, group 2 = women) is the independent variable. Comparisons were made between the two groups with respect to selected demographic factors, sexual functioning, psychological symptomatology, relationship adjustment, and levels of stress. These were assessed by the following measures: the Sexual History Form, the Symptom Checklist-90-R, the Dyadic Adjustment Scale, and the Stress Inventory.

#### Subjects

Subjects were 47 male and 22 female patients between the ages of 25 and 77 years old who received services related to complaints of low sexual desire from 1985 - 1991 in the Sex and Marital Therapy Program in the Department of Psychiatry at the University of Chicago Medical Center.

Twenty-eight of the male subjects were initially referred through the Urology Clinic at the University of Chicago Medical Center. Subjects whose low sexual desire was secondary to a major medical (i.e., hormonal imbalance), or psychiatric problem (i.e., schizophrenia, bipolar disorder, major affective disorder, or any other serious characterological or psychotic disorder) were not included in the sample. To be included in the sample, subjects had to have completed the standardized evaluation which consisted of an interview and four self-report measures. Information derived from the clinical interview included demographic information and a medical and psychiatric history.

#### Procedure

Data was obtained from the four, self-report clinical measures (the Sexual History Form, the Symptom Checklist 90-R, the Dyadic Adjustment Scale, and the Stress Inventory). All four instruments were administered to each patient at the medical center as a standard part of the initial evaluation. Additionally, information derived from the clinical interview that was a part of the initial diagnostic evaluation was included in the data set. This information included demographic information and a medical and psychiatric history.

Confidentiality of subjects' responses was safeguarded by coding all data with a subject identification number and

removing all personal identifiers.

This study was approved by the Loyola University Institutional Review Board as well as the University of Chicago Medical Center Institutional Review Board for research with human subjects.

### Instrumentation

#### Sexual History Form

The Sexual History Form, developed by LoPiccolo (1979), is a self-report questionnaire designed to elicit information regarding the subject's current sexual activities, subjective feelings, and thoughts about sex. It consists of 28 questions written in a multiple-choice format. It has been frequently used as an assessment of current sexual functioning and response to clinical intervention.

#### The Symptom Checklist 90-R (SCL-90-R)

The SCL-90-R (Derogatis, 1977) is a multi-dimensional symptom self-report inventory composed of 90 items. It is a measure of current, point-in-time, psychological symptom status. It is a commonly used, reliable, and valid instrument which has been found to demonstrate construct validity, consensual validity, internal consistency reliability, and sensitivity to change in clinical status (Derogatis, 1977, 1973). Additionally, it has found to be sensitive to the psychological distress associated with sexual dysfunctions (Derogatis, Meyer, et al, 1977, Derogatis, 1976). The measures of internal consistency for

all of the nine subscales were quite high, ranging from a low of .77 to .90. Test-retest reliability ranged between .80 and .90. The instrument showed concurrent validity with other measures of symptomatic pathology (e.g., The Middlesex Hospital Questionnaire). It also demonstrated an ability to discriminate between healthy people and hospitalized psychiatric patients.

It is designed for paper and pencil administration and takes about twenty minutes to complete. Each symptom is rated on a 5 point scale of distress from 0 (not at all) to 4 (extremely).

The instrument is composed of nine primary symptom dimensions and three global indexes of pathology. Separate norms have been developed for males and females. The primary symptom constructs are somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism. The global indexes of pathology are the Global Severity Index (GSI), the Positive Symptom Distress Index (PSDI), and the Positive Symptom Total (PST). The function of each of the global measures is to communicate in a single score the depth of the individual's psychopathology. Each measure does this in a somewhat distinct fashion, and reflects somewhat different aspects of psychopathology (Derogatis, Yevzeroff, & Wittelsberger, 1975). The GSI combines information on numbers of symptoms

and intensity of distress, and represents the best single indicator of the current level or depth of the disorder. The PSDI is a pure intensity measure in that it functions very much as a measure of response style (i.e., whether the patient is "augmenting" or "attenuating" symptomatic distress in his/her style of reporting the disorder). The PST output consists of a summary description of the number of symptoms endorsed by a respondent to any degree.

#### Dyadic Adjustment Scale (DAS)

The DAS was developed by Spanier (1976) to assess the quality of marital and other similiar dyads. This instrument is designed for paper and pencil administration and can be completed in a few minutes. The DAS consists of 32 items with Likert-type scales. The instrument has been factor analyzed, yielding four distinct subscales, measuring (1) dyadic consensus, (2) dyadic satisfaction, (3) dyadic cohesion, and (4) affectional expression of couples. Consensus is defined as level of agreement between the couple on matters important to the relationship, such as money, religion, recreation, friends, household tasks, and time spent together. Satisfaction measures the amount of tension in the relationship, as well as the extent to which the individual has considered ending the relationship. Cohesion assesses the common interests and activities shared by the couple. Affectional expression measures the individual's satisfaction with the expression of affection

and sex in the relationship.

The DAS has demonstrated content, criterion-related, and construct validity. Construct validity was demonstrated by a high correlation ( $r = .93$ ) between the DAS and the Locke-Wallace Marital Adjustment Scale. Criterion-related validity was demonstrated by highly significant differences ( $p < .001$ ) between married and divorced samples for each item. It shows a high degree of internal consistency reliability for the total scale and the four subscale scores (e.g., Cronbach's coefficient alpha = .96 for the entire instrument). No evidence of differences in men's and women's responses to the DAS has been demonstrated (Spanier, 1989).

#### The Stress Inventory

The Stress Inventory was developed by Lieb and Carroll (Lieb, 1986) and is derived from the Contextual Rating of Stressful Situations (CROSS) which is a structured interview designed to elicit information about stresses in an individual's life. The CROSS version appears to be a valid and reliable instrument (Lieb, 1986). The Stress Inventory measures the subjective report of stress experienced by the subject in four content areas: family, home, finances, and job or school. It is designed for paper and pencil administration and takes approximately five to ten minutes to complete.



### Data Analysis

The following data were coded and used in the data analysis: (1) Demographic data which included age, race, marital status, religion, occupation, education, medical and psychological history, duration of the low sexual desire, and any other sexual dysfunctions and their duration, (2) Sexual History scores, (3) SCL-90-R nine subscale scores and the three global index scores, (4) DAS four subscale scores, and (5) Stress Inventory scores.

1. A multivariate analysis of variance (MANOVA) was performed to test for differences in subject responses on the four assessment instruments across groups (men and women).

2. A t-test analysis of demographic data was performed to determine if there were significant differences between subject group means on the following variables: age, education, duration of low sexual desire, and duration of any other sexual dysfunction.

3. A chi-square analysis of demographic data was performed to determine if there were significant differences between subject group means on the following variables: race, marital status, religion, and occupation.

4. A chi-square analysis was performed to determine if there were significant differences between subject group means on the following variables: medical history, psychological history, and medication use.

5. Chi-square tests and two-tailed t tests were performed to determine if there were significant differences between subject group means on the subscales for each of the four self-report measures: The Sexual History Form, the Symptom Checklist 90-R, the Dyadic Adjustment Scale, and the Stress Inventory.

6. A discriminant function analysis was performed to identify which variables best distinguished between subject groups. The variables selected for analysis were age, sexual satisfaction, a composite measure of affection and satisfaction DAS subscales, SCL-90-R measures, and stress measures.

7. A factor analysis was performed to identify which set of variables intercorrelated with each other for both groups. The variables selected for analysis were age, duration of other sexual dysfunction, the four DAS subscales, five subscales of the SCL-90-R (depression, anxiety, anger, somatization, and interpersonal sensitivity), and summary scores for both stress and sexual functioning.

## CHAPTER IV

### RESULTS

#### Introduction

This chapter reports the findings obtained through the following analyses: (1) group comparisons on the various study data: demographic and history factors, the Sexual History Form, the Symptom Checklist-90-R, the Dyadic Adjustment Scale, and the Stress Inventory, (2) a discriminant function analysis to identify the variables which best distinguish between the groups, and (3) a factor analysis to identify the relationship between the study variables.

#### Demographic and History Data

Chi-square tests and two-tailed t tests were performed to test for differences between the male and female groups on demographic variables. Table 1 provides a descriptive summary of the entire sample.

Table 1

Group Comparisons on Demographic Data

Demographics	Male	Female	df	2 tail t-test t value
<u>Age</u>	Mean = 49.97 SD = 13.45	Mean = 33.13 SD = 6.66	67	5.54***
<u>Education (Years)</u>	Mean = 16.47 SD = 2.96	Mean = 16.23 SD = 2.32	65	.33
	Male	Female	df	X <sup>2</sup>
<u>Race</u>				
White	38 (80%)	18 (82%)		
Black	7 (15%)	3 (14%)		
Hispanic	0 ( 0%)	0 ( 0%)	5	3.09
Asian	0 ( 0%)	1 ( 5%)		
Indian	1 ( 2%)	0 ( 0%)		
Other	1 ( 2%)	0 ( 0%)		
<u>Marital Status</u>				
Single	5 (11%)	1 ( 5%)		
Married	37 (79%)	19 (86%)	3	3.08
Divorced	4 ( 9%)	1 ( 5%)		
Widowed	1 ( 2%)	1 ( 5%)		
<u>Religion</u>				
Catholic	14 (31%)	11 (55%)		
Protestant	17 (38%)	8 (40%)		
Jewish	8 (18%)	0 ( 0%)	4	7.42
Other	2 ( 4%)	1 ( 5%)		
None	4 ( 9%)	0 ( 0%)		
<u>Occupation</u>				
Professional	30 (70%)	20 (95%)		
Skilled Laborer	13 (30%)	0 ( 0%)	2	9.57
Unskilled Laborer	0 ( 0%)	1 ( 5%)		

\*p &lt; .05

\*\*p &lt; .01

\*\*\*p &lt; .001

As shown in Table 1, no significant differences were found between men and women on the variables of race, marital status, religion, education, and occupation. Eighty-one percent of the total sample was white. Additionally, 81% were married. Thirty-eight percent of the sample was Catholic. Another 38% of the sample was Protestant. Both groups were college-educated. Seventy-eight percent of the total sample were professionals. However, men were found to be significantly older than women ( $t = (67) = 6.95, p = .000$ ). The mean age for men was 50 years, while the mean age for women was 33 years.

No significant differences were found between men and women with respect to whether they had a significant medical history, related or unrelated to sexual desire ( $X^2 = 1.91, df = 1$ ). In terms of major medical problems, including those that may be related to low sexual desire, only four of the men and none of the women had medical conditions that might be related to low sexual desire, such as hypertension. (see Table 2). There were no differences found across groups with respect to medication use ( $X^2 = .163, df = 1$ ). Sixty percent of the men and 64% of the women reported no medication use. Seventeen percent of the men and 5% of the women reported that they were taking medications (e.g., antihypertensive medications) that could have possible side effects related to low sexual desire (see Table 2). Additionally, no differences ( $X^2 = 1.70, df = 1$ ) were found

Table 2

Group Comparisons on Medical History, Medication Use, and Psychological History

Factors	Male	Female
<u>Medical History</u>		
No major medical problems	26 (57%)	16 (84%)
Medical conditions possible related to low sexual desire	4 ( 9%)	0 ( 0%)
Medical conditions unrelated to low sexual desire	16 (35%)	3 (16%)
<u>Medication Use</u>		
None	28 (61%)	14 (74%)
Meds associated with possible side effects of low sexual desire	8 (17%)	1 ( 5%)
Meds not typically associated with low sexual desire	10 (22%)	4 (21%)
<u>Subject Report of Psychological History</u>		
None	21 (49%)	11 (55%)
Depression	18 (42%)	6 (30%)
Anxiety	2 ( 5%)	0 ( 0%)
Panic Attacks	0 ( 0%)	0 ( 0%)
Substance Abuse	2 ( 5%)	2 (10%)
Eating Disorder	0 ( 0%)	1 ( 5%)
<u>Subject Report of Current Psychological Functioning</u>		
None	23 (52%)	11 (52%)
Depression	13 (30%)	7 (33%)
Anxiety	8 (18%)	2 (10%)
Panic Attacks	0 ( 0%)	0 ( 0%)
Substance Abuse	0 ( 0%)	0 ( 0%)
Eating Disorder	0 ( 0%)	1 ( 5%)

to exist across groups related to a past history of significant psychological distress (e.g., depression, anxiety, substance abuse, etc). Forty-nine percent of the men and 55% of the women reported no prior history of significant psychological distress. The most commonly reported history was depression (42% of the men and 30% of the women). No significant differences existed across genders with respect to current levels of psychological functioning ( $X^2 = .007$ ,  $df = 1$ ). Fifty-two percent of the men and 52% of the women reported experiencing no current level of psychological distress (see Table 2). Of those who did, depression was again the most commonly reported (30% of the men and 33% of the women), followed by anxiety (18% of the men and 10% of the women).

Sixty-one percent of the men and 55% of the women reported that low sexual desire was the principle presenting problem. If low sexual desire was not defined as the principle presenting problem (but was still labeled as a problem), men most often (34%) reported another sexual dysfunction as being the principle problem, while women most often (36%) reported the principle problem as being relationship distress.

#### Gender Differences

The initial analysis to test for overall differences between men and women on the four measures used in this study consisted of a multivariate analysis of variance

(MANOVA) procedure. Using summary scores for the Sexual History Form, the SCL-90-R, the DAS, and the Stress Inventory, a significant difference was not found to exist between men and women on the four measures taken as a whole (Pillais test = .15,  $F(4,28) = 1.23$ ). Univariate tests were then done to test for possible differences in subtest scores.

### Sexual Functioning

Sexual functioning was assessed through analysis of the Sexual History Form. Differences were found across groups with respect to sexual functioning. Thus, the null hypothesis was rejected.

Men and women were equally likely to have a sexual dysfunction, in addition to low sexual desire ( $\chi^2 = .64$ ,  $df = 1$ ). Of the total sample, only seven men (15%) reported no other sexual dysfunctions. Five women (25%) reported no other sexual dysfunctions.

Of the men who did report the presence of another sexual dysfunction, erectile dysfunction was the most common problem (76% of the sample). For women, 55% of the sample reported problems with subjective arousal. Seventeen percent of the men and 30% of the women reported orgasm problems (premature ejaculation and anorgasmia, respectively). Six percent of the men and 25% of the women reported coital pain (see Table 3).



Table 3

Group Comparisons Regarding Sexual Functioning

Measures	Males		Females		df	2 tail
	Mean	SD	Mean	SD		t-test t value
Desired frequency of intercourse per week	4.17	1.03	3.57	1.91	25.55	1.36
Actual frequency of intercourse per week	1.73	1.61	2.20	1.47	39.84	-1.14
Frequency of masturbation per week	1.86	1.78	1.95	1.80	39.15	-.19
Difficulty in becoming aroused	2.59	1.53	1.71	1.58	38.87	2.10*
Coital pain	.61	1.20	2.0	1.67	30.88	-3.39**
Partner's sexual appeal	3.83	1.21	3.0	1.56	28.13	2.06*
Satisfaction with sexual relationship	2.13	1.77	1.15	1.34	44.65	2.40*
Duration of other sexual dysfunction (in months)	45.69	44.04	150.00	57.17	6.03	-4.26***
Duration of low sexual desire (in months)	40.68	35.56	56.75	66.36	23.78	-1.02

Note: Separate variance estimates used, degrees of freedom vary.

\*p < .05

\*\*p < .01

\*\*\*p < .001

While men and women were equally likely to report the presence of another sexual dysfunction, there was a significant difference between gender groups on the duration of the other sexual dysfunction. Women's reported average was twelve years in contrast to the men's reported average of four years (see Table 3).

There was no significant difference found between groups on the duration of low sexual desire. Women reported an average of four-and-a-half years while men reported an average of almost three-and-a-half years. It is important to note that the groups did not differ with respect to their desire for sex, frequency of intercourse, frequency of masturbation, and ability to experience orgasm through non-coital means (see Table 3). Women did report more difficulty in achieving orgasm through sexual intercourse ( $t = (62) = 3.10, p < .003$ ). It was also found that men were somewhat more likely to accept their partner's sexual advances with pleasure, whereas women usually accepted their partner's sexual advances with more reluctance.

### Psychological Distress

Psychological distress was assessed through analysis of the Symptom Checklist 90-R (SCL-90-R). Group differences on the SCL-90-R between men and women were examined using a series of independent  $t$ -tests (see Table 4). The analyses suggested a significant difference between groups on all three global indices of pathology (the GSI, PSDI, and PST)

Table 4

Group Comparisons on the Symptom Checklist (SCL-90-R)

Symptom Dimensions	Males		Females		df	2 tail t-test t value
	Mean	SD	Mean	SD		
Somatization	.11	.30	.32	.55	24.5	-1.54
Obsessive- Compulsive	.52	.56	.88	.91	29.1	-1.67
Interpersonal Sensitivity	.41	.43	.77	.89	25.7	-1.81
Depression	.77	.61	1.58	1.12	27.1	-3.18**
Anxiety	.20	.37	.96	.94	24.0	-3.68***
Hostility	.26	.35	.80	.78	24.9	-3.11**
Phobic Anxiety	.05	.139	.31	.68	21.8	-1.78
Paranoid Ideation	.15	.45	.66	.99	25.1	-2.27*
Psychoticism	.35	.44	.68	.85	25.0	-1.69
Global Severity Index	.31	.29	.81	.74	20.5	-2.82*
Positive Symptom Distress Index	.40	.31	.91	.77	20.7	-2.78*
Positive Symptom Total	13.60	13.57	24.00	18.55	31.9	-2.35*

Note: Separate variance estimates used, degrees of freedom vary.

\*p < .05

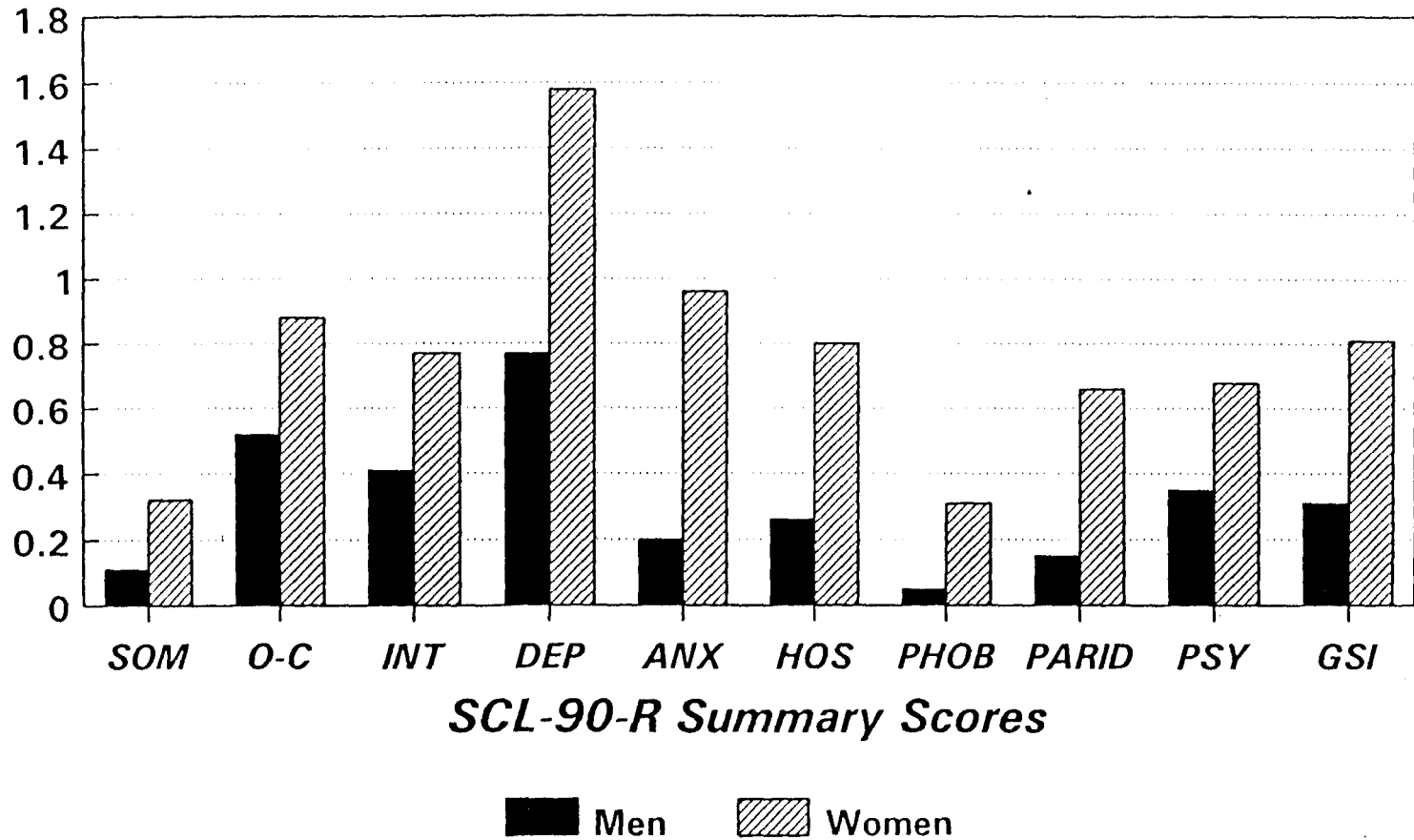
\*\*p < .01

\*\*\*p < .001

and four of the primary symptom dimensions (Anxiety, Depression, Hostility, and Paranoid Ideation), even when adjustments were made for gender. This adjustment for gender has been reported by Derogatis, Meyer, & Gallant (1977) to be necessary, due to a consistent bias in measures of psychopathology for women to score higher than men on these measures. Thus, separate norms for men and women have been developed (Derogatis, Meyer, & Gallant, 1977) and were used in the analysis in this study. The scores used in this study were adjusted for gender bias by subtracting means derived from a normative sample of 1,000 nonpatient adults. As can be seen in Table 4, women reported a higher level of psychological distress than men on all symptom clusters. Overall, women reported more than twice as much psychological distress as men (see Figure 1). Thus, the null hypothesis was rejected.

Results from  $t$ -test analyses indicate that statistically significant differences between men and women existed on four of the primary symptom dimensions (Anxiety, Depression, Hostility, and Paranoid Ideation), with women showing higher levels of psychological symptoms for each of these four dimensions (see Table 4). Women reported almost five times as much anxiety as men on the Anxiety subscale. The mean for women was .96 while the mean for men was .20 ( $t = (24) = -3.68, p < .001$ ). On the Depression subscale, women reported twice as much depression as men. The mean

*Figure 1*  
*SCL-90-R Scores for Study*  
*Sample: Men vs. Women*



for women was 1.6 while the mean for men was .77 ( $t = (27) = -3.18, p < .004$ ). On the Hostility subscale, women reported four times as much anger as men. The mean for women was .80 while the mean for men was .26 ( $t = (25) = -3.11, p < .005$ ). On the Paranoid Ideation subscale, women reported four times as much a paranoid style of thinking compared to men. The mean for women was .66 while the mean for men was .15 ( $t = (25) = -2.27, p < .032$ ).

Although no statistically significant differences were found, women also tended to show slightly higher levels of obsessive-compulsiveness, interpersonal sensitivity, and phobic anxiety compared to men.

The data from this measure indicates that women with low sexual desire reported a significantly higher level of psychological symptoms when compared with men complaining of low sexual desire. Women showed significant elevations in depression, anxiety, and hostility, as well as higher levels of a paranoid style of thinking. Women reported experiencing symptoms that indicated feelings of hopelessness, worthlessness, loneliness, low energy, nervousness, and anger, coupled with an overall tendency to feel mistrustful of other people.

Both groups were compared to the SCL-90-R norms for nonpatient "normal" adults and psychiatric outpatient adults. The men in this sample were closer to the nonpatient "normal" population than they were to the

psychiatric outpatient population (see Figure 2). In contrast, the women in this sample were more similar to the outpatient psychiatric population than they were to the nonpatient "normal" adult population (see Figure 3).

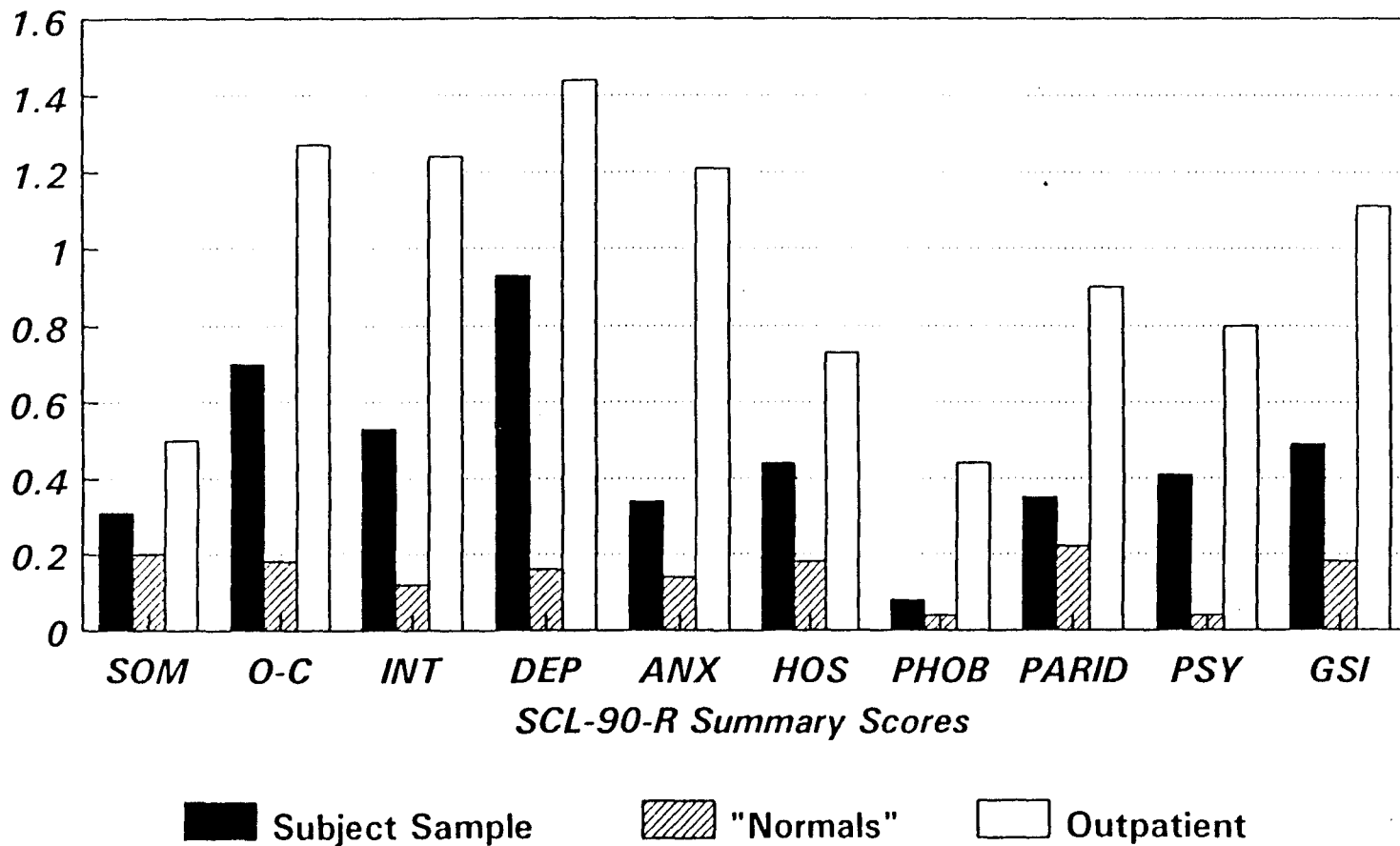
### Relationship Functioning

Relationship functioning was assessed through analysis of the Dyadic Adjustment Scale (DAS). Additionally, group responses to questions regarding partner sexual appeal and satisfaction with sexual relationship were analysed via the Sexual History Form. Differences were found across groups with respect to relationship functioning and satisfaction. The null hypothesis was thus rejected.

Table 5 compares differences in group means on the four subscales and total score for the DAS. Statistically significant differences between men and women were found to exist on two of the subscales. Women reported lower levels of marital adjustment in the areas of affection and marital satisfaction than men. On the Affection subscale, the mean for men was 7.2 while the mean for women was 4.6 ( $t = (56) = 3.94, p < .000$ ). On the Satisfaction subscale, the mean for men was 36.8 while the mean for women was 31.1 ( $t = (58) = 2.86, p < .006$ ). The total DAS score, however, showed no statistically significant differences between men and women.

In this study men and women were compared to the DAS norms for married and divorced groups (see Figure 4). Women's scores were slightly closer to the divorced norm in

**Figure 2**  
***SCL-90-R Scores for Study Sample***  
***and Normative Samples: Men***





*Figure 3*  
*SCL-90-R Scores for Study Sample*  
*and Normative Samples: Women*

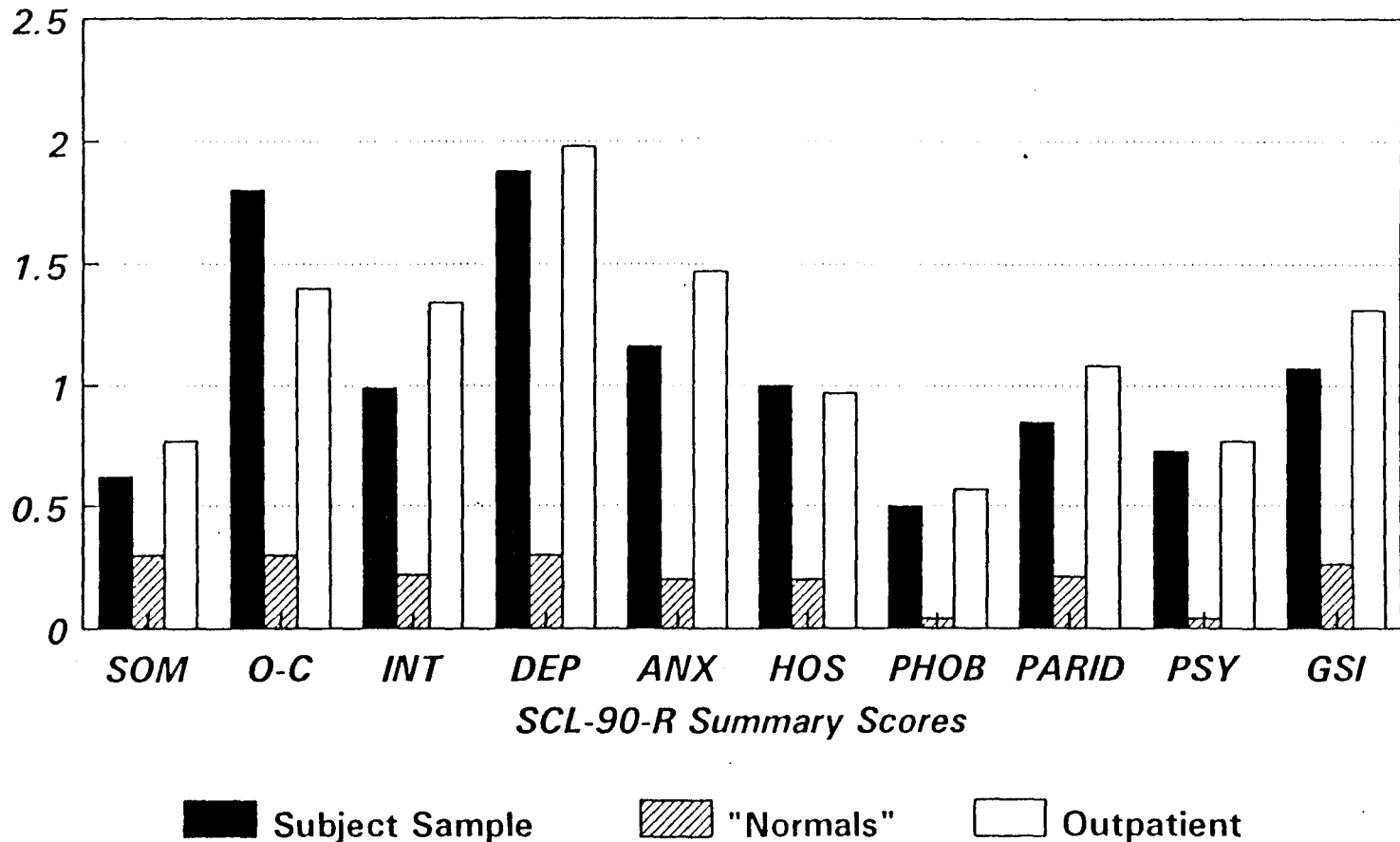


Table 5

Group Comparisons on the Dyadic Adjustment Scale (DAS)

DAS Scales	Males		Females		df	2 tail t-test t value
	Mean	SD	Mean	SD		
Consensus	45.17	9.82	43.22	11.60	52	.65
Cohesion	15.91	4.22	14.10	6.15	62	1.37
Affection	7.23	2.55	4.58	2.06	56	3.94***
Satisfaction	36.83	6.86	31.05	8.12	58	2.86**
DAS Total	103.79	20.83	93.00	25.44	47	1.58

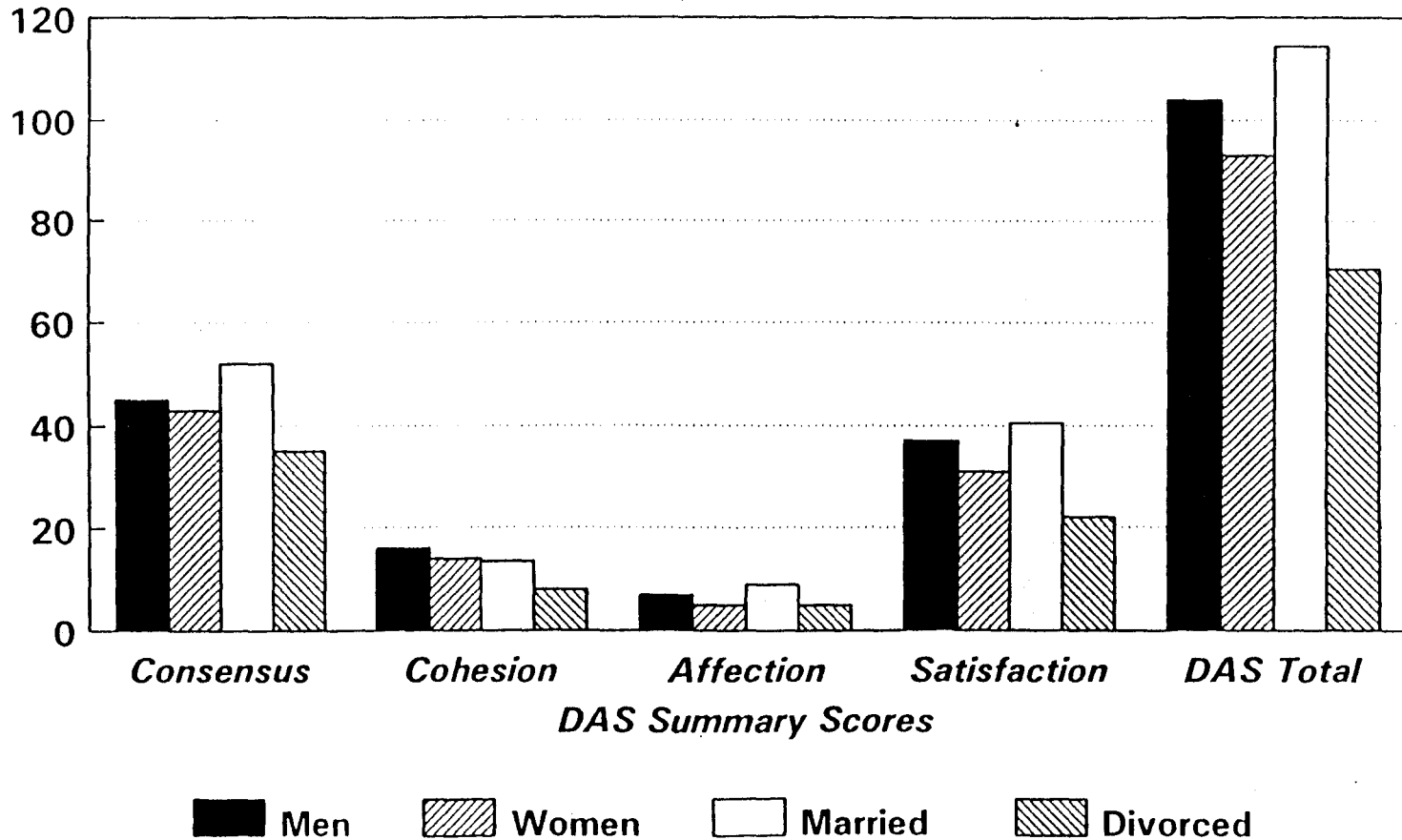
Note: The higher the score, the greater the marital adjustment.  
Pooled variance estimates used, degrees of freedom vary.

\*p < .05

\*\*p < .01

\*\*\*p < .001

**Figure 4**  
***DAS Scores for Study Sample***  
***vs. Normative Samples***



the areas of consensus and satisfaction, and in exact agreement with the divorced group in the areas of affection. Men's scores were closer to the married norm.

An analysis of differences across gender group means on the Sexual History Form showed that significant differences between men and women existed in partner sexual appeal and satisfaction with the sexual relationship. On these items there are six categories, in which 0 means extremely unappealing or unsatisfactory, 1 means moderately unappealing or unsatisfactory, 2 means slightly unappealing or unsatisfactory, 3 means slightly appealing or satisfactory, 4 means moderately appealing or satisfactory, and 5 means extremely appealing or satisfactory. Women reported that they found their partner only slightly sexually appealing, whereas men reported finding their partner moderately sexually appealing ( $\bar{t} = (59) = 2.27$ ,  $p < .027$ ). Women also reported less satisfaction with the sexual relationship in general ( $\bar{t} = (61) = 2.15$ ,  $p < .036$ ); stating they experienced their sexual relationship as moderately unsatisfactory in comparison to men who reported experiencing their sexual relationship as slightly unsatisfactory.

### Stress

Possible group differences on the Stress Inventory between men and women were tested using a series of independent  $\bar{t}$ -tests (see Table 6). It was found that there

Table 6

Group Comparisons on the Stress Inventory

Stress Scales	Males		Females		df	2 tail t-test t value
	Mean	SD	Mean	SD		
Family	5.35	3.34	6.90	5.50	26.9	-1.20
Home	2.02	2.56	6.00	4.26	26.8	-3.96***
Finances	3.22	4.52	9.43	9.14	24.5	-2.95**
Job	4.48	5.65	5.38	6.20	35.7	-.57
School	.43	1.44	1.05	2.85	24.7	-.93
Unemployment	.28	1.12	.57	1.91	26.5	-.64
Stress Total	15.78	9.16	29.33	18.23	24.7	-3.23**
No. of Stressors	4.49	2.67	7.14	3.93	30.4	-2.86**

Note: Higher scores indicate more stress.  
 Separate variance estimates used, degrees of freedom vary.

\*p < .05

\*\*p < .01

\*\*\*p < .001

was a statistically significant difference between men and women on the total number of stressors experienced ( $t = (30) = -2.9, p < .008$ ), and that, overall, women reported experiencing twice as much stress as men ( $t = (25) = -3.2, p < .004$ ). Thus, the null hypothesis was rejected.

Women reported experiencing the most stress related to the home and finances. Women reported experiencing three times as much stress as men in these areas ( $t = (27) = -3.96, p < .000$ , and  $t = (25) = -2.95, p < .007$ ). Significant differences were not found to exist between men and women regarding the stress experienced within their families or their jobs. The areas of job and family were not significant areas of stress for either group.

#### Discriminant Analysis Findings

A discriminant function analysis was performed in an effort to identify the variables which best distinguish between the male and female groups. Based on the results from the univariate analyses, the following variables were used in the discriminant analysis: age, sexual satisfaction, a composite measure of two subscales from the DAS (Affection and Satisfaction), a composite measure from the four significant subscales of the SCL-90-R (Anxiety, Depression, Hostility, and Paranoid Ideation), and the total stress score from the Stress Inventory. Two variables, age and the

psychological symptomatology score, yielded highly significant predictability (Wilks' Lambda = .606,  $p = 0.00$ ). After inclusion of these two variables in the discriminant function equation, none of the other variables (the DAS, sexual satisfaction, and stress) added significantly to the predictability. Finally, it should be noted that a classification analysis revealed that 77% of the cases were correctly classified by this discriminant function equation. A summary of the results of this analysis are presented in Table 7.

Table 7

Discriminant Function Analysis

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Classification Results

Actual Group	# of Cases	Predicted Group Membership	
		Male	Female
Male	47	34 (72.3%)	13 (27.7%)
Female	22	3 (13.6%)	19 (86.4%)

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Percent of "grouped" cases correctly classified: 76.81%

Note: Variables in discriminant function equation were age and psychological distress (four subscales from SCL-90-R).

### Factor Analysis Findings

Factor analysis was used to determine how the factors found to be related to low sexual desire were interrelated. For the first analysis, in which the male and female groups were combined, four factors were generated. A varimax rotation was used which converged in eight iterations (see Table 8 for details). The first factor yielded was a measure of psychological distress. The variables which loaded significantly on this factor were all from the SCL-90-R. The second factor yielded was a measure of interpersonal functioning. The variables loading significantly on this factor were from the DAS. The third factor consisted of two variables (age and duration of another sexual dysfunction other than low sexual desire). The variables found to be related to the fourth factor were stress and age. These four factors accounted for 80% of the variability among these variables.

In the second set of analyses, each group was analysed separately (see Tables 9 and 10 for details). These analyses yielded somewhat different factor structures for men and women. For men, five factors were generated. The first factor was a measure of interpersonal functioning. The variables loading significantly on this factor were from the DAS. The second factor was a measure of psychological distress. All variables loading significantly on this factor were from the SCL-90-R. The third factor consisted



Table 8

Factor Analysis - Combined Groups

Factor	Eigenvalue	Pct of Var	Cum Pct
1	5.02495	38.7	38.7
2	2.46670	19.0	57.6
3	1.60812	12.4	70.0
4	1.20076	9.2	79.2

Note: Principle Components Analysis

Table 9

Factor Analysis - Males

Factor	Eigenvalue	Pct of Var	Cum Pct
1	3.61353	27.8	27.8
2	2.69631	20.7	48.5
3	1.99391	15.3	63.9
4	1.77280	13.6	77.5
5	1.05723	8.1	85.6

Note: Principle Components Analysis

Table 10

Factor Analysis - Females

Factor	Eigenvalue	Pct of Var	Cum Pct
1	8.38032	64.5	64.5
2	2.88820	22.2	86.7
3	1.73147	13.3	100.0

Note: Principle Components Analysis

of three variables (stress, age, and somatization). The fourth factor consisted of three significant variables (interpersonal functioning, anger, and sexual functioning). The fifth factor consisted of one variable (the duration of another sexual dysfunction - not low sexual desire).

For women, three factors were generated. It is important to note that the factor analysis for women is limited due to the small number of cases ( $n = 22$ ). The first factor was a measure of global distress. All variables loading significantly on this factor were from the SCL-90-R, the DAS, the stress score, and the sexual history score. The second factor was a measure of sexual functioning. The variables loading significantly on this second factor were duration of another sexual dysfunction (arousal), anxiety, somatization, and dissatisfaction with the amount of affection experienced in the relationship.

The third factor was a measure of interpersonal functioning and age. The variables loading significantly on this third factor were all from the DAS.

## CHAPTER V

### DISCUSSION

The overall purpose of this study was to achieve a better understanding of men and women who seek treatment for low sexual desire. A selective review of the literature indicated the presence of a wide variety of biological, psychological, and interpersonal factors that have been associated with low sexual desire. These factors have generally been assumed to appear equally among men and women, however, there has been little empirical validation for this notion. The goal, therefore, for this study was to explore whether certain factors were more likely to be present in one gender compared to the other. It was hoped that this would lead to a more refined assessment of the problem, improved treatment for men and women with low sexual desire, and a clearer understanding of the various possible etiologies of low sexual desire.

The study sample was predominantly white, married, well-educated, and of middle to upper-middle class socioeconomic status (see Table 1). This study was unusual in that, unlike other studies in this area, there were a greater number of men than women. The explanation for this

is that, because of recruitment procedures, men were often referred from the Male Sexual Dysfunction Clinic of the Urology Section, as well as through the Sex and Marital Therapy Program of the Psychiatry Department. No significant differences were found between men and women with respect to the demographic variables of race, marital status, religion, education, and occupational status. Additionally, no significant differences were found in medical history, medication use, and psychological history across genders. This is an important negative finding, in that these factors have been hypothesized to be of importance in the etiology of low sexual desire. The fact that these were not significant indicates that these factors do not account for differences in how low sexual desire presents differently in men and women. Thus, demographic factors, medical history, medication use, and psychological history do not appear to be related to differences with respect to low sexual desire across genders.

There is, however, one highly significant demographic difference, which is that males subjects were significantly older than female subjects. The mean age for men was 50 years, while the mean age for the women was 33 years. This finding is consistent with two previous studies. In Stuart's (1985) sample of women presenting with low sexual desire, the mean age was 33. In the study conducted by Segraves and Segraves (1991a) the mean age for men was 49

years while the mean age for women was 37 years.

The reasons for this discrepancy in age are unknown, but some speculations can be made. It may be that women are more willing to report this problem and seek help at an earlier age, whereas men of the same age might be more reluctant to admit to this problem. It is also possible that the partners of these younger women, who are themselves younger, may be more likely to define this as a problem, and thus insist that they seek help. Another possibility is that perhaps as a man's sexual desire declines with age, there comes a point when it eventually is considered to be a serious problem (either by him or his partner) and help is sought then rather than earlier. It may also be that, for some relationships, a man's desire level may not have been formerly considered a problem, but with increased awareness by women of their sexual needs (and more willingness to express them), his level of desire has now become a problem.

Male and female subjects were also compared with respect to their sexual functioning, psychological symptomatology, relationship adjustment, and stress levels. These variables were assessed through a comparative analysis of four self-report measures (the Sexual History Form, the Symptom Checklist-90-R, the Dyadic Adjustment Scale, and the Stress Inventory). The results obtained through the use of a multivariate analysis of variance (MANOVA) of the data set indicated that there were no statistically significant

global differences between men and women on these measures. However, specific differences on factors related to low sexual desire did emerge when a univariate analysis was applied to the same data set. This discrepancy of results between the multivariate analysis of variance (MANOVA) and the univariate analysis might explain why global differences between gender groups have not been found. While groups do appear to be generally similar in their presentation of low sexual desire, a closer analysis of these factors reveals that some specific differences do exist between groups.

The finding that men and women are likely to have another sexual dysfunction is consistent with previous research (Segraves & Segraves, 1991). In this study, men were likely to report problems with erectile functioning, while women reported problems with subjective arousal and difficulties achieving orgasm through intercourse. In comparison to the Segraves and Segraves (1991) study in which 47% of the men were diagnosed secondarily with erectile dysfunction, this study found that 76% of the men also had an additional diagnosis of erectile dysfunction. It is likely that a higher number of cases were found due to the fact that a portion of the sample was obtained through referrals to the Urology Clinic. Fifty percent of the women in this study reported problems with subjective arousal. This was much higher than the 4% reported in the Segraves and Segraves (1991) study. The reason for this is unclear,

but may be due to differences in subject selection and how arousal problems were defined. Orgasm problems with intercourse affected 81% of the women in this sample. Of this subgroup, thirty-nine percent women reported never experiencing orgasm during intercourse, while fifty-six percent reported experiencing orgasm 50% percent or less of the time.

While men and women were equally likely to report the presence of another sexual dysfunction, in addition to low sexual desire, women were more likely to report a significantly longer history of problems with arousal and orgasm ( $\bar{X}$  = 12 years) in contrast to men's reported average duration of just under four years. The men's reported average duration in this study is consistent with Segraves and Segraves (1990) study in which the average duration for complaint of erectile dysfunction before seeking treatment was 4.6 years. The results from this study indicated that for the majority of men and women, problems with low sexual desire co-existed with arousal disorders. Previous studies (Segraves & Segraves, 1990, 1991a, 1991b) have pointed to the considerable overlap between disorders of desire and arousal. This is particularly true of men with complaints of both erectile dysfunction and low sexual desire, and would appear to be also true for those reporting problems with subjective arousal. Without desire, subjective arousal remains low. Without subjective arousal, the incentive or



desire for sex is minimized.

For both the female and male groups, the average duration of low sexual desire was reported to be about the same (4.5 years for females, 3.5 years for males). For the majority of the women, it appears to be secondary to the arousal problem. For men, it appears to have coincided with, or arrived shortly after, the arousal problem. The results from this study suggest that there could be three different ways low sexual desire presents. The first possibility is that the other sexual dysfunction is primary, and over time contributes to a secondary diagnosis of low sexual desire. The second possibility is that the low sexual desire is primary, and this, in turn, leads to a secondary sexual dysfunction. A third possibility is that there is a global inhibition of sexual response rather than a discrete phase disorder, however, one phase of the response may be more distressing to the individual. This latter possibility has been referred to as a multiple phase dysfunction by Segraves and Segraves (1991b).

What is noteworthy, however, is that for both female and male groups, the low sexual desire was most often identified as the principle presenting problem. It may be that for both groups, the other sexual dysfunction was often more tolerable than the complaint of low sexual desire; i.e., it was only after low sexual desire emerged that treatment was sought. One possible explanation for this is

that, unlike desire problems, some form of sexual activity often continues to occur between couples in spite of the sexual dysfunction. Others, such as Weeks (1987), and Schwartz and Masters (1988), have posited that couples appear better able to tolerate sexual dysfunctions in the relationship if they believe it is something over which the partner has little or no control. Sexual desire, however, is something which many couples assume is under the partner's control, thus it is not often extended the same degree of understanding since the partner perceives the lack of desire as deliberate. This perception can lead to significant conflict in the relationship and frequently precipitates entry into treatment. Schwartz and Masters (1988) stated that it is common for men and women to gradually reduce their frequency of sexual encounters or withdraw from sexual interaction when another sexual dysfunction is initially present. Their premise is that the longer the history of the sexual dysfunction, the more firmly established is the secondary complaint of low sexual desire. It is more typically this which causes more distress in the relationship and what causes the couple to seek help.

When men and women were compared with regard to severity of psychological distress, women with low sexual desire reported a significantly higher level of psychological symptoms when compared to men complaining of

low sexual desire (see Figure 1). This was true even when gender-adjusted scores were used. Women showed significant elevations in depression, anxiety, and hostility, as well as higher levels of a paranoid style of thinking. There were also slightly higher levels of obsessive-compulsiveness, interpersonal sensitivity, and phobic anxiety. At first glance, this differs from Stuart's (1986) finding in which women with low sexual desire showed no evidence of significant psychological disturbance or psychopathology. Stuart's study, however, employed the Minnesota Multiphasic Personality Inventory (MMPI), which is not as sensitive a measure of point-in-time distress as is the Symptom Checklist (SCL-90-R), and is designed to measure personality traits rather than a current psychological state. The SCL-90-R scores for this study sample of women with low sexual desire would concur with Stuart's findings, in that they do not necessarily suggest a psychological disorder or significant psychopathology. However, it is important to note that the scores are closer to psychiatric outpatient norms than "normals" (see Figure 3), which suggests that these women are experiencing subclinical levels of psychological disorder. One might question whether these women might, over time, meet criteria for a major mood or anxiety disorder, or other psychiatric diagnosis, given the significant amounts of not only psychological distress, but relationship distress and overall stress. The likelihood

for this is certainly high, if these various stressors are left untreated.

It is important to note, too, that in this study, men and women did not differ in past psychological history, or in their verbal report of what they perceived was their current psychological status. Instead, both groups focused on the desire problem, in addition to the other sexual dysfunction and/or the distress experienced in the relationship. What is interesting, given the SCL-90-R findings, is that women focused more on the low sexual desire or the relationship distress than they did on their degree of psychological distress. It appears that women were more troubled by their lack of sexual desire than they were about their feelings of depression or other symptoms of psychological distress. For men, it appears that, while the level of psychological distress was higher than the "normals" (see Figure 2), it was substantially less, in most cases, to the psychiatric outpatients, and that they, too, focused primarily on their sexual functioning or responsiveness.

Women's dissatisfaction with the quality of the marital relationship, especially when it comes to the expression of affection, is consistent with other findings which have found that married women are less happy than married men with the relationship (Blumstein & Schwartz, 1983). This dissatisfaction appears to be a major factor for women with

problems with low sexual desire. In a study done by Carroll, Volk, and Hyde (1985) which examined the differences between men and women in motives for engaging in sexual intercourse, 56% of the women and only 21% of the men reported that the main reason for refusing sex was that they "were not getting enough love." Females reported a greater need for love, commitment, and emotion than did men, and reported that without these, they would not engage in sexual intercourse. Stuart (1985) hypothesized that when women do not get their emotional needs met by their partners, their sexual attraction to their partner decreases. This would support the finding yielded in this study in which women reported that, in general, they currently found their partners only slightly sexually appealing. Conversely, for men, their problems with low sexual desire appear to be less related to, or dependent upon, relationship distress or dissatisfaction.

In this sample women reported significantly more stress than men; particularly with respect to home and finances. Previous research by Avery-Clark (1986a) found that female subjects who were employed in a professional position were more likely to suffer from low sexual desire than those females who held non-professional jobs, or who were not employed. A possible explanation for this is that these females experience competing demands from both job and home (schedule overload) which, in turn, create both physical and

higher than the "normal" male norm, it does not approach the norm level of psychiatric outpatients. He also reports experiencing only slightly less distress in the relationship than males with good marital satisfaction. Thus, it appears that for men, the issue of sexual functioning (whether it be related to performance or desire) is what precipitates their entry into treatment.

These differentiated profiles for each gender group are supported by the findings from the discriminate function analysis, which indicated that the two most significant factors that distinguished the gender groups were age and level of psychological distress. Once these factors were accounted for, the other factors (relationship distress and stress; both of which initially were found to yield significant differences between the groups), were not significantly related to the gender differences.

The factor analysis revealed that, for women, there was one central factor which was a global measure of psychological distress and dissatisfaction. Age was the principle component of a separate factor. For men, there were multiple discrete factors (e.g., interpersonal functioning, psychological distress, stress, age, sexual functioning, somatization); none of which were particularly stronger than the other. These results lend further support to the picture of the differences between genders that were suggested above.

### Implications for Treatment

Treatment approaches for low sexual desire have generally been the same for men and women, though the various treatment approaches have been quite heterogeneous (e.g., Apfelbaum & Apfelbaum, 1985; Fish, Fish, & Sprenkle, 1984; Friedman, 1983; LaPointe & Gillespie, 1979; LoPiccolo, 1980; McCarthy, 1984; Shover, 1981; Talmadge & Talmadge, 1986). One of the purposes for this study was to determine if different treatment approaches are indicated for men and women with low sexual desire. The results from this study demonstrated that factors associated with low sexual desire are not the same for men and women. Men and women present differently and thus, have to be understood differently. In view of this, the same treatment approach may not be warranted for both.

For women, both individual and interpersonal factors are significant. Treatment would most likely need to focus on psychological symptomatology, level of stress, and relationship issues, in addition to addressing problems in sexual functioning. One of the primary issues would be separating out the desire problem from the arousal problem, if possible. The next would be to determine, if one can, whether the desire problem is in response to psychological distress, stress, or relationship satisfaction, or whether its presence creates psychological distress, stress, and conflict in the relationship. Determining causality,

however, may not be possible, or even necessary, to treat this problem. Instead, addressing the problem in systemic terms may be necessary.

For men, the most important thing would be to assess the presence of another sexual dysfunction and to assess its relationship to the low sexual desire. The goal would be to determine if this was a causal relationship, or if instead, reflective of a more global inhibited sexual response. Treatment focusing on sexual functioning may be more successful with men.

#### Limitations of Study

The major limitations of this study have to do with sample size and type of sample. The small size of the female sample, coupled with a bias toward white, well-educated individuals limits the generalizability of these results. There may also be a bias created by a significant portion of the male sample coming from the Urology Clinic. There may be differences in these factors for men with respect to whether they present to a psychiatric clinic or a medical clinic. Furthermore, subjects were self-selected on the basis of a decision to seek treatment, which may distinguish them from those people with low sexual desire who do not seek treatment. Hence, a larger and more representative sample is needed to extend this study's findings.

Secondly, this is a cross-sectional descriptive study.



As such, it cannot demonstrate causality. For example, in this study we find that the women in the sample have low sexual desire and significant amounts of psychological symptomatology. Despite the presence of a significant association between these variables, it cannot be determined if one caused the other, or if there was a third variable accounting for the relationship. Additionally, the co-existence of arousal problems and relationship distress causes speculation as to whether the loss of desire is the result of the long-standing arousal problem, or whether it is more likely due to the level of distress in the relationship. Perhaps even though the arousal problem has existed for a particularly long period of time, desire is not lost until relational distress reaches a particular point.

A third limitation is the exclusive use of self-report measures. This increases the possibility of response set and provides the investigator with only one way to investigate this construct. Additional assessment methods might be to include partner report and/or a clinical interview to obtain a broader understanding of this problem and related factors.

#### Directions for Future Research

The results of the study indicate that future investigation regarding gender differences in factors associated with low sexual desire is necessary. This study

points out several directions such research should take. In doing this, a clearer understanding of how specific factors are related to one another for each gender may be obtained. It would be useful to compare these groups with a control group of males and females whose sexual desire and functioning were normal. It would also be valuable to compare these groups to groups with sexual dysfunctions that do not include desire problems.

An additional area of research would include examining specific subgroups of subjects complaining of low sexual desire. The difficulty in assessing low sexual desire may be a function of the differences in population samples as much as the disorder itself. Considering the complexity of the disorder, it might be more useful to look at specific subgroups and to derive hypotheses related to these populations rather than attempting to generalize to all people, or to all men, or to all women, experiencing low sexual desire. For example, an individual complaining of low sexual desire for six months may look very different psychologically from an individual who has experienced low sexual desire for three years. Another subgroup would be those people who experience a secondary sexual dysfunction in addition to low sexual desire. A third subgroup is different age groups. A man at age 30 with low sexual desire may look quite differently psychologically than a man who is 50 years old with low sexual desire. Comparisons

between gender groups and within gender groups would help to determine what factors may distinguish these groups. In doing this, a more refined method of treatment could be developed which could ultimately be more successful in treating this disorder.

Another direction would be studying the dyad rather than the individual. The absence or loss of sexual desire invariably affects the relationship in some way. For example, Derogatis, Meyer, and Gallant (1977) evaluated sexually asymptomatic male and female partners of sexual dysfunctional men and women (not specifically desire disorders) and found that the male partners showed significantly more psychological symptoms than the female partners but about the same symptom distress levels as sexually dysfunctional men. Their hypothesis for this gender-specific difference was that men felt much more responsible for the sexual satisfaction in the relationship, and specifically, for their partner's sexual dysfunction. It would be interesting to explore if, almost fifteen years later, these findings would be any different; particularly as women have come to assume and/or be expected to assume greater responsibility for their own sexual satisfaction.

It is clear that further study is necessary in order to improve current assessment and treatment methods for this disorder; particularly given its increasing prevalence in sex therapy clinics today. Continuing to examine how low

sexual desire may manifest itself differently among various groups may provide important information on how to more effectively address and treat this problem.

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