



The sexual desire inventory: Development, factor structure, and evidence of reliability

Ilana P. Spector , Michael P. Carey & Lynne Steinberg

To cite this article: Ilana P. Spector , Michael P. Carey & Lynne Steinberg (1996) The sexual desire inventory: Development, factor structure, and evidence of reliability, Journal of Sex & Marital Therapy, 22:3, 175-190, DOI: [10.1080/00926239608414655](https://doi.org/10.1080/00926239608414655)

To link to this article: <https://doi.org/10.1080/00926239608414655>



Published online: 14 Jan 2008.



Submit your article to this journal [↗](#)



Article views: 607



Citing articles: 230 View citing articles [↗](#)

The Sexual Desire Inventory: Development, Factor Structure, and Evidence of Reliability

ILANA P. SPECTOR, MICHAEL P. CAREY, and LYNNE STEINBERG

The purpose of this investigation was to develop a self-administered questionnaire to measure sexual desire. In the development phase, items were generated and pilot-tested with 24 subjects. Based on these data, items were deleted, added, or modified. Next, in Study One, the Sexual Desire Inventory (SDI) was administered to 197 females and 117 males. Factor analyses revealed that the SDI was multifactorial; however, none of the generated factor solutions up to five factors yielded a good fit. Interpretation of the factors led to revisions of the SDI. It was hypothesized that sexual desire might consist of two related dimensions: dyadic sexual desire and solitary sexual desire. Items on the SDI were modified to measure these two dimensions, and the revised SDI was administered to 249 females and 131 males. Factor analysis supported the presence of these two dimensions. Internal consistency estimates using Cronbach's alpha revealed coefficients of .86 for dyadic sexual desire and .96 for solitary sexual desire, providing preliminary evidence for the reliability of the SDI. The implications of these findings are discussed.

Sexual desire has been referred to in the professional literature by many terms, including libido, sexual drive, sexual motivation, sexual interest, and sexual appetite. Many fields have contributed expertise to existing knowledge about desire, including anthropology, sociology, biology, zoology, medicine, and psychology. Within psychology, different orientations have been used to understand desire, including psychodynamic, cognitive-behavioral, and systems perspectives. Although researchers and theorists continue to explore desire, understanding of this construct and

Ilana P. Spector is at the Community Psychiatric Center, Douglas Hospital, and the Department of Psychiatry, McGill University. Michael P. Carey is at the Department of Psychology, Syracuse University, Syracuse, NY. Lynne Steinberg is at the Department of Psychology, Oklahoma State University, Stillwater, OK. Address correspondence to: Ilana P. Spector, Community Psychiatric Center, Douglas Hospital, 6875 LaSalle Blvd, Verdun, Quebec, Canada, H4H 1R3. Preparation of this article was supported in part by a Scientific Development Award from the National Institute of Mental Health (NIMH Grant #K21-MH01101) to Michael P. Carey.

its determinants is undermined by difficulties in its definition and measurement.

The purpose of this research was to develop a self-administered questionnaire to measure sexual desire. First, models of sexual desire will be reviewed. Second, the difficulties with current measurement of desire will be highlighted. Finally, the development and psychometric evaluation of a cognitively-based measure of sexual desire will be proposed.

MODELS OF SEXUAL DESIRE: A REVIEW

Freud¹ was one of the first theorists to discuss a sexual drive, which he called *libido*. Freud suggested that the goal of sexual expression is to relieve libidinal urges so that the individual can experience emotional homeostasis. He did not discuss methods to measure libido. Kinsey, Pomeroy, and Martin² proposed an "outlet" mode of measurement, whereby sexual desire was quantified by counting how many sexual activities the individual performed that led to orgasm. Both Kinsey and Freud described sexual desire as accumulating, resulting in tension, and requiring release.

Kinsey's and Freud's descriptions of sexual desire are from a biological perspective. However, many aspects of sexual behavior seem to be determined by social forces rather than solely biological ones. For example, Kinsey's outlet measurement has been criticized³ because of his focus on orgasm and neglect of cognitive and affective variables.

Other theorists have since attempted to define and understand sexual desire. For example, Whalen⁴ divided sexual motivation into two components: sexual arousal and sexual arousability. Sexual arousal was defined as the more transient component and refers to current level of excitement. Whalen stated that when arousal reaches its maximum level, orgasm occurs. Arousability was defined as how rapidly the individual reaches orgasm with sexual stimulation. Therefore, Whalen described sexual desire as closely related to sexual arousal, and its measurement is calculated as latency to orgasm.

Singer and Toates⁵ also discussed sexual motivation and attempted to determine whether it was a drive or an appetite. They used vignettes to support their model of sexual motivation as an appetite and concluded that sexual activity is not pursued as an escape from pain (that is, due to deprivation) but rather an approach to pleasure. They developed several predictions about how judgments of attractiveness of potential partners change in states of deprivation and satiation. These hypotheses were not specifically tested.

Multidimensional Conceptualizations of Sexual Desire

Over time, theorists seem to agree that sexual desire is a complex construct, and there has been a movement away from simplistic unidimensional definitions toward multidimensional models. For example, Kaplan^{6,7} defined desire as sensations that motivate individuals to initiate

or be receptive to sexual stimulation. She divided desire into spontaneous sexual desire triggered by internal stimulation (e.g., biological events, thoughts) and sexual desire triggered by external stimulation (e.g., erotica, seeing attractive potential partners).

In a biopsychosocial approach to desire, Levine⁸ defined desire as involving three components. *Biological drive* such as that generated by testosterone is one component. *Cognitive aspiration* involves an evaluation of what is appropriate or expected in terms of sexual desire. *Psychologic motivation* involves a willingness to behave sexually when presented with sexual cues. Although Levine's model conceptualizes desire biopsychosocially, no data have been collected in support.

THE ASSESSMENT OF SEXUAL DESIRE

Professionals studying sexual desire have had difficulty with its measurement. Many studies measure sexual desire by examining self-reported overt behavior (e.g., frequency of intercourse).⁹⁻¹¹ This method overemphasizes behavior and underemphasizes cognitions. It would be erroneous to assume without empirical data that there is a perfect correlation between *interest in* sexual behavior and *actual* sexual behavior. For example, Beck, Bozman, and Qualtrough¹² found that sexual behavior can occur without sexual desire. Alternatively, it is possible for one to experience desire and not pursue sexual activity. These authors suggested that more attention should be directed toward the definition of sexual desire, and that such definition should not be limited to overt interpersonal sexual behavior.

A second method used to measure sexual desire in the empirical literature involves single-item Likert scales that ask about broad cognitions (questions such as: Have you noticed any changes in sexual desire? How often do you feel sexual desire?).¹³⁻¹⁵ This method assumes that sexual desire is unidimensional; one item could not measure the multidimensional nature of sexual desire proposed by theorists.

Several existing scales purport to measure sexual desire. The Derogatis Sexual Functioning Inventory (DSFI)¹⁶ has two subscales related to sexual desire. The Drive scale measures the frequency of various sexual behaviors, and the Fantasy scale measures a variety of sexual fantasies. The subscales purportedly discriminate between functional and dysfunctional samples, but no evidence has been reported to suggest that they discriminate in particular between samples with desire difficulties and those without. The Sexual History Form¹⁷ has questions that pertain to the frequency of sexual behaviors, but it does not directly assess thoughts. There is no evidence to suggest that these items cluster factorially to form a separate desire scale. These two scales are widely used in practice to describe sexual functioning, but they have not been used frequently for research purposes.

Harbison, Graham, Quinn, McAllister, and Woodward¹⁸ describe their Sexual Interest Questionnaire as a measure of sexual desire. However, what the scale appears to measure is how subjects feel about five different

sexual activities. Thus, although the scale measures positive versus negative feelings toward different sexual activities, it does not quantify sexual desire. Because this scale contains 160 items, it is time-consuming to complete, requires computer scoring, and is rarely used.

Kaplan and Harder¹⁹ developed the Sexual Desire Conflict Scale to measure emotional discomfort in response to arousal and desire. This measure was designed to examine anxiety about desire rather than actual interest; items measure behaviors rather than interest, and the concepts of arousal and desire are not distinguished.

Several researchers have attempted to measure fantasies as an index of sexual desire. For example, Nutter and Condron^{20,21} examined frequency of sexual fantasies in men and women with inhibited sexual desire as compared to nondysfunctional control subjects. Results indicated that those subjects with inhibited sexual desire fantasized less frequently than nondysfunctionals, indicating that cognitive factors may be important indicators of sexual desire.

Jones and Barlow²² also differentiated further between fantasies (internally generated thoughts) and urges (externally provoked thoughts). Using diary methods, these researchers found that 100% of males and 62% of females had daily sexual thoughts. Males had more frequent fantasies than urges, both of which occurred on at least a daily basis. Females reported no differences between fantasies and urges, which they had only once or twice a week. This study highlights significant gender differences in the amount and type of sexual thoughts.

These difficulties in the measurement of sexual desire are highlighted in problems diagnosing hypoactive sexual desire disorder (HSDD), which may well be the most frequently experienced and reported sexual problem.²³ The DSM-IV²⁴ refers to "persistently or recurrently deficient (or absent) sexual fantasies and desire for sexual activity" (p. 498). How desire for sexual activity should be measured is not indicated. How much desire is deficient (i.e., What is normative?) is not known. How can scientist-practitioners measure desire in a less subjective manner? The problems in defining and measuring sexual desire have implications for the diagnosis and treatment of sexual desire disorders.

SEXUAL DESIRE: A WORKING DEFINITION

As can be seen from the previous review, theoreticians, practitioners, and researchers have not agreed on terminology for the phenomenon of desire nor on how to measure it. Before an adequate measure can be developed, the construct must first be defined so that items can be developed to reflect the definition. The following definition of desire is the creation of these authors based on an evaluation of the previously reviewed literature. Sexual desire refers to *interest in sexual activity*. It is primarily a cognitive variable, which can be measured through the amount and strength of thought directed toward approaching or being responsive to sexual stimuli. Sexual desire is *not* a behavior, and it should

not be measured by examining directly sexual behaviors such as intercourse and masturbation. Rather, desire involves thoughts that may motivate an individual to seek out or be receptive to sexual opportunities. Moreover, before models of sexual desire can be evaluated, appropriate measurement of desire must be designed. Based on this definition, items on strength and frequency of sexual thoughts should be included.

PRESENT INVESTIGATION

The purpose of this investigation was to develop and evaluate a self-administered questionnaire to measure sexual desire. Subjects who completed the instrument were told that sexual desire was "an interest in behaving sexually." The development of the Sexual Desire Inventory took place over three stages. During the Test Construction phase, items were generated and pilot-tested. In Study One, a factor analytic study was conducted and hypotheses were generated about the structure of the construct of sexual desire. In Study Two, the factor structure was confirmed and preliminary evidence for the reliability of the SDI was collected.

TEST CONSTRUCTION

Subjects

Seventeen females and seven males were recruited from an undergraduate class in order to pilot-test the items of the questionnaire. The mean age of the sample was 20.8 years ($SD = .9$, range = 19–23).

Measure

Sexual Desire Inventory-Pilot (SDI-P). Items were generated in the following domains: interest in dyadic sexual behavior (e.g., desired frequency of intercourse), interest in individual sexual behavior (e.g., desired frequency of masturbation), cognitions (e.g., fantasies), and importance of sexual needs. Items were selected by considering extant theoretical models of desire, diagnostic criteria used in the DSM-III-R for HSDD, and clinical experience in assessing and treating sexual desire disorders. The items were presented initially to sexology researchers and clinicians, who rated the face validity and the clarity of the items.

Procedure

Subjects completed the SDI-P in a group setting where the privacy of the subjects was assured. After the subjects completed the SDI-P, they were asked to comment on the clarity of the items, the relevance of the content, and whether any items should be added, deleted, or modified.

Results

The SDI-P was revised based on the feedback of the subjects. First, the instructions were shortened. Second, the vocabulary was simplified. Third, clarity was enhanced by defining some of the terms that were judged ambiguous by subjects (e.g., erotica materials). The revised instrument will be referred to as the SDI-1.

STUDY ONE

The purpose of Study One was to examine the factor structure of the revised SDI (SDI-1).

Subjects

The subjects were 197 female and 117 male students; they were recruited from both undergraduate and graduate classes. Completed data were available for 300 subjects. Subjects ranged in age from 18 to 51 ($M = 23.0$, $SD = 5.5$).

Measure

Sexual Desire Inventory-1 (SDI-1). This is a 20-item scale based on the suggested revisions of the pilot sample.

Procedure

Subjects completed the SDI in several classroom settings. Privacy of the subjects was assured.

Results

Item Analyses. Each item of the SDI-1 was examined for the distribution of responses selected. These analyses revealed that responses to some items were positively skewed (e.g., items asking about masturbation and use of erotic materials) or negatively skewed (e.g., items asking about the frequency of sexual thoughts).

Factor Analyses. Exploratory Maximum Likelihood Factor Analyses (MLFA) were conducted on the SDI-1 using the 300 subjects who completed the SDI without omitting any items. Next, an oblique rotation was generated because it was hypothesized that the different facets of desire would be correlated. The MLFA were conducted by generating chi-square values for one-, two-, three-, four-, and five-factor oblique models. Analyses were conducted separately by gender because preliminary analyses revealed differences in the covariance matrices by gender (Box's M , $F(210, 156668) = 2.3$, $p < .0001$).

Examination of the female data revealed that none of the generated factor solutions yielded a good fit. Although the addition of the fifth

factor was still significant, continuing to examine the effects of additional factors was judged to be of limited theoretical utility. Therefore, analyses ceased, and the five-factor model was examined to see if it could guide scale refinement.

The five factors provided by this model can be labeled as one general Sexual Desire factor (items measuring frequency and strength of overall interest in behaving sexually with a partner, frequency of sexual thoughts, and overall ratings of sexual desire relative to perceived gender and age norms) and four content-specific factors: Masturbation (items measuring frequency and strength of desire to masturbate); Erotica (items measuring frequency and strength of desire to use erotic materials; Attraction (items measuring strength of sexual desire for potential attractive sexual partners); and Dreams (items measuring frequency and strength of sexual desire during sexual dreams). Masturbation was significantly correlated with Erotica [$r(192) = .31, p < .001$]. The general Sexual Desire factor was correlated with Attraction [$r(192) = .37, p < .001$] and Dreams [$r(192) = .42, p < .001$]. Dreams was also correlated with Attraction [$r(192) = .43, p < .001$]. The remaining six interfactor correlations were nonsignificant.

Analysis of the male data revealed that none of the generated factor solutions yielded a good fit, similar to the findings obtained with the female data. Although the addition of a fifth factor was statistically significant, it did not yield an interpretable factor. Therefore, the four factor model will be described because (a) it stimulated hypotheses about how to revise the instrument, and (b) it was similar to the factor structure generated by the female data.

The four factors provided by this model can be labeled as General Sexual Desire, Masturbation, Erotica, and Attraction. The items that loaded onto these factors were similar to those described in the female data, with the exception of the Dreams items, which loaded onto the general factor. Correlations were computed among the four factors. Masturbation was correlated with General Sexual Desire [$r(106) = .33, p < .001$], Erotica [$r(106) = .34, p < .001$], and Attraction [$r(106) = .24, p < .001$]. General Sexual Desire was correlated with Attraction [$r(106) = .60, p < .001$]. The remaining two interfactor correlations were nonsignificant.

DISCUSSION

The SDI-1 was found to be multidimensional. Five factors were obtained and could be labeled as one general construct of sexual desire and four related constructs involving interest in masturbation, interest in using erotic materials, sexual dreams, and interpersonal attraction. Despite the initial gender differences in the covariance matrices, the overall pattern of dimensionality was similar across gender. Nevertheless, because the item analyses revealed skewed distributions, we decided to revise the instrument and readminister it. Based on the factor analyses, testable

hypotheses emerged involving the construct of sexual desire and its measurement.

First, the factor analyses suggest that sexual desire is a multidimensional construct. This finding confirms the theories of Lief,²⁵ Levine,⁸ and Kaplan.⁷ Thus, it is important that a measure of sexual desire contain items representing the different dimensions.

Second, our findings lead us to differentiate between different aspects of sexual desire. Specifically, we propose that sexual desire for a partner may differ from sexual desire without a partner, and that these two aspects of sexual desire serve different needs. In support of this view, we note that, when correlation matrices for both genders are examined, the factors measuring desire for masturbation and erotic materials were highly correlated with each other, but less highly correlated with the remaining factors. Perhaps interest in using erotic materials and masturbation represent one aspect of sexual desire: interest in behaving sexually by oneself (or *solitary* sexual desire). It is possible that expression of solitary sexual desire serves a different purpose (e.g., tension release) than expression of desire to behave sexually with another person (or *dyadic* sexual desire). Dyadic behaviors may allow one to feel emotional as well as physical intimacy. Solitary desire may be more physical in nature and allow a person to focus on his or her own sexual needs and wishes without attending to those of a partner. Closer examination of the items that loaded onto the general Sexual Desire factor also support this hypothesis; that is, the ambiguity in the wording of these items, combined with naive subjects' beliefs about the definition of sexual desire (as involving intercourse), might have led subjects to interpret these items as partner-related. We speculated that if the general factor items were reworded to refer specifically to desire for partner activity, they would join with the Attraction items (which clearly refer to desire for other individuals) to form a Dyadic Desire subscale. Preliminary support for this hypothesis was found by examining the correlation matrices, which revealed a stronger correlation between the general factor and Attraction factor than between the general factor and any other factor.

Therefore, one hypothesis about the nature of sexual desire emerges from these data: namely, there may be two types of sexual desire that might be labeled dyadic sexual desire and solitary sexual desire.

STUDY TWO

The purposes of Study Two were to examine the factor structure of the revised SDI (SDI-2) with regard to dimensions of dyadic and solitary sexual desire, and to examine preliminary evidence for the reliability of this revised measure.

Subjects

The subjects were 249 female and 131 male students recruited from undergraduate classes. Subjects ranged in age from 18 to 40 years ($M = 20.8$, $SD = 2.7$).

Measure

Sexual Desire Inventory-2 (SDI-2). This is the revised scale based on Study One data. Items were revised to refer specifically to partner-related or solitary sexual desire. Items 1, 4, 5, and 6 on the SDI-2 were taken directly from the SDI-1. Items 2, 3, 7, 8, and 9 were revised from the SDI-1 to refer to partner-related desire. Items 10–13 refer to solitary sexual desire. Item 14 of the SDI-2 combines three items from the SDI-1 to inquire generally about distress experienced during abstinence from sexual activity. The SDI-2 items can be found in the Appendix.

Procedure

Subjects completed the SDI-2 in small groups assembled to assure privacy.

Results

Item Analyses. Items were examined to determine the distribution of responses selected. These analyses revealed that response to items 10–13 were positively skewed.

Factor Analysis. To assess the presence of solitary and dyadic dimensions of the SDI-2, a factor analysis was performed on all items except item 14, which asked about distress during abstinence. This item was not hypothesized to load onto either dimension of sexual desire. The factor model was set at two factors, and oblique rotation was once again used to interpret the factors. Male and female data were analyzed together because Study One data revealed more similarities than differences in factor structure, and no theoretical rationale existed to expect gender differences in the nature of desire with respect to separate dimensions of solitary and dyadic desire.

The factor analysis identified two independent factors, which were labeled Dyadic Sexual Desire and Solitary Sexual Desire. Items 1–9 loaded high on the Dyadic factor, while items 10–13 loaded high on the Solitary factor (see Table 1). Both factors had eigenvalues > 1 (Dyadic factor eigenvalue = 5.63; Solitary factor eigenvalue = 2.54). The correlation between the two factors was $r = .35$.

Summary Scores. In order to allow comparisons among individuals in terms of strength of sexual desire, and to examine evidence for the validity of the distinction between dyadic and solitary desire, the calculation of summary scores was necessary. Based on the factor analysis, a summary score for the Dyadic scale was calculated by summing items 1–8. We decided that item 9 was not measuring the quantity of sexual desire, but rather perceived sexual desire in comparison to peers. Because the other items seemed to quantify sexual desire in terms of amount, whereas item 9 did not, item 9 was eliminated from further analyses because it measured a different (although possibly related) construct from the other items.

TABLE 1
Principal Components Analysis Factor Loadings on the SDI-2

SDI Item	Dyadic Factor	Solitary Factor
1	<u>.74</u>	.34
2	<u>.59</u>	.38
3	<u>.81</u>	.35
4	<u>.57</u>	.38
5	<u>.53</u>	.35
6	<u>.59</u>	.15
7	<u>.89</u>	.25
8	<u>.69</u>	.12
9	<u>.66</u>	.17
10	<u>.29</u>	<u>.89</u>
11	.34	<u>.95</u>
12	.34	<u>.89</u>
13	.29	<u>.84</u>

Note. Factor loadings over 0.45 are underlined for each item to facilitate interpretation.

Next, the solitary scale summary score was calculated by summing items 10, 11, and 12. Item 13 was eliminated for the same reason as item 9.

Internal Consistency. Internal consistency estimates (e.g., Cronbach's alpha coefficients) were calculated for both subscales. Cronbach's alpha for the Dyadic desire scale = .86, and for the Solitary desire scale = .96. These statistics reveal that both subscales have strong evidence of reliability.

DISCUSSION

The purpose of this investigation was to develop a self-report measure of sexual desire—the Sexual Desire Inventory (SDI). Two studies were conducted in order to examine the factor structure of the SDI. Results of both studies indicated that the SDI is multifactorial and demonstrates appropriate evidence of internal consistency. These results lend themselves to an interesting discussion of the nature and measurement of the construct of sexual desire and ideas for future research.

A Multidimensional Sexual Desire

Solitary and Dyadic Sexual Desire. In Study One, the SDI-1 was found to be multidimensional in nature, supporting extant theory. In an attempt to further refine the SDI, it was hypothesized that sexual desire might consist of two related dimensions: Dyadic Sexual Desire and Solitary Sexual Desire. Items were generated to reflect these different dimensions in Study Two. Results indicated that these two dimensions did exist. Analyses indicated that all the items asking about desire for sexual activity occurring without a partner clustered together to form one factor called

the Solitary Sexual Desire factor, whereas all items asking about sexual activity with a partner clustered together to form a Dyadic Sexual Desire factor. These factors had high evidence of internal consistency.

It was hypothesized that dyadic and solitary desire might represent distinct constructs. The two scales were not highly correlated, suggesting that this might be true. Other ways to determine the validity (and utility) of the two constructs would be to investigate whether there are variables that influence one mode of sexual desire and not the other or influence the two in different directions. Some examples of variables to examine might be relationship satisfaction, body image, depression, or performance anxiety. Studies of these potential moderating variables could lend evidence to support or refute the value of distinguishing between two types of desire.

Frequency and Strength. The content of the SDI included items involving frequency of sexual thoughts and desired frequency of sexual activity. These can be differentiated from the strength items, which asked how strong and important aspects of sexual desire were to the respondents. Kaplan⁶ predicted that people with low sexual desire should also wish to engage in sexual activities less frequently than those with higher sexual desire; the clustering of frequency and strength items together support this prediction. Negotiation concerning desired frequency of sexual activity is important for sexual partners, especially when there is a discrepancy between partners. However, strength of sexual desire should also be an important indicator of the construct of desire because it is possible to have frequent thoughts about sexual activity that are not strong. It is useful to address both aspects of sexual desire for comprehensive assessment; the SDI does this.

Internal and External Triggers of Desire. The questions of external and internal triggers of sexual desire relates to Kaplan's⁷ description of desire consisting of these two different elements, and Jones and Barlow's²² distinction between fantasies and urges. The Dyadic desire scale includes items of both types, and the high internal consistency of this scale suggests that these concepts are highly associated with one another.

Comparison of the SDI with Existing Measures of Sexual Desire

Existing measures of sexual desire were previously described. The SDI differs from these measures in several ways. The Drive Scale of the DSFI¹⁶ is a behavioral measure that examines the actual frequency of various sexual behaviors; the SDI is a cognitive measure that examines the strength of sexual desire, and also asks about desired frequency of behavior rather than actual behavior. Thus, the SDI yields additional data to those of the Drive Scale of the DSFI. Research has yet to determine the relationship between sexual desire and sexual behavior. The Sexual Interest Questionnaire¹⁸ examines affective responses to five specific sexual activities; the SDI asks about thoughts related to more general classes of sexual behavior, is easier to administer and to score, and is much

shorter. The Sexual Desire Conflict Scale¹⁹ examines anxiety and discomfort with the experience of sexual desire, but does not quantify sexual desire; the SDI does. It is conceivable that quantity of sexual desire may be related to affective responses to sexual behavior; future research should attempt to correlate the SDI to such measures.

Empirical investigations of the correlates of sexual desire have measured desire in two ways. One common way has been to inquire about the frequency of sexual behaviors. This method was often found in the literature on male sexual desire and testosterone.⁹⁻¹¹ Thus, although it is known that lower than normal levels of testosterone can decrease sexual behavior in males, the effects of testosterone on strength of sexual desire using cognitive measures has not yet been examined. A second way of measuring sexual desire in empirical research has been to ask a unidimensional question such as "What is your current level of sexual desire?" This method was used by several researchers examining sexual desire in pregnant women.¹³⁻¹⁵ However, the data presented in the SDI investigation suggest that sexual desire is multidimensional; thus, more comprehensive measurement with more than one item may be needed to fully understand the relationship between desire and pregnancy.

Therefore, it seems that the SDI can provide a measurement of sexual desire that is different from existing questionnaires and perhaps more comprehensive than what has been used in previous investigations of sexual desire. This pioneering work in the measurement of sexual desire raises several empirical and theoretical questions.

Sexual Desire Redefined

At the outset, sexual desire was defined as interest in sexual activity, which could be measured by amount and strength of thought directed toward sexual stimuli. Because of the data reported in this study, it is possible to further refine this definition.

Sexual desire refers to interest in sexual activity, and the kind of activity one feels desire for can be divided into two categories: dyadic and solitary desire. Dyadic desire refers to interest in or a wish to engage in sexual activity with another person. Dyadic desire may also involve a desire for intimacy and sharing with another. Solitary desire refers to an interest in engaging in sexual behavior by oneself, and may involve a wish to refrain from intimacy and sharing with others. Further research is needed to understand whether this distinction is meaningful in terms of whether there are variables that influence the two desires differently, and whether this distinction has clinical significance in terms of treatment goals and prognosis.

It is hoped that this proposed definition and model of sexual desire will enhance understanding and generate more comprehensive empirical study of the phenomenon of desire.

Future Research on Measurement of Sexual Desire

This investigation demonstrated preliminary evidence for a multidimensional construct of sexual desire. Continued work should progress on validating the two dimensions of sexual desire on more heterogeneous samples and with other related constructs. The SDI should be examined for efficacy in clinical and nonclinical samples, for example comparing subjects diagnosed with HSDD to those without clinical complaints.

This study is a first attempt to move from behavioral to more cognitive methods of quantifying sexual desire. It is hoped that through continued study, sexuality professionals will have improved capability to define sexual desire, to measure desire, to establish normative data about sexual desire, and to develop effective treatment programs for those with desire disorders.

*APPENDIX**Sexual Desire Inventory-2 (SDI-2)*

This questionnaire asks about your level of sexual desire. By desire, we mean **INTEREST IN** or **WISH FOR SEXUAL ACTIVITY**. For each item, please circle the number that best shows your thoughts and feelings. Your answers will be private and anonymous.

1. During the last month, how often would you have liked to engage in sexual activity with a partner (for example, touching each other's genitals, giving or receiving oral stimulation, intercourse, etc.)?

- | | |
|-------------------------|-------------------------|
| 0) Not at all | 4) Twice a week |
| 1) Once a month | 5) 3 to 4 times a week |
| 2) Once every two weeks | 6) Once a day |
| 3) Once a week | 7) More than once a day |

2. During the last month, how often have you had sexual thoughts involving a partner?

- | | |
|--------------------------|----------------------------|
| 0) Not at all | 4) 3 to 4 times a week |
| 1) Once or twice a month | 5) Once a day |
| 2) Once a week | 6) A couple of times a day |
| 3) Twice a week | 7) Many times a day |

3. When you have sexual thoughts, how strong is your desire to engage in sexual behavior with a partner?

0	1	2	3	4	5	6	7	8
No Desire					Strong Desire			

4. When you first see an attractive person, how strong is your sexual desire?

0	1	2	3	4	5	6	7	8
No Desire					Strong Desire			

5. When you spend time with an attractive person (for example, at work or school), how strong is your sexual desire?
- 0 1 2 3 4 5 6 7 8
- No Desire Strong Desire
6. When you are in romantic situations (such as a candle lit dinner, a walk on the beach, etc.), how strong is your sexual desire?
- 0 1 2 3 4 5 6 7 8
- No Desire Strong Desire
7. How strong is your desire to engage in sexual activity with a partner?
- 0 1 2 3 4 5 6 7 8
- No Desire Strong Desire
8. How important is it for you to fulfill your sexual desire through activity with a partner?
- 0 1 2 3 4 5 6 7 8
- Not At All Extremely
- Important Important
9. Compared to other people of your age and sex, how would you rate your desire to behave sexually with a partner?
- 0 1 2 3 4 5 6 7 8
- Much Less Much More
- Desire Desire
10. During the last month, how often would you have liked to behave sexually by yourself (for example, masturbating, touching your genitals etc.)?
- | | |
|-------------------------|-------------------------|
| 0) Not at all | 4) Twice a week |
| 1) Once a month | 5) 3 to 4 times a week |
| 2) Once every two weeks | 6) Once a day |
| 3) Once a week | 7) More than once a day |
11. How strong is your desire to engage in sexual behavior by yourself?
- 0 1 2 3 4 5 6 7 8
- No Desire Strong Desire
12. How important is it for you to fulfill your desires to behave sexually by yourself?
- 0 1 2 3 4 5 6 7 8
- Not At All Extremely
- Important Important
13. Compared to other people of your age and sex, how would you rate your desire to behave sexually by yourself?

	0	1	2	3	4	5	6	7	8	
	Much Less					Much More				
	Desire					Desire				

14. How long could you go comfortably without having sexual activity of some kind?
- | | |
|-------------------|----------------------|
| 0) Forever | 5) A week |
| 1) A year or two | 6) A few days |
| 2) Several months | 7) One day |
| 3) A month | 8) Less than one day |
| 4) A few weeks | |

REFERENCES

1. Freud S: *Three essays on the theory of sexuality*. New York, Avon, 1962 (original work published 1905).
2. Kinsey AC, Pomeroy WB, Martin CE: *Sexual behavior in the human male*. Philadelphia, Saunders, 1948.
3. Rosen RC, Beck JG: *Patterns of sexual arousal: Psychophysiological process and clinical applications*. New York, Guilford, 1988.
4. Whalen RE: Sexual motivation. *Psychol Rev* 73:151-163, 1966.
5. Singer B, Toates FM: Sexual motivation. *J Sex Res* 23:481-501, 1987.
6. Kaplan HS: Hypoactive sexual desire. *J Sex Marital Ther* 3:3-9, 1977.
7. Kaplan HS: *Disorders of sexual desire*. New York, Brunner/Mazel, 1979.
8. Levine SB: More on the nature of sexual desire. *J Sex Marital Ther* 13:35-44, 1987.
9. Bancroft J, Tennant G, Loucas K, Cass, J: The control of deviant sexual behavior by drugs: 1. Behavioral changes following oestrogens and anti-androgens. *Br J Psychiat* 125:310-315, 1974.
10. Gooren LJG: Androgen levels and sex function in testosterone-treated hypogonadal men. *Arch Sex Behav* 16:463-473, 1987.
11. Skakkebaek NE, Bancroft J, Davidson DW, Warner, P: Androgen replacement with oral testosterone undecanoate in hypogonadal men. *Clin Endocrinol* 14:49-61, 1981.
12. Beck JG, Bozman AW, Qualtrough T: The experience of sexual desire: Psychological correlates in a college sample. *J Sex Res* 28:443-456, 1991.
13. Bogren LY: Changes in sexuality in women and men during pregnancy. *Arch Sex Behav* 20:34-45, 1991.
14. Elliott SA, Watson, JP: Sex during pregnancy and the first postnatal year. *J Psychosom Res* 29:541-548, 1985.
15. Reamy K, White SE, Daniell WC, Le Vine ES: Sexuality and pregnancy: A prospective study. *J Reprod Med* 27:321-327, 1982.
16. Derogatis LR, Melisaratos N: The DSFI: A multidimensional measure of sexual functioning. *J Sex Marital Ther* 5:244-281, 1979.
17. Nowinski JK, LoPiccolo J: Assessing sexual behavior in couples. *J Sex Marital Ther* 5:225-243, 1979.
18. Harbison JJM, Graham PJ, Quinn JT, McAllister H, Woodard R: A questionnaire measure of sexual interest. *Arch Sex Behav* 3:357-366, 1984.
19. Kaplan L, Harder DW: The Sexual Desire Conflict Scale for Women: Construction, internal consistency, and two initial validity tests. *Psychol Rep* 68:1275-1282, 1991.
20. Nutter DE, Condrion MK: Sexual fantasy and activity patterns of females with inhibited sexual desire versus normal controls. *J Sex Marital Ther* 5:225-243, 1985.

21. Nutter DE, Condrion MK: Sexual fantasy and activity patterns of males with inhibited sexual desire and males with erectile dysfunction versus normal controls. *J Sex Marital Ther* 11:91-98, 1985.
22. Jones JC, Barlow DH: Self-reported frequency of sexual urges, fantasies and masturbatory fantasies in heterosexual males and females. *Arch Sex Behav* 19:269-279, 1990.
23. Spector IP, Carey MP: Incidence and prevalence of the sexual dysfunctions: A critical review of the empirical literature. *Arch Sex Behav* 19:389-408, 1990.
24. American Psychiatric Association: *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC, Author, 1994.
25. Lief HI: Inhibited sexual desire. *Med Aspects Hum Sex* 7:94-95, 1977.