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**THE EFFECT OF MARITAL THERAPY ON INHIBITED SEXUAL DESIRE:
AN OUTCOME STUDY**

David C. MacPhee

Thesis submitted to the School of Graduate Studies and Research
of the University of Ottawa
in partial fulfilment of the requirements
for the degree of Doctor of Philosophy
(Clinical Psychology)



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DEDICATION

This dissertation is dedicated to
my parents,
Carl and Jean MacPhee.

ABSTRACT

A total of 49 couples, in which the women were experiencing inhibited sexual desire (ISD), were randomly assigned to Emotionally Focused Therapy for Couples (EFT) or a wait-list control group condition. An additional 15 couples were recruited as a non-ISD comparison sample. The purpose of the study was to investigate the effect of marital therapy (EFT) on ISD, and examine differences between ISD and non-ISD couples. At post-treatment, EFT couples' levels of marital and overall sexual adjustment were not significantly different from those of the control group following the wait-list period. On a measure of sexual desire, however, treatment group females had post-treatment levels of sexual desire that were significantly higher than those of control group females following the wait-list period. In most areas assessed, treatment group levels of clinically significant improvement were found to be superior to those of the control group. Treatment group within-group gains from pre-treatment to post-treatment were largely maintained at follow-up. For Treatment females, better pre-treatment marital adjustment predicted better post-treatment overall sexual adjustment. The main difference found between ISD couples and non-ISD couples was that ISD couples had significantly more sexual distress. Results are discussed in light of an interpersonal conceptualization of ISD.

ACKNOWLEDGEMENTS

Several years ago, Dr. Susan Johnson and I had a conversation about marital distress and inhibited sexual desire. This research project is the end result of that discussion. Sue has been an invaluable source of guidance and encouragement throughout this project. I have been greatly enriched from having known her. I am very grateful to the members of my thesis committee: Dr. J. Ledingham, Dr V. Whiffen, and Dr. H. Edwards. Their comments during the proposal stage served to improve this project. I want to thank the therapists in this project for generously donating their excellent clinical skills. I also want to thank Dwayne Schindler for all his help as statistical consultant. Monika van der Veer was tremendous in her role as research assistant. I would like to thank David Fairweather and Diane Chappell for their work on the implementation check. I am also grateful to Dr. D Boulet for allowing this project to be conducted at CPS. I want to thank the School of Graduate Studies and Research of the University of Ottawa for contributing financially to this project. I am especially indebted to the couples who let this project into their lives. Finally, I want to thank Michelle whose love and support helped me get through the rough parts.

TABLE OF CONTENTS

	Page
ABSTRACT	i
ACKNOWLEDGEMENTS	ii
LIST OF APPENDICES	ix
LIST OF TABLES	x
INTRODUCTION	1
CHAPTER I: REVIEW OF THE LITERATURE	2
Definition and Diagnosis of ISD	2
Prevalence and Sex Ratio of ISD	5
Potential Etiological and Maintenance Factors of ISD	6
Biological Domain	6
Intrapsychic Factors	8
Interpersonal Factors	9
Empirical Findings Related to the Use of Couples Therapy in the Treatment of ISD	15
The Relationship Between Sexual and Marital Distress	15
Association of Sexuality and the Overall Relationship: Sex Therapy Treatment Outcome Studies	18
Effect of Marital Therapy on Sexual Dysfunction and Sexual Satisfaction	20
ISD: Treatment Outcome Studies	25
Differences Between ISD and Non-ISD Couples	29
Assessment of ISD	32
Summary of the Literature Review and Rationale of the Proposed Study	35

Why Would EFT Enhance Sexual Desire?	36
Hypotheses	38
Hypothesis 1a	38
Hypothesis 1b	38
Hypothesis 2a	38
Hypothesis 2b	38
Hypothesis 3a	38
Hypothesis 3b	38
Hypothesis 4	38
Hypothesis 5	39
ISD VS Non-ISD Comparison	39
CHAPTER II: METHODOLOGY	40
Research Design	40
Setting	40
Subjects	41
ISD Couples	41
Lifelong-global ISD	43
Lifelong-situational ISD	43
Non-lifelong-global ISD	43
Non-lifelong-situational ISD	43
Non-ISD Couples	46
Therapists	48
Instruments	49
Standardized Telephone Screening Procedure	49
Information and Consent Forms	49
Demographic Data Questionnaire	50
Dyadic Adjustment Scale (DAS)	50
Description of the scale	50
Scoring and cut-off points	51

The Beck Depression Inventory (BDI)	51
Description of scale	52
Symptom Checklist-90-Revised (SCL-90-R)	52
Description of measure	53
Reliability and validity	53
Scoring and cut-off scores	53
Golombok-Rust	
Inventory of Sexual Satisfaction (GRISS)	54
Description of the scale	54
Reliability	55
Validity	55
Sexual History Form (SHF)	56
Description of scale	56
Sexual Desire Towards Partner Scale (SDTPS)	57
Couples Therapy Alliance Scale (AS)	58
Description of scale	59
Summary of Outcome Variable Assessment	60
Procedure	61
ISD Couples	61
Non-ISD Couples	65
Data Analysis Procedures	66
Power Estimates	71
 CHAPTER III: DATA ANALYSIS AND RESULTS	 73
Phase I: Preliminary Analyses	73
Accuracy of the Data File	73
Outliers	74

	vi
Psychometric Properties of Selected Measures	76
GRISS	76
GRISS: Test-retest reliability	76
SDTPS	77
SDTPS: Factor analysis	77
SDTPS: Internal consistency	78
SDTPS: Test-retest reliability	79
Integrity of Treatment Implementation	79
Phase II: Group Equivalence at Pre-Treatment	81
Demographic Variables	81
Outcome Variables	81
Phase III: Statistical and Clinical Differences Between Treatment and Control Group at Post-Treatment	83
Statistical Differences	83
Continuous outcome variables	83
Non-parametric outcome variable	89
Clinical Significance at Post-Treatment	90
Phase IV: Treatment Group Statistical and Clinical Changes Across Time	91
Changes Across Time on Parametric Measures	93
Changes on Non-Parametric Measure Across Time	96
Clinical Significance at Follow-Up	98
Phase V: Predictors of Post-Treatment Score	99
ISD vs Non-ISD	100
ISD Subtype vs Non-ISD	104
Summary of Results	105

	vii
CHAPTER IV: DISCUSSION	107
Hypothesis 1a: Statistically Significant Effects of Marital Therapy on Dyadic Adjustment	108
Hypothesis 1b: Clinically Significant Effects of Marital Therapy on Dyadic Adjustment	114
Hypothesis 2a: Statistically Significant Effects of Marital Therapy on Sexual Desire	115
Hypothesis 2b: Clinically Significant Effects of Marital Therapy on Sexual Desire	117
Hypothesis 3a: Statistically Significant Effects of Marital Therapy on Sexual Adjustment	118
Hypothesis 3b: Clinically Significant Effects of Marital Therapy on Sexual Adjustment	119
Hypothesis 4: Relationship Between Initial Level of Marital Distress and Sexual Adjustment and Sexual Desire at Post-Treatment	120
Hypothesis 5: Maintenance of Improvement at Follow-Up	123
Comparisons of ISD and Non-ISD Couples	126
Summary	132
Strengths, Limitations, and Recommendations for Future Investigations	134
Strengths	134
Operationalization of ISD	134
Homogeneity of ISD sample	134
Control group	134
Treatment implementation	134
Limitations	135
Sample characteristics	135
Initial levels of dyadic adjustment	135
Therapist ratings of distress	136

	viii
Length of treatment	136
Comparisons of treatment formats	137
Assessment of ISD	137
Size of subject sample	137
REFERENCES	139
APPENDICES	153
TABLES	220

LIST OF APPENDICES

	Page
APPENDIX A Potential Biological Causes of ISD	153
APPENDIX B EFT Intervention Manual for ISD: Couples Format	156
APPENDIX C EFT Intervention Manual for ISD: Group Format	165
APPENDIX D Telephone Screening, Information, Consent and Demographic Forms	176
APPENDIX E Screening and Outcome Measures	194
APPENDIX F Use of Instruments Schedule	196
APPENDIX G Standardized Interview Schedule	199
APPENDIX H Advertisements for Recruitment	212
APPENDIX I Implementation Check Instructions, Coding Form, and Examples	214

LIST OF TABLES

TABLE		Page
1	Golombok-Rust Inventory of Sexual Satisfaction (GRISS): Test-Retest Reliability for Control Groups Subjects from Pre-treatment to End of Wait-List Period	220
2	SDTPS (Sexual Desire Toward Partner Scale) Internal Consistency Levels for Females and Males	221
3	Analysis of Variance Assessment of Pre-Treatment Group Equivalence on Continuous Demographic Variables	222
4	Median Values and Mann-Whitney U Assessment of Pre- Treatment Group Equivalence on Non-Parametric Demographic Variables	223
5	Chi-Square Assessment of Pre-Treatment Group Equivalence on Non-Parametric Demographic Variables	224
6	Analysis of Variance Assessment of Pre-Treatment Group Equivalence on Continuous Outcome Variables for Females . .	225
7	Analysis of Variance Assessment of Pre-Treatment Group Equivalence on Continuous Outcome Variables for Males	226
8	Median Values and Mann-Whitney U Assessment of Pre- Treatment Group Equivalence on Non-Parametric Outcome Variable	227
9	Means and Adjusted Means for Females on Continuous Outcome Measures at Post-Treatment	228
10	Univariate F-Tests and Roy-Bargman Stepdown F-Tests for Main Effect of Group for Females on Continuous Outcome Variables	229
11	Means and Adjusted Means for Males on Continuous Outcome Measures at Post-Treatment	230

12	Univariate F-Tests for Main Effect of Group for Males on Golombok-Rust Inventory of Sexual Satisfaction Subscales	231
13	Median Values and Mann-Whitney U Assessment of Non-Parametric Outcome Variable at Post-Treatment	232
14	Percentage of Females Who Recovered, Improved, and/or Deteriorated on Outcome Measures at Post-Treatment	233
15	Percentage of Males Who Recovered, Improved, and/or Deteriorated on Outcome Measures at Post-Treatment	234
16	Means for Female Treatment Subjects at Pre-Treatment, Post-Treatment, and Follow-Up on Continuous Outcome Measures	235
17	Trend Analysis Univariate F-Tests for Main Effect of Time for Females on Continuous Outcome Measures	236
18	Means for Male Treatment Subjects at Pre-Treatment, Post-Treatment, and Follow-Up on Continuous Outcome Measures	237
19	Trend Analysis Univariate F-Tests for Main Effect of Time for Males on Continuous Outcome Measures	238
20	Trend Analysis Univariate F-Tests for Main Effect of Time for Females on Golombok-Rust Inventory of Sexual Satisfaction Subscales	239
21	Median Values and Wilcoxon Assessment of Treatment Subjects' Non-Parametric Outcome Measure Scores from Pre-Treatment to Post-Treatment	240
22	Median Values and Wilcoxon Assessment of Treatment Subjects' Non-Parametric Outcome Measure Scores from Pre-Treatment to Follow-Up	241
23	Comparison of Percentage of Female Treatment Subjects Who Recovered, Improved, and/or Deteriorated on Outcome Measures at Post-Treatment and Follow-Up	242

24	Comparison of Percentage of Male Treatment Subjects Who Recovered, Improved, and/or Deteriorated on Outcome Measures at Post-Treatment and Follow-Up	243
25	Summary of Maintenance and Deterioration for Improved Treatment Subjects at Follow-Up	244
26	Hierarchical Multiple Regression Summary for Female Level of Sexual Desire Toward Partner at Post-Treatment, With Pre-Treatment Dyadic Adjustment and Type of ISD as Predictors	245
27	Hierarchical Multiple Regression Summary for Female Golombok-Rust Inventory of Sexual Satisfaction at Post-Treatment, With Pre-Treatment Dyadic Adjustment and Type of ISD as Predictors	246
28	Means for ISD and Non-ISD Couples on Continuous Demographic Outcome Variables	247
29	Median Values and Mann-Whitney U Assessment of ISD and Non-ISD Couples on Non-Parametric Demographic Variables ..	248
30	Chi-Square Assessment of ISD and Non-ISD Couples: Sexual Trauma in Female's Past	249
31	Means for ISD and Non-ISD Females on Continuous Outcome Measures	250
32	Univariate and Roy-Bargman Stepdown F-Tests for Main Effect of Group for ISD and Non-ISD Females on Continuous Outcome Measures	251
33	Univariate F-Tests for Main Effect of Group for ISD and Non-ISD Females on Golombok-Rust Inventory of Sexual Satisfaction Subscales	252
34	Median Values and Mann-Whitney U Assessment of ISD and Non-ISD Subjects' Non-Parametric Outcome Measure Scores ..	253
35	Means for ISD and Non-ISD Males on Continuous Outcome Measures	254

THE EFFECT OF MARITAL THERAPY ON INHIBITED SEXUAL DESIRE: AN OUTCOME STUDY

Introduction

This study investigated the effectiveness of marital therapy in the treatment of inhibited sexual desire (ISD). Emotionally Focused Therapy for Couples (EFT), was compared to a wait-list control group condition in order to examine the effects of marital therapy on sexual adjustment and sexual desire. Furthermore, this study examined whether subjects' initial level of marital adjustment and type of ISD predicted outcome with respect to overall sexual adjustment and sexual desire. Differences between ISD couples and non-ISD couples were also examined.

Recently, there has been an effort to: 1) develop interpersonal conceptualizations of ISD (e.g., Lief, 1985), 2) examine differences between ISD and non-ISD couples (e.g., Stuart, Hammond, & Pett, 1987), and 3) develop couple therapy treatment strategies for ISD (e.g., Fish, Fish, & Sprenkle, 1984). As yet, however, there have been no controlled ISD treatment outcome studies and a need for such studies has been identified (O'Carroll, 1991). The following sections provide an overview of the relevant literature in this area.

CHAPTER I

REVIEW OF THE LITERATURE

Definition and Diagnosis of ISD

There is no universally accepted definition of ISD and various terms are used to describe this condition, such as: loss of libido (Crowe, Gillan, & Golombok, 1981), low sexual desire (Schover & loPiccolo, 1982), impaired sexual interest (Hawton & Catalan, 1986), and problems of sexual desire (Zimmer, 1987). Kaplan (1977) argues that it is impossible to formulate a precise definition of ISD because exact levels of normal sexual desire are not known and sexual desire is ultimately subjective. LoPiccolo (1980) cautions that data on frequency of sexual interaction cannot be interpreted as measures of sexual desire because factors other than sexual desire may be involved in frequency, such as partner availability and engaging in sex as a means of pleasing one's partner.

Kaplan uses the term hypoactive sexual desire for cases in which the etiological diagnosis has not been made. ISD is a term she reserves for those cases in which it has been determined that desire has been inhibited by psychological factors. Her formulations have been influential in the construction of DSM-III and DSM-III-R definitions of ISD.

DSM-III defines the diagnostic criteria for ISD as:

- A. Persistent and pervasive inhibition of sexual desire. The judgement of inhibition is made by the clinician taking into account factors that affect

sexual desire such as age, sex, health, intensity and frequency of sexual desire, and the context of the individual's life. In actual practice this diagnosis will rarely be made unless the lack of desire is a source of distress to either the individual or his or her partner. Frequently this category will be used in conjunction with one or more of the other psychosexual dysfunction categories.

- B. The disturbance is not caused by organic factors (e.g., physical disorder or medication) and is not due to another Axis I disorder (APA, 1980, p. 278-279). DSM-III-R provides a slightly modified definition and uses the term hypoactive sexual desire disorder:
 - A. Persistent or reoccurring deficient or absent sexual fantasies and desire for sexual activity. The judgement of deficiency or absence is made by the clinician, taking into account factors such as age, sex, and the context of the person's life.
 - B. Occurrence not exclusively during the course of another Axis I disorder (other than a sexual dysfunction), such as a major depression (APA, 1987, p. 293). DSM-III-R notes that it should be specified whether the disorder is:
 - 1) psychogenic only or biologic, 2) lifelong or acquired, and 3) generalized or situational. Furthermore, if a V code condition such as marital problem or other interpersonal problem is the primary cause of the disturbance in functioning, hypoactive sexual desire should be diagnosed and both conditions noted.

One obvious feature of the above definition is the lack of precise criteria for what constitutes an absence or loss of desire. DSM-III emphasises the need for a report of distress either by the individual or the spouse before a diagnosis is usually made in actual practice. The diagnosis of ISD, therefore, rests largely on a subjective complaint of an absence or decline in desire, a report of distress by either the individual or spouse, and clinical judgement.

Aside from DSM-III and DSM-III-R, the Multi-Axial Descriptive System for the Sexual Dysfunctions (M-ADSSD) offers another system for the diagnosis and description of ISD (Schover, Friedman, Weiler, Heiman & LoPiccolo, 1980). Like DSM-III and DSM-III-R, the M-ADSSD also bases diagnosis of ISD on patient self-report of subjective desire for sex, in the form of either an absence of or a decline of sexual desire. It also recommends that there be a low frequency of sexual activity (less than once every two weeks), unless a higher frequency is due to factors such as partner pressure. The M-ADSSD also categorizes low sexual desire into lifelong vs. not lifelong, global vs. situational. Like DSM-III-R, the M-ADSSD system still gives a diagnosis of low sexual desire even if explanatory factors such as marital conflict are present.

For the purposes of the present study an operational definition of ISD was developed which incorporated the essential elements of existing definitions of ISD; 1) a self-report of an absence or decline in sexual desire, 2) the presence of distress in the symptomatic individual or the partner, and 3) the role of clinical judgement.

In the present study ISD was defined as: a self-report from the female member of the couple of a total absence of, or decline in, her level of sexual desire. In addition, the total absence of, or decline in, level of sexual desire, was distressing to both the symptomatic individual and her partner. Clinical subtype of ISD (e.g., lifelong-global ISD) was noted, but all subtypes were included under the general definition of ISD. Furthermore, there was a report of a low level of sexual activity (less than once every two weeks), unless a higher frequency was reported by the female partner as due to reasons other than a desire to engage in sexual activity (e.g., pressure from spouse, fear of losing spouse, guilt, sense of duty, an attempt not to hurt spouse's feelings). Lastly, the total absence of, or decline in, the female member's sexual desire was of at least six months duration. Other inclusion/ exclusion criteria, such as certain medical disorders or medication use, are presented in the Methodology section. This definition was designed to construct a homogeneous subject population whose symptomology and distress was sufficient to satisfy existing definitions of ISD.

Prevalence and Sex Ratio of ISD

One of the reasons why ISD has attracted such attention is the prevalence of this disorder. Although precise incidence of ISD in the general population is unknown, ISD is considered to be the most common complaint among couples seeking sex therapy (Stewart, Hammond, & Pett, 1987). Surveys of sex therapy centres have reported that up to 49% of female clients and 16% of male clients

reported ISD, either alone or in combination with another sexual dysfunction (Warner & Bancroft, 1987). Most studies have indicated that the diagnosis is usually more common among women than men, however, there may be an increasing number of men reporting ISD (Schover & LoPiccolo, 1982). In the present study only couples in which the female member reported ISD were recruited as subjects. This decision was made in order to construct a homogeneous subject population that reflected the most commonly encountered clinical situation.

Potential Etiological and Maintenance Factors of ISD

The following sections review the potential biological, intrapsychic, and interpersonal factors involved in the etiology and maintenance of ISD. The focus of this research project was the effect of marital therapy in the treatment of ISD, and therefore the relationship between ISD and disturbances in the interpersonal domain of sexual functioning will be emphasized.

Biological Domain

With respect to reproductive hormones, the evidence related to whether estrogens are necessary or important for maintaining normal levels of sexual interest or enjoyment in women is largely inconclusive (Bancroft, 1984). Riley, Riley and Brown (1986) argue that in some cases of lowered sexual desire in women low prolactin levels may be responsible and prolactin levels should be assessed in cases in which traditional therapy fails. Schreiner-Engel, Schiavi,

White, and Ghizzani (1989) found no evidence that reproductive hormones were important determinants of individual differences in female level of sexual desire. Overall, Bancroft (1984) states that, as in the case of men, psychological factors may override hormonal effects on female sexual desire.

Aging, pregnancy, and lactation are three other physiological factors that may effect sexual desire (Schiavi, 1985). Warner and Bancroft (1987) suggest that age distributions for ISD in men and women indicate that physical factors are more relevant for men. Schiavi (1985) states that any medical condition involving distress, pain, and generalized weakness can influence sexual desire and sexual activity. Pharmacological agents such as endocrine drugs, antihypertensives, psychoactive drugs, antihistamines, and drug abuse may also have a negative effect sexual desire. Schiavi (1985) states that one of the well recognized symptoms of even subclinical depression is loss of sexual desire, and that over 60% of depressed patients have been found to have impaired sexual interest. Kaplan (1979) also notes that depression can be an etiological and maintenance factor in ISD.

Although our understanding of how physiological factors can effect sexual desire is incomplete, it appears that there are a number of avenues through which the biological state of the individual can have a negative impact upon sexual desire. The following section will review intrapsychic factors which may cause or maintain ISD.

Intrapsychic Factors

Theorists have suggested a number of intrapsychic factors that may be related to the development of ISD. Freud postulated that the suppression of libido and aversion to heterosexual sex were related to unresolved Oedipal conflicts and unconscious homosexual desires (LoPiccolo, 1980). More recently, other theorists discussed the potential etiological role of a variety of other intrapsychic factors such as 1) automatic anti-sexual thoughts and negative sexual self concept (Lapointe and Gillespie, 1979), 2) conditions for 'good' sex not being met (Bass, 1985), 3) unconscious conflicts involving guilt and/or fears concerning intimacy (Kaplan, 1979; Lief, 1985), 4) immediate intrapsychic factors, such as involuntary and unconscious but active suppression of sexual desire through negative thoughts (Kaplan, 1979), 5) difficulties in object relations (Scharff, 1988), and 6) child sexual abuse (Maltz, 1988). Intrapsychic explanations of ISD recognize an identified patient in the presenting couple and attend primarily to changing the identified patient. Biological and intrapsychic factors have therefore been identified as having the potential to cause or maintain ISD. It is difficult to empirically assess factors such as subjects' level of unconscious conflict around sex, but two quantifiable intrapsychic factors were assessed: 1) level of depressive symptomatology, and 2) global level of psychological distress. These variables were assessed in order to 1) establish a greater understanding of intrapsychic symptom level of intensity in these areas at pre-treatment in the sample of ISD couples, 2) assess the effect of marital therapy on these variables, and 3)

investigate differences between ISD and Non-ISD couples in these areas.

Interpersonal conceptualizations of ISD, as will be reviewed next, focus on the underlying feelings and interpersonal patterns in the couple's relationship which cause or maintain ISD.

Interpersonal Factors

Sexuality has been incorporated into broad interpersonal contexts, such as models of romantic love, adult attachment and couple intimacy (e.g., Clinebell & Clinebell, 1970; Sternberg, 1988; & Shaver, Hazen, & Bradshaw, 1988). The commonly held view in this area is that the overall relationship has the power to influence sexual activity, and the quality of sexual activity can exert an influence on the total relationship (Sager, 1976; & Stuart & Hammond, 1980). A number of authors have described in detail the ways in which marital discord can negatively influence sexual interaction (e.g., Heiman, 1986; Jacobson & Margolin, 1979; & Woody & Woody, 1973). Greenberg and Johnson (1988) have proposed that, unless there is an organic basis for a sexual disorder, sexual interaction usually reflects the rules and structure of the relationship in general. Sexual activity can be used as an arena for; the playing out of power struggles, expressing a lack of trust, spoiling the other partner's sexual pleasure due to hostility, expressing anger, expressing contractual problems, withholding support, and

expressing ambivalence about intimacy (Kaplan, 1983). The following section will focus specifically on interpersonal conceptualizations of ISD.

The role of the marital system in etiology, maintenance, and treatment has been emphasized more in the ISD literature than it has for any other sexual dysfunction. Increasingly, clinicians have moved toward interpersonal conceptualizations of ISD, and have developed systemic treatment strategies. Lief (1988) suggested that most clinicians agree that the major cause of ISD is marital conflict. Kaplan (1985) proposed that ISD can be caused by either physiological factors, intrapsychic sexual conflicts, pathological interpersonal interactions with the sexual partner, or a mixture of these factors. Kaplan (1979) integrated interpersonal issues into broadly based sex therapy treatment strategies, whereas others have developed purer systemic conceptualizations of ISD treatment (e.g., Fish, Fish, & Sprenkle, 1984).

Theorists have focused on a number of relationship issues in the development and maintenance of ISD. For many women, ISD may reflect a larger pattern of general marital conflict (Schover, 1986; & Stuart et al., 1986). Issues such as the expectation that affection must lead to intercourse, unsatisfactory ability to listen and resolve conflicts, and lack of emotional closeness may deprive women of the original stimulants for sexual desire (Stewart et al., 1986). The role of anger in the development and maintenance of ISD has been especially emphasized. It has been argued that anger toward one's partner, and anger related issues such as power struggles and disappointments, are prevalent causes of ISD. Angry

partners lack the trust and vulnerability required for sexual abandonment (Kaplan,1979). It therefore becomes safer to block sexual feelings. Kaplan (1979) proposed that anger in the couple must be at least partially resolved before sexual feeling can emerge. Low sexual desire may also be a way to maintain an emotionally safe distance from the partner when intimacy is too threatening (Stuart et al., 1987; & Zilbergeld & Ellison,1980). ISD can also function to create needed boundaries around an individual's body, and be used as way to maintain the status quo in a relationship (Fish et al., 1984).

Kaplan (1979) described how the common reaction of the nonsymptomatic spouse can maintain ISD. Many partners feel threatened and rejected by their spouse's lack of desire. These feelings can lead to a destructive cycle of pressure to have sex from one spouse and increased reluctance from the other. Kaplan (1979) states that such a cycle can cause ISD and can aggravate the condition when it already exists in a mild form. Therapists need, therefore, to deal with such interactional patterns before treatment of the primary problem becomes possible (Kaplan, 1979).

Thus far, this discussion of potential relationship factors has referred to ISD as if it were a unitary concept. In fact, as has been mentioned previously, there are a variety of subtypes of ISD. The subtype that has been most closely linked to interpersonal distress is nonlifelong situational ISD, in which the loss of desire is specific to one's partner (e.g., Kaplan, 1979). In this condition, the symptomology strongly suggests that the quality of the marital relationship is causing, or at least

maintaining, the loss of desire toward one's partner. This does not imply, however, that couple distress underlies all cases of partner specific ISD. Nor does it mean that other subtypes of ISD are unrelated to relationship factors. For example, for many individuals sexual desire is focused almost exclusively on the partner, and therefore a loss of desire towards the partner may be reflected in symptoms reflective of a global loss of sexual desire (Lief, 1988). Some individuals seem to give up their interest in sex, such as fantasies about other partners, when they have lost their sexual desire for their primary partner. Hence, a global loss of sexual desire may be the broader consequence of a loss of desire for one's partner. Friedman and Hogan (1985) argue against linking the different subtypes of ISD with specific etiological factors. They suggest that etiological factors can combine in complex ways to result in different patterns of ISD. Therefore, although partner specific ISD is the subtype most closely linked to underlying relationship distress, other forms of ISD may also have an interpersonal component with respect to the etiology or maintenance of the disorder.

In addition to outlining the potential of relationship factors in the development of ISD, theorists have also described how marital therapy may be useful in treatment. Some theorists view the role of marital therapy as limited to certain cases of ISD. Kaplan (1979) argues, on the basis of clinical experience of sex therapy treatment failures, that ISD patients may benefit from marital and/or individual therapy. She states that if the sexual symptom is a smoke screen for a

poor relationship, and relationship issues present an obstacle to treatment, the focus of the intervention shifts to the marital system.

Others contend that low sexual desire, in general, can rarely be treated successfully as a sexual problem that is isolated from the context of the marital relationship (Fish, Fish, & Sprenkle, 1984; Stuart et al., 1987; Schover, 1986; Talmadge & Talmadge, 1986; & Zilbergeld & Ellison, 1980). Some proponents of this view have recommended the integration of marital therapy into the sex therapy treatment of partner-specific ISD (e.g., Schover, 1986). Others have recommended treatment approaches focused on the marital relationship.

Specifically, theorists have recommended systemic treatment approaches to ISD. Stuart et al. (1987) suggest that conjoint sex therapy may too often become a guise for individual therapy aimed at solving the identified patient's 'problem', and suggest that systemic treatment approaches may be useful. Talmadge and Talmadge (1986) state that in the past insufficient attention has been given to the marital system, especially the emotional relatedness of the couple, in the diagnosis and treatment of ISD. They suggest treatment derived from systems theory and experiential and gestalt psychotherapy. The form of marital therapy used in this study (EFT) is derived from a systemic/experiential perspective. Once organicity is ruled out, these authors suggest that the symptom of ISD be reframed as adaptive, in that one partner carries the symptom for the relationship, and emphasis be given to how the relationship supports the symptom. Often hostility needs to be uncovered and openly expressed between the partners. In order to

facilitate this process, anger is often reframed as deep hurt, unmet need, fear, and/or anxiety. Bagarozzi (1987) argues that one reason why behavioral sex therapy not been largely successful in the treatment of ISD is the failure to acknowledge the symbolic significance of sexual exchanges, and that such symbolic significance needs to be addressed in therapy. Fish, Fish, and Sprenkle (1984) argue that disorders of sexual desire must be treated not only as part of the human sexual response cycle, but also as part of a larger relationship system. They conceptualize disorders of sexual desire from an interpersonal perspective and suggest that ISD can be treated most parsimoniously within that context. They argue that framing ISD as an individual problem prevents treatment focus on the role ISD plays in perpetuating a couples' overall interactive patterns or system. Regas and Sprenkle (1984) suggest that ISD may be amenable to treatment using the brief systems-behavioral approach of functional family therapy in which the focus is shifted from the symptomatic partner and on to the relationship or patterns that maintain the symptom.

In summary, theorists have outlined a variety of ways that relationship issues can cause and/or maintain ISD. A number of treatment approaches focusing on the couple's overall relationship have been suggested.

Empirical Findings Related to the Use of Couples

Therapy in the Treatment of ISD

Beyond reports of case studies, there have been no attempts to establish the clinical effectiveness of couples therapy in the treatment of ISD. Such studies have been called for, but have not yet been conducted. Therefore, it is impossible to present a body of literature related specifically to the efficacy of couples therapy in the treatment of ISD. There are, however, related areas of empirical findings that serve to outline the potential usefulness of couples therapy in the treatment of this disorder, such as 1) the co-incidence of marital and sexual distress, 2) the effectiveness of sex therapy of and/or marital therapy with sexually distressed couples, 3) the effectiveness of marital therapy alone in the treatment of sexual problems, 4) the effectiveness of sex therapy in the treatment of ISD, and 5) the relationship between ISD and marital distress in women.

The Relationship Between Sexual and Marital Distress

Marital discord and sexual dysfunction in couples are usually not found in isolation from each other. Clinicians have argued that the majority of couples who seek professional help are usually found to evidence both these forms of disturbance (Kaplan, 1974; Sager, 1976). In addition to the clinical finding that sexual and marital distress are often found together, a number of studies have

demonstrated that a happy marriage and good sexual functioning commonly co-occur. For example, frequency of intercourse has been found to discriminate between happy and unhappy couples, in that happy couples engaged in sex more often (Birchler & Webb, 1977). In addition, sexual satisfaction has been found to correlate highly and positively with the quality of the marital relationship (Schenk, Pfrang, & Rausche, 1983).

A number of studies have demonstrated that sexually distressed couples commonly have relationship deficits. For example, sexually distressed and maritally distressed couples have been found to have similar behavioral deficits in communication (Zimmer's, 1983). In addition, and 42% of couples seeking sex therapy have been characterized as having conflict-centred or passive-constrained relationships rather than affectionate-congenial relationships (Roffe & Britt, 1981). Furthermore, Snyder and Berg (1983a) examined the determinants of sexual dissatisfaction in sexually distressed couples, and found that the incidence of specific sexual dysfunctions was considerably lower than more general interpersonal difficulties within the marriage. These studies serve to illustrate that sexual and marital problems are often found together, that sexual and marital happiness appears to be linked, and that sex therapy clients generally evidence considerable interpersonal distress.

Results in this area have, however, not always been consistent. Heiman, Gladue, and Roberts (1986) found that the variables of marital affection and communication did not discriminate between sexually functional and sexually

dysfunctional married couples. Furthermore, Hartman (1980) found that sexually distressed couples were rated as having more positive structured interactions than either couples experiencing marital distress or couples experiencing both sexual and marital distress. It should be noted that there were only five couples in each of Hartman's (1980) experimental groups. These findings suggest that sexual disfunction is not necessarily accompanied by relationship deficits. In addition, Frank, Anderson and Kupfer (1976) found that although couples seeking sex therapy and those seeking marital therapy had comparable levels of sexual and marital problems, sex therapy couples were more likely than the marital therapy couples to rate their marriage as happy or very happy, and over one quarter of the marital therapy couples rated their sex lives as more satisfying than the rest of their marriage. Berg and Snyder (1981) found similar results. These findings suggest that couples entering either sex therapy or marital therapy may have comparable levels of distress in both domains, but view one as being the primary problem.

The descriptive and correlational nature of research in this area prevents firm conclusions from being made concerning the association of sex and the overall relationship. In general, findings in this area have demonstrated that, although sexual and marital distress can occur in isolation, there is usually a great deal of overlap between the two. The empirical evidence, at least indirectly, supports the clinical impression that marital discord is often related to problematic sexual functioning. In some cases sexual distress may 'spill over' into the total

relationship, whereas in other cases interpersonal conflict in the overall relationship may be impinging negatively on what Sager (1976) refers to as the sexual strand in the cable of bonding.

Association of Sexuality and the Overall Relationship: Sex Therapy Treatment Outcome Studies

One question addressed in this study was the ability of pretreatment levels of marital functioning to predict outcome. In order to shed some light on this issue, it is useful to examine the results of sex therapy treatment outcome studies that have examined how subjects' level of marital adjustment effects outcome. A number of studies have found that general marital distress and/or specific areas of relationship discord predicted poorer outcome for sexually distressed couples receiving sex therapy (Abramowitz & Sewell, 1980; Hawton & Catalan, 1986; Hawton, Catalan, Martin & Fagg, 1986; Lansky and Davenport, 1975; Lieblum, Rosen, & Pierce, 1976; Mathews, Bancroft, Whitehead, Hackman, Julier, Bancroft, Gath, & Shaw, 1976; & Snyder & Berg, 1983). Studies using a combination of sex therapy and pharmacological treatment for couples in which the woman had little sexual interest or enjoyment found similar results (Mathews, 1983; & Whitehead & Mathews, 1986). The authors suggested that with this sexual problem, relationship factors may reflect greater general pathology or aspects of etiology that need to be reversed before treatment can be successful (Mathews, 1976). Alternative treatment strategies such as marital therapy have been suggested (Whitehead & Mathews, 1986). Hawton and Catalan (1986) agree that the quality

of the general relationship may be an especially important predictor when the sexual problem is low sexual interest in women.

It would appear that marital discord is predictive of generally poorer outcome, even if judged a priori to be secondary to the sexual problem (Whitehead and Mathews, 1986). Research in this area has also highlighted the importance of the quality of the general relationship in couples in which the woman has an impairment of sexual interest (e.g., Hawton & Catalan 1986). One could argue that in some cases marital conflict may simply prevent the couple from engaging in the sex therapy assignments. It is also possible to argue that for some such couples sex therapy fails to address the underlying relationship discord which causes or maintains the sexual problem. It is possible that these findings would be reversed when sexual problems are treated through a marital therapy approach. In a marital therapy approach to sexual problems, those couples with higher initial levels of marital distress may have better treatment outcome than couples with lower initial levels of marital distress because the underlying relationship issues that may be impinging on sexual interaction would be addressed directly in therapy. This issue will again be addressed in the following section which reviews the effectiveness of marital therapy in the treatment of sexual problems.

Effect of Marital Therapy on Sexual Dysfunction and Sexual Satisfaction

A number of studies have examined the effect of marital therapy on sexual satisfaction and sexual problems. These studies fall into three main groupings: 1) the effect of adding a marital therapy component to sex therapy; 2) direct comparisons of the effectiveness of sex therapy and marital therapy; and 3) the effectiveness of marital therapy alone on sexual satisfaction and the resolution of sexual problems.

Results of studies examining whether relationship enhancing interventions improve the effectiveness of sex therapy have been mixed. Some researchers have found sex therapy and relationship enhancement therapy to be superior to sex therapy alone in the treatment of couples with heterogeneous sexual problems (Cookerly & McClaren, 1982), whereas others have not (Perreault, Wright, & Mathews, 1979). Perreault, Wright, and Mathews (1979), however, found that couples with both marital and sexual distress had superior outcomes with the combined treatment approach.

Other researchers have directly compared the effectiveness of sex therapy and relationship oriented interventions in the treatment of sexual problems. In one such study relationship oriented interventions were found to be useful, but sex therapy was superior (Everaerd & Dekker, 1981). It is possible to argue, however, that the relationship oriented interventions used, communication training, did not constitute full marital therapy. Crowe, Gillan, and Golombok (1981)

found sex and marital therapy to be equally effective in the treatment of sexual problems.

Researchers have also used cross-over treatment designs to assess the comparative effectiveness of sex and marital therapy in the treatment of sexual dysfunctions. In one such study Hartman and Daly (1983) found that when the results were collapsed across the two phases of treatment, sex therapy was found to have produced greater overall improvements in sexual satisfaction. The superiority of sex therapy was more evident in couples who began therapy with higher levels of marital harmony. It was also found that those couples who had both sexual dysfunction and marital discord did not show improvement in sexual functioning until marital problems were addressed. Limitations of this study included the small sample size and the use of a group treatment format. In addition, the marital therapy focused only on communications skills and problem solving, and thus may not adequately reflect the full content and process of marital therapy.

In a similar study, Zimmer (1987) found very different results. Both sex and marital therapy treatment conditions led to significant improvements in sexual functioning, as compared to a control group. Significant positive changes were found after the initial marital therapy phase, with respect to both marital adjustment and sexuality, and follow-up data were superior for the combined marital and sex therapy treatment. Furthermore, although little generalization was found from sex therapy to marital satisfaction, sexual satisfaction increased

markedly after only nine sessions of marital therapy. Marital therapy resulted in improvement in both sexual and marital satisfaction. The contradictory findings of Hartman and Daly (1983) and Zimmer (1987) may be due in part to the subject populations. Zimmer (1987) described his couples as seriously distressed both sexually and maritally. As has been discussed earlier, marital distress generally predicts poorer outcome in sex therapy. Zimmer's couples may have more closely resembled those couples in Hartman and Daly's subject sample (1983) who experienced both sexual and marital distress and only responded to treatment after the marital therapy phase. In addition, the marital therapy used in Zimmer's (1987) study was also more comprehensive than that of Hartman and Daly (1983).

Researchers have also examined the effectiveness of marital therapy alone on sexual satisfaction and the resolution of sexual problems. O'Leary and Arias (1983) conducted an archival study of the influence of marital therapy on sexual satisfaction. All of the couples presented for marital therapy, but 37% of the husbands and 42% of the wives felt dissatisfied with the quality or frequency of their sexual interactions. Behavioral marital therapy was associated with highly significant increases in marital satisfaction and sexual satisfaction. Wives experienced significant positive changes in all aspects of the sexual relationship which were assessed, except for desired frequency of intercourse. Couples with loss of sexual desire, however, were excluded from this study. Husbands demonstrated significant positive changes only in their level of overall satisfaction with the sexual

relationship. The authors concluded that marital therapy led to significant improvements in reports of sexual satisfaction (O'Leary & Arias, 1983). In addition, they point out that increases in sexual satisfaction occurred whether or not sex was presented as a problem or treated as a problem. This study did not, however, address how focusing on the relationship will affect couples seeking treatment for specific sexual dysfunctions such as ISD.

Bennun, Rust, and Golombok (1985) administered behavioral marital therapy to 20 couples referred for marital problems and for whom sexual functioning was not the primary referral problem. Pre-therapy and post-therapy comparisons revealed that marital therapy led to improved levels of sexual adjustment in both male and female partners. Of note were increases of frequency of sexual activity, male and female sexual satisfaction, and sexual communication. The authors note, however, that the study did not utilize a control group. Furthermore, they point out that although marital therapy had a significant effect on general sexual functioning, it did little to improve specific sexual dysfunctions. This study did not provide data on the types of sexual dysfunctions experienced by subjects, and did not specifically assess sexual desire.

In conclusion, results in this area have been mixed and subject to a number of methodological limitations. Some studies have found that, although both types of therapy were useful, sex therapy was superior to marital therapy (Everead & Dekker, 1975; Hartman & Daly, 1983), whereas others have found equal levels of effectiveness (Crowe et al., 1981), or have found marital therapy to be superior to

sex therapy (Zimmer, 1987). O'Leary and Arias (1983) and Bennun et al. (1985) have shown that marital therapy alone increases sexual satisfaction, but the subject populations consisted of couples who presented with global relationship distress and not for specific sexual dysfunctions.

These studies are subject to a number of methodological limitations such as small sample size, and with the exception of Zimmer (1987), lack of a control group comparison. As is often the case in this area of research, there were no separate analyses made on the possible differential effects of treatment on various forms of sexual dysfunction, such as ISD. In general, it appears that marital therapy can have a positive impact on sexual satisfaction and, to some extent, specific sexual dysfunctions. The results also suggest that marital therapy is most effective in treating sexual problems when the couple is experiencing both marital and sexual distress (Hartman & Daly, 1983; Zimmer, 1987).

Thus far, studies examining the effectiveness of marital therapy alone have used subject populations who presented primarily for marital distress and have a mixture of sexual problems. In the present study subjects' presenting complaint was a specific sexual dysfunction, ISD. Researchers (e.g. O'Carroll, 1991; Kinder & Blakney, 1977; & Hawton & Catalan, 1986) have called for studies which examine the effect of treatment on one specific type of sexual dysfunction, rather than more studies with heterogeneous subject populations. Furthermore, almost all studies examining the effect of marital therapy in the treatment of sexual problems have used a behavioral marital therapy approach. In the present study,

an experiential-systems approach was used, thus expanding the range of approaches used in this area.

The clinical and research literature would suggest that marital therapy may be a very useful treatment for ISD. However, the symptom of low frequency of sexual intercourse has been shown to be a poor predictor of outcome in behavioral marital therapy and communication skills training (Hahlweg, Schindler, Revenstorf, & Brenglemann, 1984). However, Hahlweg et al. (1984) gave no special attention to the symptom of low frequency of intercourse, and this symptom alone does not necessarily reflect a diagnosis of ISD.

ISD: Treatment Outcome Studies

Given the level of interest that has been displayed in the topic of ISD (such as numerous books, chapters, conceptual articles, etc), it is surprising that there have been so few treatment outcome studies that have addressed this specific sexual disorder. Kilmann (1986) comments that a lack of controlled research prevents any definitive statements from being made about treatment effectiveness for several sexual disorders, including desire problems. All of the treatment outcome studies that do exist in the area of ISD have assessed the effectiveness of sex therapy, or a combination of sex therapy and pharmacological treatment. With respect to the effectiveness of sex therapy in the treatment of ISD, many authors have commented on the intractability of ISD (e.g. Zilbergeld & Ellison, 1981) and the poor prognosis associated with ISD when using a sex therapy

treatment approach (e.g., Crowe & Ridely, 1986; Kaplan, 1979; Lapointe & Gillespie, 1979; Lopiccolo, 1980; Riley et al., 1986; & Talmadge & Talmadge, 1986). For example, Kaplan (1979) reported that the prognosis for ISD using directive sex therapy was substantially poorer than that for orgasm and excitement phase disorders. In addition, Lief (1977) argued that of all sexual dysfunctions, ISD was the most difficult to treat, and the results were rarely spectacular. Unfortunately, there has only been one outcome study that has specifically examined the effectiveness of sex therapy in the treatment of ISD (Schover & Lopiccolo, 1982). There are, however, other studies which, although lacking rigorous empirical controls, do shed some light on the question of how effective sex therapy is in the treatment of ISD.

Most controlled studies examining the general effectiveness of sex therapy combine the results for all clinical groups, and it is impossible to assess success rates for specific dysfunctions (e.g., Zimmer, 1987). Hawton, Catalan, Martin, and Fag (1986), however, did perform an analysis on those couples in which the woman suffered from impaired sexual interest. They found that after an average of 15 sessions, this disorder was resolved in only 19% of all cases, and largely resolved with some difficulty remaining in 37% of all cases. The authors describe this success rate as modest and note that such couples were generally rated as having the poorest overall marital relationships of any diagnostic group. They suggested that marital therapy might be a more suitable treatment for such clients. In their assessment of the long-term follow-up effectiveness of sex therapy,

Hawton and Catalan (1986) described long-term follow-up outcome as very poor for couples who sought treatment due to the female partners' impaired sexual interest.

A series of studies have examined the effectiveness of sex therapy in the treatment of sexually unresponsive women. Sexual unresponsiveness, however, is a term used to describe a lack of sexual arousal, enjoyment, or interest that involves more than simply a difficulty with orgasm (Mathews, Bancroft, Whitehead, Hackman, Julier, Bancroft, Gath, & Shaw, 1976). Therefore, these studies include subjects whose sexual problems involve more than just low sexual interest. Mathews et al. (1976) reported relatively minor increases in post-sex therapy levels of sexual interest in sexually unresponsive women. Mathews, Whitehead, and Kellett (1983) examined the effect of combining either testosterone or a placebo to sex therapy and found that sexually unresponsive women showed a significant increase in sexual interest post-therapy, however, they describe the overall response to therapy as incomplete. In a similar study, Whitehead, Mathews, and Ramage (1987) found that at both post-treatment and three month follow-up, sex therapy, with or without drug treatment, resulted in significant increases in the sexual relationship of couples in which the woman complained of sexual unresponsiveness. Change in level of sexual interest were not specifically reported by the authors. A major limitation of these studies is that wait-list control groups were not used.

As noted previously, Schover and LoPiccolo (1982) have conducted the only sex therapy outcome study to focus exclusively on ISD. They used archival data from the sex therapy center at Stony Brook to determine the effectiveness of treating ISD with sex therapy. Couples with severe marital conflict or individual psychopathology were excluded.

Level of sexual desire was not specifically assessed as part of the outcome variables. The outcome variables assessed included: 1) marital satisfaction; 2) sexual satisfaction; 3) frequency of sexual activity. Almost without exception, there was significant improvement on all measures from pre-therapy to post-therapy assessment periods. There was no significantly different response to therapy with respect to whether the ISD was life-long vs. not life-long, or global vs. situational, or whether the male or female presented with ISD. The authors judged these results to be comparable to those obtained for arousal or orgasm dysfunctions. Schover and loPiccolo (1982) point out, however, that the crucial question is the clinical significance of the results. They reported that at follow-up the couples evidenced average marital satisfaction, were slightly to moderately satisfied with sexual activity, and frequency of sex was once or twice a week. The authors stated that this represented a respectable but less than optimal decrease in distress. This study did not utilize a control group comparison.

The lack of controlled outcome studies in this area makes it difficult to accurately assess the effectiveness of treatments for ISD. Added to this is the constraint that all studies in this area have examined the effectiveness of only sex

therapy, or a combination of sex therapy and drugs, in the treatment of ISD. It appears, however, that sex therapy may in some cases lead to statistically significant positive outcomes in the treatment of ISD, but that the results are often disappointing. Given the current findings in this area, it can be argued that sex therapy's level of success with ISD is less than optimal. Although alternative treatment strategies for ISD, such as marital therapy have been proposed (e.g. Stewart, Hammond & Pett, 1987), only case study reports of the effectiveness of marital therapy in the treatment of ISD have been published. The results of such case studies have been promising, and controlled outcome studies examining the effectiveness of marital therapy in the treatment of ISD have been called for (e.g. Regas & Sprenkle, 1984).

Differences Between ISD and Non-ISD Couples

The present study made exploratory comparisons between ISD and non-ISD couples. Only a limited number of studies have examined this issue. Stuart, Hammond, Croydon, and Pett (1986) and Stuart, Hammond, and Pett (1987) examined differences in a number of areas between couples in which the woman was diagnosed as having ISD, and couples receiving sex therapy, in which the woman did not have ISD. The diagnosis of ISD was made on the basis of clinical judgement. Stuart et al. (1986) found no differences between those receiving a diagnosis of ISD ($n=59$) and those not receiving a diagnosis of ISD ($n=31$) on the Minnesota Multiphasic Personality Inventory (MMPI). In addition, Stewart et al.

(1987), like Schreiner-Engel et al. (1989), found no hormonal differences between these two groups. In addition, no significant difference was found between the two groups' frequency of sexual intercourse. The non-ISD group were more likely to engage in sex to enjoy themselves (81%) and experience emotional closeness during sex (97%). The women in the ISD group reported accepting sexual invitations to avoid hurting their partner's feelings (68%) and due to a sense of duty (56%).

The most striking differences between the two groups were found in regard to the quality of their marital relationships. The marital adjustment of the women and spouses in the ISD group, as measured by the Dyadic Adjustment Scale (DAS), was significantly lower than that of the non-ISD group. These results can not be used to determine causality, but Stuart et al. (1987) speculated that, although individual variables are important, marital dissatisfaction may lead a number of women to lose their sexual interest and their original basis for sexual desire, and that it may be useful to conceptualize ISD in interactional terms when planning treatment strategies, and modify the couple's current interactional style. These research findings add empirical support to the clinical descriptions of couples with ISD (i.e. lower marital adjustment, on average, than most married couples and other couples with sexual dysfunctions). These results, indirectly, point to the potential usefulness of a marital therapy approach to the treatment of ISD.

Schreiner-Engel and Schiavi (1986) compared 24 women with ISD to 15 women free of any sexual or psychological difficulties. Diagnosis of ISD was based on a reported lack of sexual desire, and sexual frequency of twice a month or less for at least the past six months. No significant differences were found between the two groups with respect to current level of depression or global psychological distress. ISD women, however were found to have a higher rate of affective illness in their past and more severe premenstrual symptoms.

Research in this area has compared ISD women to: 1) women free of any sexual and psychological difficulties, and 2) women free of ISD, but part of a couple receiving sex therapy for other sexual problems. In previous studies, reports of desire disorders and ISD symptomology were absent in non-ISD couples. In the present study, ISD couples were compared to couples in which the women and/or couple were receiving psychotherapy for a concern other than ISD. The confound of receiving therapy was taken into account as it was by Stuart et al.'s (1987) study. The type of therapy, however, was expanded beyond Stuart et al.'s (1987) criteria of sex therapy. In addition, subjects were not excluded on the basis of ISD symptoms. This permitted an investigation of variables that distinguish between women receiving treatment for ISD and those seeking treatment for other psychological concerns. In addition, comparisons were made between ISD and non-ISD male partners on measures other than simply marital adjustment. Overall, the non-ISD sample used in this study added a new comparison base to the existing literature. The present sample permitted

investigation of basic questions related to the underlying nature of ISD, such as whether women in treatment for ISD have higher levels of sexual distress and sexual desire symptomology than women in treatment for other concerns. Nonsignificant findings in this area would have questioned the usefulness of ISD as a distinct diagnostic entity.

Assessment of ISD

An important issue for the present study was the question of how treatment outcome in cases of ISD should be assessed. As yet there are no measures which focus specifically on sexual desire, nor any subscale of a larger measure that is a direct measure of sexual desire (J. LoPiccolo, personal communication, Sept 12, 1990; L. R. Schover, personal communication, Sept 12, 1990). In light of this absence, a variety of different outcome assessment strategies have been used. One common method has been to use (pre-treatment, post-treatment, and follow-up) couple ratings of level of sexual desire along five-point face valid scales (e.g., Mathews et al., 1983). Researchers have also assessed changes in sexual desire by comparing subjects' responses over time on specific items, such as those concerning desired frequency of sexual intercourse, on measures of sexual interaction (e.g. O'leary & Arias, 1983). Other researchers have used items from questionnaires which tap the behavioral sequelae related to ISD. For example, Schover and LoPiccolo (1982) drew upon several items of the Sexual History

Form (SHF) as indicators of treatment effectiveness for ISD, such as frequency of sexual intercourse, and sexual satisfaction.

Assessing changes in the couple's presenting complaint is, of course, important. At the same time, however, perhaps an even more useful outcome measure is the couple's overall level of sexual adjustment and satisfaction (J. LoPiccolo, personal communication, September 12, 1990; L. R. Schover, personal communication, September 12, 1990). Examining the effect of treatment on one symptom or aspect of functioning (e.g., woman's level of sexual desire) in isolation of the couple's overall sexual satisfaction would be an extremely limited strategy. J. LoPiccolo (personal communication, September 12, 1990) notes that overall couple sexual adjustment and satisfaction is an especially important outcome variables for ISD due to our limited ability to assess sexual desire directly and the often encountered partner complaint aspect of ISD. In addition, the partner's level of sexual satisfaction and ratings of frequency of sex are especially important outcome variables (J. LoPiccolo, personal communication, Sept. 12, 1990). In general, measures of overall sexual satisfaction and adjustment are commonly used as an important outcome measure in the treatment of sexual problems (e.g. Bennun, Rust, and Golombok (1985). In fact, J. Rust (personal communication, Sept 12, 1990) reports that the general satisfaction scales of the Golombok Rust Inventory of Sexual Satisfaction (GRISS) are very sensitive to changes in sexual interest, and the inventory includes a female sexual avoidance subscale which,

although not a pure measure of sexual desire, can be used as an approximation of sexual desire (J. Rust, personal communication, Sept. 12, 1990).

Since there is no universally accepted way of assessing the effectiveness of treatments for ISD, all of the above methods appear to be useful in the construction of a multi-dimensional assessment approach. Face valid measures of sexual desire appear to be very useful and practical devices. Examining items on standardized measures of sexual satisfaction and sexual interaction which specifically address level of sexual desire (such as the SHF) is also essential. Assessing changes in ISD related behaviours, such as frequency of sexual intercourse, is another worthwhile strategy (e.g., GRISS subscale). Overall sexual adjustment and satisfaction of both members of the couple, as discussed, is perhaps the most important outcome measure. Those researchers in the area who were consulted, approved of this multi-dimensional approach. This multi-dimensional approach was achieved through repeated administrations of face valid measures, the SHF, and the GRISS.

LoPiccolo-Schover (1980) listed a very large variety of factors that should ideally be assessed in research related to ISD, but noted that to assess all these dimensions would likely be too great a burden on subjects and may result in greater levels of subject drop-out (L. R. Schover, personal communication, September 12, 1990). Overall, she and J LoPiccolo (personal communication, September 12, 1990) state that a "common sense" approach to diagnosis and outcome assessment can overcome the lack of valid and reliable measures

specifically focusing on sexual desire, and limit the number of dimensions assessed with multiple measures.

Summary of the Literature Review and Rationale of the Proposed Study

Sexual interaction occurs within the context of relationships and many theorists have emphasized the ability of the sexual component of a couple's bond and their overall relationship to influence each other (e.g., Sager, 1976). Sexual distress and marital distress are often found together. Marital distress often predicts poorer outcome in sex therapy (e.g., Hawton & Catalan, 1986). Marital therapy has also been found to be useful in the treatment of sexual problems, especially when marital distress is also present (e.g., Zimmer, 1987).

ISD is a complex clinical phenomenon that has several potential etiological origins, such as biogenic, intrapsychic, and interpersonal pathology (Kaplan, 1979). ISD is often considered to be the result of marital discord (e.g., Schover, 1986). In fact, relationship variables have been found to represent the most striking differences between women with ISD and women without ISD (Stuart et al., 1987). In addition, the results of sex therapy in the treatment of ISD have been less than optimal (e.g., Schover & LoPiccolo, 1982), and marital therapy has been suggested as a useful treatment strategy for ISD (e.g., Lief, 1985; & Stuart et. al., 1987). Theorists have developed interpersonal models of ISD, and case study evidence suggests that the couple therapy treatment strategies stemming from such

models may produce promising results (e.g., Fish et al., 1984). As yet, however, there have been no controlled empirical attempts to demonstrate the effectiveness of marital therapy in the treatment of ISD, although such investigations have been called for (e.g., O'Carroll, 1991; & Fish et al. 1984). This study compared the effectiveness of marital therapy in the treatment of ISD to a wait-list control group condition. In addition, this study examined whether treatment couples' initial level of marital distress predicted outcome. Findings in the existing literature suggest that marital therapy may be most effective in treating sexual problems when the couple is experiencing both marital and sexual distress (Hartman & Daly, 1983; & Zimmer, 1987). In this study a higher initial level of marital distress was expected to predict better outcome. The form of couple therapy used was Emotionally Focused Couples Therapy (EFT).

Why Would EFT Enhance Sexual Desire?

Emotionally Focused Therapy For Couples (EFT) is an integration of the systemic and experiential traditions in psychotherapy (Greenberg & Johnson, 1988). The experiential tradition emphasizes the role of affect and the reprocessing of intrapsychic experience in the change process, whereas the systemic tradition emphasises the organization of interactions in system maintenance (Greenberg & Johnson, 1988). EFT has been found to be an effective marital therapy (e.g., Dandeneau, 1989; Dessaulles, 1990, Johnson & Greenberg, 1985,a; Johnson & Greenberg, 1985b; & Gordon-Walker, 1993).

Therapist Treatment manuals providing a detailed description of the EFT approach used in this study may be found in Appendices B and C. Johnson and Greenberg (1985a) found EFT to be effective in as few as eight sessions.

Although the effectiveness of EFT in the resolution of sexual problems had never been specifically assessed, EFT appeared well suited for the task of treating ISD. The process and content of EFT addresses many of the elements theorists have suggested are important in the treatment of ISD, such as the inner experience and perceptions of the rules and structure of interactions, and emotional closeness. EFT, for example: 1) contains systemic and experiential treatment components, 2) aims at identifying and changing negative relationship interaction patterns, and since sexual interaction usually reflects the rules and structure of the relationship in general, 3) gives considerable attention to emotional closeness and distance, and addresses strong negative emotions such as anger, 4) focuses on the role that both partners play in creating and maintaining their relationship and negative interaction cycles (there is no identified patient), and 5) accesses underlying vulnerability, and feelings and needs, thus allowing for an emotional context which is more conducive to sexual desire and expression. For these reasons EFT was considered to have excellent potential in the treatment of ISD.

Hypotheses

Hypothesis #1a. It was expected that EFT would have a statistically significant positive effect on both male and female marital adjustment, as compared to a wait-list control condition.

Hypothesis #1b. It was expected that EFT would have a clinically significant positive effect on both male and female marital adjustment, as compared to a wait-list control condition.

Hypothesis #2a. It was expected that EFT would have a statistically significant positive effect on the female partner's level of sexual desire, as compared to a wait-list control condition.

Hypothesis #2b. It was expected that EFT would have a clinically significant positive effect on the female partner's level of sexual desire, as compared to a wait-list control condition.

Hypothesis #3a. It was expected that EFT would have a statistically significant positive effect on both the male and female partner's level of sexual adjustment, as compared to a wait-list control condition.

Hypothesis #3b. It was expected that EFT would have a clinically significant positive effect on both male and female partner's level of sexual adjustment, as compared to a wait-list control condition.

Hypothesis #4. It was expected that level of dyadic adjustment at pre-treatment and type of ISD would predict levels of sexual desire and overall sexual adjustment in treatment group females at post-treatment. Lower levels of dyadic

adjustment and diagnosis of partner-specific ISD were both expected to predict higher levels of sexual desire and overall sexual adjustment at post-treatment.

Hypothesis #5. It was expected that significant differences established between the treatment group's pretreatment and post-treatment outcome scores would be maintained at three month follow-up.

ISD VS Non-ISD Comparison

No specific hypotheses were made concerning the results of this analyses. Given past findings in the literature, however, it would be expected that ISD couples would have significantly poorer marital adjustment than non-ISD couples. In addition, ISD couples would be expected to have significantly more sexual distress.

CHAPTER II

METHODOLOGY

Research Design

A pretest-posttest, wait-list control group design with one treatment group and one wait-list control group was used to investigate the hypotheses of this study. The primary question under investigation was the effect of marital therapy (EFT, the independent variable) on levels of female sexual desire, couple sexual adjustment, marital adjustment, depression, and global psychological distress (dependent variables). The relationship between treatment subjects' initial level of marital distress and their functioning following treatment was also examined. In addition, a comparison between ISD and non-ISD couples was performed.

Setting

The study was conducted at the Centre for Psychological Services (CPS) of the University of Ottawa, an APA accredited doctoral training facility serving a general adult population.

Subjects

ISD Couples

Couples in the ISD treatment and control groups met the following inclusion criteria:

- 1) Presently living together and having cohabitated for a minimum of two years.
- 2) Free of alcohol or drug related problems.
- 3) No history of physical abuse in the relationship.
- 4) Neither couple involved in an extramarital sexual relationship.
- 5) Presently not receiving other psychological treatment, and no plans to engage in any psychological treatment within the time frame of this study.
- 6) Female partner reported that she was not known to be suffering from any medical condition, or taking any medication related to diminished sexual desire (see appendix A). Couples in which there was a clear indicator that the ISD had a physiological origin were excluded from this study.
- 7) Female partner was not pregnant, and had not given birth within the last six months.
- 8) Any other sexual problems that the couple had, such as female anorgasmia, was judged by the couple and the interviewer to not be

responsible for the female partner's diminished sexual desire (see appendix G for a detailed standardized interview schedule).

- 9) Female partner reported a lifelong absence or low level of sexual desire, or a nonlifelong significant decline in, or a total loss of, sexual desire. The reported loss of desire was of at least six months duration. There had to be an accompanying decline in, or total cessation of, sexual interaction with her spouse (less than once every two weeks), unless a higher frequency was due to reasons other than desire on the part of the woman to engage in sexual activity (e.g., pressure from partner, fear of losing partner, sense of duty, an attempt not to hurt the partner's feelings, etc.). In addition both members of the couple reported that they were distressed by the female partner's level of sexual desire.

In all couples, therefore, the female partner reported an absence, or significant decline in sexual desire, the couple was interacting together sexually less than once every two weeks (unless a higher frequency was due to reasons other than sexual desire), and both members of the couple were distressed by the female partner's current level of sexual desire. Couples with all clinical subtypes of ISD were admitted to the study. The variety of ISD reported by each couple was recorded. The potential subtypes of ISD, and their operational definitions are listed below.

Lifelong-global ISD. The individual reported a lifelong total absence of all aspects of sexual desire (no sexual fantasies, no desire for masturbation, no desire for sexual partners, etc.), or a subjectively distressing low level of desire for all aspects of sexual desire that was of lifelong duration. For example, the individual reported that, for all aspects of sexual desire, her level of sexual desire has always been distressingly low.

Lifelong-situational ISD. The individual reported a lifelong absence of, or subjectively distressing low level of, one or more aspects of sexual desire. For example, the individual experienced sexual fantasies and a desire for masturbation, but never experienced desire for sexual interaction with a partner.

Nonlifelong-global ISD. The individual reported that in the past she had experienced sexual desire, but was currently experiencing a total absence of, or a significant decline in, all aspects of sexual desire. For example, the individual reported that until six months ago she was satisfied with her level of sexual desire, but since that time she has experienced a distressing decline in all aspects of sexual desire.

Nonlifelong-situational. The individual reported that in the past she had experienced sexual desire, but is currently experiencing a total absence of, or a significant decline in, one or more aspects of sexual desire. For example, the individual reported that until six months ago she was satisfied with her level of sexual desire, but was currently experiencing a total loss of desire to have sex with

her partner. Other aspects of sexual desire, such as desire for masturbation, are intact.

For each of the nonlifelong subtypes of ISD, it was recorded whether the condition was exclusive to the present relationship, or whether it had occurred within the contexts of other relationships as well.

- 10) Couples' level of marital distress was largely allowed to range freely in this study. Both non-maritally distressed couples and maritally distressed couples were accepted as subjects. Couples with very severe marital distress (Marital adjustment at a level that approximated that of divorced couples - i.e., an individual in the couple had a total Dyadic Adjustment score of 70 or lower), however, were not accepted as subjects. Such couples would likely not have had the degree of commitment or cohesion necessary to benefit from a brief marital therapy intervention.
- 11) Both members of the couple were willing to explore and attempt to resolve the problem of female ISD through marital therapy.

A total of 120 couples responded to newspaper advertisements that described a research project for couples wishing treatment for sexual desire problems (see appendix H for advertisement). Following the telephone screening interviews, 61 couples were invited to engage in subsequent full assessment interviews at CPS. For those subjects who responded to advertisements, but were not invited to engage in a full assessment ($n = 59$) the reasons for exclusion were as follows: 1)

one partner not interested in participating ($n = 15$), one partner engaged in ongoing psychotherapy ($n = 6$), health problems in the female partner which may have been related to ISD ($n = 5$), couple did not meet criteria for ISD ($n = 4$), couple co-habiting for insufficient length of time ($n = 3$), history of physical abuse in the relationship ($n = 1$), ongoing substance abuse ($n = 1$), extramarital sexual relationship ($n = 1$), male partner rather than female partner ISD ($n = 23$).

Of the 61 couples who engaged in full assessment interviews, seven were excluded from participation. The reasons were as follows: 1) reported levels of individual or interpersonal distress that were judged to be beyond the scope of a brief marital therapy intervention ($n = 4$), 2) extramarital sexual relations that were not revealed during the telephone screening interviews ($n = 2$), upon closer examination couple did not meet the criteria for ISD ($n = 1$). All couples not entering the project were supplied with appropriate referral information.

A total of 54 couples were randomly assigned to either the treatment or control group condition. Throughout the ongoing recruitment and treatment process four couples withdrew from the project. The reasons given were: 1) lack of time in personal schedules to participate in project ($n = 3$), 2) male partner felt his spouse required individual therapy and no longer wished to participate in marital therapy ($n = 1$). These couples were replaced by ongoing recruitment and treatment. A total of 50 couples completed the treatment and wait-list control condition: treatment group ($n = 25$), control group ($n = 25$). Two couples in the

treatment condition did not complete outcome measures at the three month follow-up period. In both cases, the experimenters were unable to contact these couples at follow-up. Hence, 23 couples (92% of original 25 treatment couples) were available for follow-up data collection.

At pre-treatment the average age in years of female and male ISD subjects was 40.65 (SD = 8.37) and 42.27 (SD = 8.45), respectively. ISD couples had been married an average of 14.00 (SD = 8.60) years. The typical level of income was above \$55,000 a year. The average duration of ISD was 6.68 (SD = 4.54) years. The typical ISD female desired sex less than once a month. The typical female and male partner both reported engaging in sex less than once a month and were moderately dissatisfied with their overall sexual relationship.

With respect to ISD diagnosis: 1) six females (12%) reported lifelong-global ISD, 2) 16 females (22%) reported nonlifelong-global ISD, and 3) 28 females (56%) reported nonlifelong-situational ISD of a partner-specific nature. In subsequent analyses, ISD couples were divided into two subtypes: 1) lifelong-global and nonlifelong-global ISD categories were combined in to a general global-ISD category (44% of sample), and 2) partner-specific ISD (56% of total sample).

Non-ISD Couples

Non-ISD couples met the general inclusion criteria for ISD subjects (e.g. no physical abuse in marriage). In addition, at least the woman in the couple had to be receiving ongoing psychotherapy for issues other than ISD. The female

partner's level of ISD symptomology was allowed to vary. The group referent of non-ISD denoted that none of these women were in treatment for ISD, but made no assumptions concerning their level of ISD symptomology. Extensive efforts were made to recruit a large sample of non-ISD couples. These efforts included: 1) newspaper advertisement (see Appendix H), 2) recruitment of subjects who were receiving therapy at CPS, 3) information letters sent to local mental health professionals describing the project and asking them to invite their clients to participate, 4) face to face meetings and telephone contacts with local mental health professionals. Despite these efforts, only 24 women offered to participate in the project. Five were excluded following the telephone screening procedure (decided not to participate ($n = 2$), substance abuse in the relationship ($n = 2$), and couple not living together ($n = 1$)). A total of 17 women and 15 spouses completed the outcome measures used in this study. In two cases the male partner was not interested in participating. Their female partners' data were included as part of the non-ISD sample in the interest of bolstering the sample size. The non-ISD sample therefore consisted of 17 women and 15 male partners.

Females were currently receiving psychotherapy for a wide range of issues: 1) self-esteem issues ($n = 2$), 2) child sexual abuse ($n = 1$), 3) child emotional abuse ($n = 1$), depression ($n = 1$), panic attacks ($n = 1$), and personal growth issues ($n = 2$). In addition to these individual issues, nine women and their partners (53% of total sample), were receiving marital counselling (total $n = 17$).

The mean couple DAS score for the total sample was 92.73 (SD = 13.39). The mean couple DAS scores for those couples in marital therapy, and those and not in marital therapy was 91.22 (SD = 12.79) and 95.00 (15.16), respectively. All women completed the outcome measures used in this project. Six couples, however, were not willing to participate in the full assessment interview. Of the eleven who were willing to participate, three (27%) were judged to meet the criteria for ISD.

The average age in years of non-ISD females and males was 39.75 (SD = 10.92) and 42.25 (SD = 12.77), respectively. Couples were married an average of 12.81 (SD = 10.25) years. The typical level of income was above \$55,000 a year. The typical non-ISD female reported desiring to engage in sex at least once a week. The typical non-ISD couple reported engaging in sex once every two weeks to once a month, and were slightly satisfied to slightly unsatisfied with their overall sexual relationship.

Therapists

Ten therapists (seven female and three male) administered the EFT interventions. Each therapist treated at least two couples, and five therapists treated three couples each (total = 25). Therapists were clinical psychology doctoral students who had previously administered EFT. Therapists received additional training in how to utilize EFT with couples in which the female partner has a loss of sexual desire (see appendix B for the treatment manual).

Group supervision was provided once a week. Each therapist was be required to present at supervision on at least four occasions for each couple. Additional supervision was available when needed. Supervision for EFT was provided by Dr. Susan Johnson (see appendix C for treatment manual).

Instruments

This section presents the instruments, questionnaires, and forms used in this study. They are presented in the order in which they were utilized in this study. Those measures for which there were no copyright restrictions appear in Appendix D and E.

Standardized Telephone Screening Procedure

The telephone screening procedure was devised for marital therapy outcome research (Dandeneau, 1988), and was adapted for the present study. It included general information concerning: 1) the project and its requirements, 2) inclusion criteria questions, and 3) clinical referral information. A reproduction of the telephone screening procedure appears in Appendix D.

Information and Consent Forms

The information and consent forms for ISD and non-ISD couples were designed for marital therapy research (Dandeneau, 1988), and were adapted for this study. The purpose was to clearly inform potential subjects of the major procedures of the study, the requirements of subjects, potential risks, and how the confidentiality of subjects would be assured throughout the project. Potential

subjects were made aware that participation was voluntary and that they could withdraw from the study at any time without penalty. Signed consent was required before the administration of screening and assessment instruments, and a confirmation of consent was required before subjects began counselling procedures. The information and consent forms, as well as the overall study, were approved by the University of Ottawa Human Research Ethics Committee. A reproduction of the forms appears in Appendix D.

Demographic Data Questionnaire

The demographic data questionnaire had been used previously in marital therapy outcome research (Dandeneau, 1988). It was used in the present study to collect demographic information such as: age, number of years married, number of children, gross family income, and level of education. A copy of this questionnaire appears in Appendix D.

Dyadic Adjustment Scale (DAS)

The DAS is a self-report questionnaire used to assess the quality of marital adjustment. It yields a numerical index of global couple adjustment, as well as indices on a number of subscales related to specific components of dyadic adjustment. The DAS was used in this study as a screening measure and an outcome measure. The DAS was used as an outcome measure in order to examine the effect of marital therapy on the quality of the couples' relationship.

Description of the scale. The scale contains 32 items, with a theoretical range of 0-151, that can be completed by subjects in under five minutes. It

provides a total score as well as four subscale scores relating to: 1) consensus, 2) affectional expression, 3) satisfaction, and 4) cohesion. Reliability coefficients, using Cronbach's coefficient alpha, have been found to range from 0.73 to 0.97 for the subscales and the total DAS scale. In Spanier's (1976) sample, the reliability for the total scale was found to be 0.96. The data indicated that the total scale and the subscales had sufficiently high reliability. Each item, and the total DAS score, was found to differentiate significantly between married and divorced groups differed significantly at the .001 level (Spanier, 1976).

Scoring and cut-off points. The mean total DAS scale scores in Spanier's (1976) original sample were 114.8 (SD- 17.8) for the married sample and 70.7 (SD-23.8) for the divorced sample. For research purposes, a distress cut-off point has been set at one standard deviation below the mean for the married sample (97). If either member of the couple scores below 97, then they are considered to be distressed. During assessment, the DAS was used to determine the couples' pretreatment level of global marital adjustment. Couples with levels of dyadic adjustment scores reflective of divorced couples (70) were not accepted as subjects in this study. It was judged that such couples would have been unlikely to benefit from the time-limited treatment approach used in this study.

The Beck Depression Inventory (BDI)

The BDI is a widely used self-report measure of the severity of depressive symptomatology. The BDI was used in this study as an outcome measure. ISD, in general, can originate as a reaction to depression. Global (as opposed to

partner-specific) loss of sexual desire may be related to subclinical depression (Schiavi, 1985). Furthermore, marital distress has been found to be the stressor that most commonly precedes the onset of a depressive episode in married persons (Paykel, Myers, Dienelt, Klerman, Lindenthal, & Pepper, 1969), and marital therapy has been shown to be effective in reducing depression in maritally distressed couples (Beach & O'Leary, 1986). Both male and female subjects' level of depression may therefore be useful in understanding treatment response rates. Subjects were not excluded from this study on the basis of their BDI scores.

Description of scale. The BDI consists of 21 sets of four statements. A symptom reflective of depression is addressed by each of the sets of statements. Each set of statements yields a symptom severity score from 0 to 3, with a possible range of summed scores from 0 to 63. The BDI can be administered in less than five minutes. Test-retest reliability has been reported to range from 0.60 to 0.90 for nonpsychiatric samples (Sundberg, 1992). In a recent review of the BDI, Beck et al. (1988) reported that the BDI has been found to be able to discriminate medical patients, nonmedical patients, and normals. The following guidelines for BDI cut-off scores have been established: none or minimal depression is < 10; mild to moderate depression is 10-18; moderate to severe depression is 19-29; severe depression is 30-63.

Symptom Checklist-90-Revised (SCL-90-R)

The SCL-90-R is a self-report symptom inventory designed to assess the symptom patterns of psychiatric and medical patients. The Global Severity Index

(GSI) was used in this study as an outcome measure. Subjects were not excluded from this study on the basis of their SCL-90-R scores.

Description of measure. Each of the 90 items of the SCL-90-R represents a symptom reflecting the symptom patterns of psychiatric and medical patients. Each Item is rated on a five point scale of level of distress. There are nine primary symptom dimensions and three global indices of distress. The Global Severity Index (GSI) represents the best single indicator of the current level of distress (Derogatis, 1977). Derogatis (1977) suggests that the SCL-90-R requires approximately 15 to 20 minutes to administer.

Reliability and Validity. Coefficient alphas for the nine major subscales have been found to range from 0.77 to 0.86 (Derogatis, 1977). Test-retest reliability for the GSI has been reported to be 0.90 (Peterson, 1989). Derogatis (1977) reported that the SCL-90-R has been found to provide clinical discrimination between subject groups.

Scoring and cut-off scores. There are a variety of normative samples that have been developed for this measure, including separate norms for male and female nonpatient normals (Derogatis, 1977). As in the case of the depression dimension, it has been found that females presenting with a sexual dysfunction (anorgasmia) and their partners have mean profile GSI scores that are higher than those of nonpatient normals. Hence, for this population it may be "normal" to have GSI scores between T-60 and T-65 (T-50 represents the nonpatient norm).

The Golombok Rust Inventory of Sexual Satisfaction (GRISS)

In all, three instruments were used to assess couple sexual interaction. Together, they assessed couple sexual adjustment, level of sexual desire, and areas related to sexual desire. The first of these measures was the GRISS. The GRISS is a self-report measure which assesses the quality of a sexual relationship and of a person's functioning within it. The GRISS was used in this study as an outcome measure. The GRISS was used to assess overall sexual adjustment. In addition, the GRISS has subscales which specifically address sexual desire related behaviours (GRISS-INF: a sexual infrequency subscale, and GRISS-AVD: a sexual avoidance subscale). These relevant subscales were used as one component of the method by which changes in the female partner's level of sexual desire, and sexual desire related behaviours (e.g. infrequency of sexual activity, sexual avoidance, sexual noncommunication, and sexual dissatisfaction), were assessed. A full description of the specific subscales relevant to this process appears in a summary at the end of the section on instruments.

Description of the scale. The GRISS is designed to assess areas in which a sex therapist or researcher would hope to see change during therapy. Items dealing with sexual interest generally have been found to contribute significantly towards the two main GRISS scales for men and women (Golombok & Rust, 1986). The GRISS contains 56 items (28 for men and 28 for women). The GRISS yields separate overall scale scores of sexual adjustment for each member of the couple, and also yields nine subscale scores related to specific areas of

dysfunction (e.g. female sexual avoidance). Higher scores indicate greater sexual problems in the areas assessed. The GRISS requires under 15 minutes to administer.

Standardization of the GRISS was performed using a sample of 88 sex therapy clients from throughout the United Kingdom. A combination of norm referencing and criterion referencing yielded standard scales which allow for a good indication of the existence and severity of sexual problems.

Reliability. Split-half reliabilities for the main GRISS total score scale was found to be 0.94 and 0.87 for the male and female, respectively. Split half reliabilities for the remaining scales ranged from 0.61 to 0.83, with an average of 0.74 (Rust & Golombok, 1986).

Validity. The GRISS overall female and overall male scales, and target subscales, were found to significantly discriminate between sexually dysfunctional clients and nonsexually dysfunctional individuals. Significant correlations were found between therapists' ratings of problem severity and the overall male and female scores, and between therapists' ratings of improvement and the overall female + male scores (Rust & Golombok, 1986).

Rust (Sept 12, 1990, personal communication) has suggested that the GRISS is an excellent measure for assessing treatment effectiveness for couples in which the woman has a loss of sexual desire towards her partner. Improvements in overall sexual functioning are important in the assessment of any treatment for

sexual problems, and GRISS subscales also specifically address sexual desire related areas such as avoidance of sex.

Sexual History Form (SHF)

The SHF is a self-report measure that assess specific areas of sexual functioning and sexual problems in individuals. In this study it was used as a screening measure and an outcome measure. As a screening measure it was used as an aide to the interviewer during that portion of the assessment interview which dealt with couple sexual problems. Schover, Friedman, Weiler, Heiman, and LoPiccolo (1982) reported that it has been designed and used extensively for this purpose. Responses to the SHF helped determine whether the female's loss of sexual desire towards her spouse was due primarily to another sexual disorder (e.g. loss of desire due to painful intercourse, or a reaction to partner's impotence). Such couples were excluded from the study.

As an outcome measure, the SHF items addressed level of sexual desire (item # 6). This allowed for an alternative method of assessing this variable. Hence, the SHF bolstered the overall outcome assessment package used to assess improvement in the female partner's level of sexual desire.

Description of scale. The SHF was developed to be used in the Multi-Axial Descriptive System For The Sexual Dysfunction, Schover et al, 1982). It consists of 28 questions in a multiple choice format that assess variables such as frequency

of intercourse, and ability to reach orgasm through various methods of stimulation. There are no overall or subscale scores for the SHF. Each item independently assesses an aspect of sexual functioning that is relevant to clinicians and can contribute to an overall clinical description of a couple's or individual's areas of sexual dysfunction.

Since the SHF's primary purpose is to provide descriptive data concerning a couple's sexual functioning, there has been little attempt to determine its psychometric properties. Items from the SHF have been used as outcome measures in sex therapy research (Schover & LoPiccolo, 1982), and research examining the effect of marital therapy on sexual functioning (O'Leary & Arias, 1983). Hence, the SHF has been successfully utilized in previous outcome studies which have addressed areas of interest in this study (i.e. 1) the effect of marital therapy on sexual functioning, and 2) the treatment of ISD).

Sexual Desire Towards Partner Scale (SDTPS)

The SDTPS was designed for the specific purposes of this study. This scale consisted of ten items related to the respondents' level of sexual desire towards their spouse. Like the GRISS scale, the time frame involved is "Recently". For each item, respondents rate themselves on a scale ranging from 1-5 (1-Never Or Almost Never, 2-Rarely, 3-Occasionally, 4-Often, 5-Always Or Almost Always). For example, subjects are asked "Do you feel a desire to have sex with your

spouse? ____". The possible total scores range from 10 to 50, with higher scores indicating a higher level of sexual desire.

The items selected were designed to assess a wide range of variables related to one's level of sexual desire towards one's partner. Areas assessed include, desire to have sex with partner, feelings of sexual attraction towards partner, desire to accept spouses sexual advances, satisfaction with level of sexual desire towards partner.

The advantage of the SDTPS was that it allowed for a detailed examination of sexual desire towards the spouse. The SHF provided only a global measure of sexual desire. Although this study focused on the female's level of sexual desire, the male partner's score on this measure was also be assessed for the purpose of gathering further descriptive data.

Internal consistency coefficients, test-retest reliability coefficients, and the results of a factor analysis of this scale, as reported in the results section, were found to be satisfactory (e.g., mean Chronbach Alpha 0.89). The SDTPS was used as an outcome measure. A copy of the SDTPS appears in appendix E.

Couples Therapy Alliance Scale (AS)

The AS is a 29 self-report scale designed to measure the couple's perception of quality of the therapeutic alliance (Pinsof & Catherall, 1986). It was used in this study to assess the quality of therapeutic alliance between therapists and counsellors and the integrity of treatment implementation. It was administered

after the fifth session (half way point of therapy). By then the general quality of the alliance between couple and therapist should have been established.

Description of scale. The product-moment reliability coefficient of the AS was found to be 0.70, and significant at the .005 level (Pinsof & Catherall, 1986). Positive and significant correlations have been found between the total AS score and client progress in therapy. A couple's total AS score is based on the mean of both partners AS scores. Possible scores range from 1-7 (1-low level of alliance, 7-high level of alliance). An AS score of 3 or less would indicate a poor alliance.

Summary of Outcome Variable Assessment

<u>Variable</u>		<u>Outcome Measures</u>
1) Dyadic adjustment -----	a)	Total DAS score
2) Sexual adjustment -----	a)	GRISS total score
	b)	GRISS-INF: GRISS Sexual Infrequency subscale
	c)	GRISS-NCO: GRISS Noncommunication subscale
3) Level of sexual desire -----	a)	SHFD: SHF item #6 A rating of sexual desire
	b)	GRISS-AVD - GRISS Sexual Avoidance subscale
	c)	SDTPS: A rating of sexual desire
4) Level of depression -----	a)	BDI
5) Level of psychological distress -----	a)	SCL-GSI

DAS = Dyadic Adjustment Scale

GRISS = Golombok-Rust Inventory Of Sexual Satisfaction

SHF = Sexual History Form

SDTPS = Sexual Desire Towards Partner Scale

BDI = Beck Depression Inventory

SCL-GSI = Symptom Check-list-90-R: Global Severity Index

In order to assess treatment outcome in ISD couples this assessment package allowed for the assessment of four major classes of outcome variables: 1) the level of dyadic adjustment, 2) level of sexual adjustment 3) sexual desire, and 4)

psychological functioning (depression and global psychological distress). Experts in the area of sex therapy have expressed the opinion that the couples' level of sexual adjustment, and sexual desire related behaviours such as frequency of sex, are essential outcome measure regardless of the specific sexual dysfunction that the couple suffers from (LoPiccolo, Sept 12, 1990; Schover, Sept 12, 1990; Rust, Sept 13, 1990, personal communication). A table of the measures used in this study and a schedule of their administration, appears in appendix F.

Procedure

ISD Couples

Couples who met the preliminary telephone screening criteria made an appointment for an assessment interview. At the interview, couples were first supplied with information concerning the major procedures and requirements of the study and asked to sign an information and consent form.

The next step in the assessment appointment was an interview to gather preliminary information concerning the couple's presenting concerns. Following the couple interview there were separate interviews conducted with each member of the couple (a detailed standardized interview protocol appears in appendix G). The female partner was interviewed first. The purpose of the interview process was to explore the nature of the female partner's loss of sexual desire, explore the nature of any other sexual problems that the couple may have had. The

interviewer collected information regarding the exact nature of the female's ISD complaint (i.e. onset, duration, subtype). In addition, during the individual interviews the interviewer completed the Sex History Form (SHF) with each individual and noted the onset, frequency, and duration of any other sexual problems reported. In short, in the individual interviews the interviewer confirmed that couples met the inclusion criteria for this study (presence of ISD in female, ISD not caused by another sexual problem, ISD not related to health problem or medication, both members of the couples willing to engage in couples counselling). Couples who had ISD and other sexual problems were informed that there are alternative treatments available for such problems (e.g., sex therapy), and that sexual problems sometimes have an organic basis, and therefore they may wish to consult their physician if they have not already done so. The interview process required approximately 45 minutes for each member of the couple.

As one member of the couple engaged in the interview process, the other completed the assessment questionnaires (DAS, BDI, SCL-90-R, GRISS, and SDTPS) and the Demographic Data Questionnaire. The total time necessary to complete this assessment battery was approximately 45 minutes. Following the separate interviews and the completion of the screening and outcome measures the couple was seen together in order to provide feedback concerning the information gathered thus far, and to answer any questions which they may have had. The total length of the assessment session was approximately two hours. Couples were informed at the end of the assessment appointment as to whether

they met the inclusion criteria on the DAS. Couples not meeting the inclusion criteria were referred elsewhere for appropriate treatment.

Couples assigned to the treatment group were randomly assigned to a counsellor. Couples randomly assigned to the wait-list control group were informed that counselling would be offered to them following the ten week wait-list period. As noted above, chosen couples were randomly assigned to one of two groups: 1) EFT ($n=25$); or 2) wait-list control group ($n=25$). The random assignment was completed by dividing couples into couple pairs. Numbers of either 1 (treatment) or 2 (control) were randomly drawn for each couple in every pair, and one couple within each block was assigned to each group.

Couples in the experimental group were given 10 one hour to one and a half hour, weekly, sessions of EFT (see appendix B for treatment manual). A treatment duration of 10 sessions was chosen because previous research had found EFT to be effective in treating marital distress in as few as eight sessions (Johnson & Greenberg, 1985b), as noted in the Review of the Literature section (p. 35). It was, therefore, expected that 10 sessions would be sufficient time in which to achieve significant improvements in marital adjustment in the present sample. All therapy sessions were audiotaped. After the fifth session couples were asked to complete the Couples-Therapy Alliance Scale. After the tenth (i.e. final) session, each member of the couples in the experimental group was asked to complete the post-treatment outcome measures (i.e. DAS, SHF, GRISS, SDTPS, BDI, and SCL-90-R).

Any couple who chose to withdraw from the study during the course of the counselling sessions was replaced by another couple, in order to maintain groups with an equal number of subjects. Couples withdrawing from the study were asked whether they wished to be referred elsewhere for treatment, and given appropriate referral information.

A three month follow-up was conducted by contacting treatment group subjects by telephone, and asking them to make an appointment to complete the follow-up outcome questionnaires. A full debriefing concerning the study was offered at that time, and, once the full results of the study were analyzed, a summary of the results was provided to subjects.

As noted previously, couples assigned to the wait-list group were informed that they were in the wait-list group as soon as such an assignment had been made. They were again contacted following the ten week waiting period to complete the post-wait outcome measures (DAS, SHF, GRISS, SDTPS, BDI, and SCL-90-R), and to commence counselling sessions. Control group couples received either a small group format of EFT which was conducted in the context of a two day counselling workshop (see appendix C for treatment manual), or ten individual sessions of EFT. For many control group couples, it was logistically impossible for them to attend the week-end workshops. Once the final results of the study had been analyzed, a summary of the results was provided.

Non-ISD Couples

Non-ISD couples who successfully completed the telephone screening procedure were invited to attend an assessment interview. Eleven of the 17 non-ISD women and their partners completed the full assessment interview. The remaining six completed consent forms and outcome measures, but declined to engage in the full interview process.

The first step in the interview process was a preliminary interview with both members present. Its purpose was to inform subjects of the procedures to be used, and have them read and sign an information and consent form (see Appendix D). Each member then engaged in separate individual interviews. The purposes of the individual interviews were to collect information concerning the type of psychotherapy that the female, or couple, was receiving, gain information on sexual functioning, and assess the presence of sexual desire difficulties. The Sex History Form was completed in order to gather information about sexual functioning. The interview schedule used with ISD couples was administered in order to explore whether the members of the couple had concerns related to sexual desire and/or met the criteria for ISD. As one member completed the individual interview, the other member completed the standardized measures.

Following this assessment session, couples were invited to attend a feedback session concerning the results of the standardized measures. These feedback sessions were conducted by the researcher. Couples who requested referral information following the feed-back session were provided with appropriate

referral information. Following the analysis of data, these couples were provided with a summary of the results of this study, if they so desired.

Data Analysis Procedures

There were six stages of data analysis. The first consisted of preliminary analyses investigating a) the accuracy of the data file, b) the presence of univariate and multivariate outliers, c) the psychometric properties of selected measures (1) GRISS and GRISS subscale test-retest reliability which was not available in the literature, and 2) factor analysis, internal reliability and test-retest reliability for the SDTPS), d) the integrity of treatment implementation.

Integrity of treatment implementation was assessed by two trained raters (one male and one female) who were experienced in EFT. For each couple in the treatment group, two taped sessions of EFT were chosen at random from sessions two to nine (total number of tapes rated was 50). Sessions one and ten were not included in this analysis because of the high level of information gathering statements and summary statements likely to be found in the first and last sessions of therapy. Raters listened to the second ten minutes of therapy on each of these tapes. Raters were instructed to rate each therapist statement as being an EFT intervention or non-EFT intervention according to the categories and examples provided which were based on the manual for EFT (see Appendix I). EFT was judged to be faithfully implemented if at least 75% of therapist statements were rated as EFT interventions. Total percentage of EFT vs non-EFT statements was

calculated, and an inter-rater reliability Kappa of concordance (Bartko & Carpenter, 1976) was calculated based on a random sampling of 20% of rated sessions (see Results section). An inter-rater reliability Kappa of 0.80 or higher was judged to be acceptable.

The second phase of data analysis investigated treatment and control group equivalence at pre-treatment. For each variable an alpha level of $p < 0.05$ was maintained in order to increase the probability of detecting group differences on demographic and outcome variables.

The third phase of data analysis consisted of a comparison of treatment and control group differences on outcome measures at Time 2 (post-therapy time period for the treatment group, end of ten week wait-list period for control group). Multivariate analyses of covariance were performed as explained in the results section.

In addition to statistically significant differences, clinically significant differences were also examined. Assessment of clinically significant change is important in that it examines whether differences found after therapy are of sufficient magnitude to be meaningful for the individuals involved (Jacobson, Follette & Revenstorf, 1986; Jacobson & Truax, 1991).

Clinical recovery examines the extent to which post-treatment or follow-up scores reflect a departure from distress. There are several methods available to calculate a cut-off point beyond which an individual's score reflects sufficient improvement to warrant the term "recovered." Some methods however require

established normative data on variables of interest. For several of the measures used in the present study normative data had not been established (e.g. Sexual Desire Toward Partner Scale) or no norms had been established for couples experiencing loss of sexual desire. This difficulty was resolved by using Jacobson and Truax's (1991) alternative method for determining a recovery cut-off point. This method involves taking the mean for the combined treatment and control group distributions for a given variable at pre-test and determining a cut-off point two standard deviations in the direction of functionality. This method results in a stringent criterion for recovery (Jacobson & Truax, 1991).

Beyond the conservative clinical indicator of recovery is the less stringent clinical indicator: improvement. Improvement is assessed through the calculation of a reliable change index which determines the probability that the magnitude of change observed for a given individual is due to measurement error. Observed change that is above what would be expected due to measurement error is considered to reflect clinical improvement. The reliable change is calculated by subtracting a subject's post-test score from his or her pre-test score and dividing by the standard error of difference between the two test scores. The standard error of differences is determined by taking the square-root of the standard error of measurement multiplied by two and then squared. The standard error is determined by multiplying the standard deviation for a given measure at pre-test by the square-root of one minus the established test-retest reliability of the measure (Jacobson & Truax, 1991). A reliable change index above 1.96 is unlikely

to reflect a degree of change that is due to measurement error ($p < 0.05$) (Jacobson & Truax, 1991).

For example, in the present study, using the combined distribution for control and treatment females at pretreatment and the reliability of the DAS as reported in the literature, the standard error of measurement for the DAS was found to be 2.64. The resulting standard error of differences was calculated to be 3.74. This meant that for a female subject to obtain a reliable change index of 1.96 or greater at post-treatment or follow-up, her score on the DAS had to be 7.33 or more points above her pre-treatment DAS score. Subjects demonstrating such gains were considered clinically improved. The criteria for deterioration is also based on the reliable change index (Jacobson and Truax, 1991). A subject whose score at post-treatment or follow-up had decreased beyond what could be expected due to measurement error alone is considered deteriorated.

In order to examine clinically significant change in the present study, a comparison was made between the percentage of treatment and control group subjects recovered, improved, and or deteriorated on outcome measures at post-treatment. Rates of recovery were reported only on those measures for which the term recovery was deemed appropriate (i.e., those that revealed mean pretreatment scores indicating distress - the measures of sexual functioning). In order to examine the maintenance of gains made in therapy, a comparison was also be made between treatment group subjects' rates of recovery, improvement, and deterioration at post-treatment and follow-up. Comparisons of clinically

significant change are typically descriptive in nature and do not involve tests of statistical significance (e.g. Jacobson and Truax, 1991). This trend was followed in the present study.

The fourth phase of data analysis explored whether treatment group statistically significant gains found at post-treatment were maintained at follow-up. The control group wait-list period did not extend to the treatment group follow-up period, hence these follow-up analyses were in the form of treatment group trend analyses across time. The maintenance of clinically significant gains was also examined.

Phase five of data analysis consisted of hierarchical multiple regression analyses examining whether pre-treatment levels of dyadic adjustment and type of ISD predicted treatment group female post-treatment levels of sexual desire and sexual adjustment.

The sixth and final phase of data analysis compared ISD and non-ISD couples on demographic and outcome measure. Analyses were also conducted to compare ISD subtypes (global and partner-specific) to non-ISD couples, and to each other.

Computer software statistical analysis programs from both the SPSS statistical package (1989) and BMDP (1990) statistical package were used in the above analyses.

Power Estimates

Statistical power estimates were calculated for the two primary outcome measures (DAS, and GRISS). All power estimates appearing below were calculated using the procedures and statistical tables outlined by Cohen (1988).

DAS. Johnson and Greenberg (1985b) reported an effect size of 2.19 in their analysis of the difference between the experimental group's post-treatment DAS total score and the control group's post-wait-list DAS total score. An effect size of 0.80 or above is considered to be large. Similar effect sizes were expected for the DAS in the present study. Outcome data analysis involved a multivariate analysis of covariance with one degree of freedom in the numerator, at the .05 level of significance. Based on Cohen (1988), in such an analysis an effect size of even half of that found by Johnson and Greenberg (1985b) would result in a power level of 99% or higher (with an n of 25 subjects in each group). Power estimates of 0.80 or higher are considered optimal for research purposes (Cohen, 1988). Level of statistical power was expected to be optimal.

GRISS. Bennun, Rust, and Golombok (1985) used the GRISS to examine changes in sexual satisfaction in a group of maritally distressed couples who received marital therapy. Effect size calculations for the male and female main scales were 0.83 and 0.73, respectively. Even if the lowest effect size calculation found (0.73) is used, a power level of 99% is expected in the type of analysis to be performed in this study with an n 25 couples in each group.

Overall, the primary outcome measures used in this study were expected to have high levels of power when used in the type of analysis planned in this study with a sample of 25 subjects in each group.

<u>Measure</u>	<u>Study</u>	<u>Estimated Effect Sizes</u>		<u>Power*</u>
DAS	Johnson & Greenberg (1985,b)	Total	2.19	0.99
GRISS	Bennun et al. (1985)	Total M	0.83	0.99
		Total F	0.73	0.99

* Based on Cohen (1988), Power levels for multivariate analysis of covariance with one degree of freedom in the numerator at the 0.05 level of significance with a population of 25 in each group. and up to five dependent variables in each analysis.

With respect to the multiple regression analysis, it was expected that initial levels of marital distress would account for a significant proportion of outcome variance. The influence of type of ISD on outcome was also examined. Cohen (1988) recommends that 0.35 be used as a conservative estimate of a large effect size in multiple regression analyses. With an estimated expected effect size of at least 0.35, a multiple regression analysis with two predictor variables, one degree of freedom, and an n of 25 has a power level of above 0.70, at a 0.05 alpha level.

CHAPTER III

DATA ANALYSIS AND RESULTS

The first phase of data analysis consisted of preliminary analyses investigating a) the accuracy of the data file, b) the presence of univariate and multivariate outliers, c) the psychometric properties of nonstandardized outcome measures, and d) the integrity of treatment implementation. The second phase tested control and treatment group equivalence at pretreatment. In the third phase, the hypotheses related to statistical and clinical differences between the control and treatment groups at post-treatment were tested. In phase four, the hypotheses related to statistical and clinical differences within the treatment group over time (pre-treatment, post-treatment, three month follow-up) were tested. In phase five, multiple regression analyses were performed to investigate the predictors of post-treatment scores. The sixth and final phase of data analysis examined statistical differences between couples with loss of sexual desire in the female partner and a comparison group of couples in which the woman was receiving psychotherapy for concerns other than ISD.

Phase 1: Preliminary Analyses

Accuracy of the Data File

Prior to any computerized analysis, a visual check was performed to ensure the accuracy of data entry. For each demographic and outcome variable, the original scores on at least twenty percent of all subjects' questionnaires were

compared to the value entered into the electronic data file. On only one occasion was the value in the electronic file found to differ from the value on the original questionnaire. This suggests a high degree of accuracy was maintained during the transformation from 'paper and pencil' scores to the electronic data file.

Next, the SPSS Frequencies program (SPSS, 1990) was used to check for missing data, univariate outliers, skewness, and kurtosis. The plausibility of the individual scores, means, standard deviations, maximum and minimum scores for each demographic and outcome variable were also examined.

With respect to missing data, it was found that the collection of demographic information was incomplete for two couples in the comparison group of couples without sexual desire difficulties. In one of these couples the female partner also failed to complete one of the outcome measures. After consideration, it was decided that, in order to maximize the sample size of this group, these couples' existing scores would be retained as part of the overall data pool. The purely exploratory nature of the analysis in which they were to be involved lent support to this decision. In addition, two couples in the treatment group failed to complete three month follow-up questionnaires. These couples were excluded from follow-up analyses, leaving a total of twenty-three treatment couples in the follow-up analyses.

Outliers

In the search for univariate outliers all of the demographic and outcome variables were investigated separately for males and females in the control,

treatment, and comparison groups. Subjects with scores exceeding 3.00 standard deviations from the mean were labeled as univariate outliers. For all continuous variables, degree of skewness and kurtosis was determined by dividing the value for skewness and kurtosis by their respective standard error. Resulting values more extreme than +3.29 or less than -3.29 ($p = .001$) were judged to represent excessive skewness or kurtosis (Tabachnick & Fidell, 1989).

One male subject in the control group condition was found to be a univariate outlier on the GRISS sexual avoidance subscale, suggesting that he avoided sex with his partner to a much greater degree than did his counterparts. This score also resulted in positive skewness in this variables distribution. Degree of skewness and kurtosis was found to be within acceptable levels for all other variables and no transformations were necessary. It was decided to maintain this subject in the data pool until multivariate outliers were examined.

The BMDPAM statistical program (BMDP, 1990) was used to detect multivariate outliers. Demographic and outcome variables were entered as independent variables and couple numbers were used to create a 'dummy' variable. Any subject with a Mahalanobis distance greater than x^2 (chi-square) (4) = 18.467 ($p < .001$) from the centroid of the distribution was considered a multivariate outlier (Tabachnick & Fidell, 1989). The male control group subject who was earlier found to be a univariate outlier was also identified as a multivariate outlier. This couple's scores were excluded from this study's data pool, leaving twenty-four couples remaining in the control group condition. The

high degree of skewness reported above for males on the GRISS sexual avoidance subscale was no longer present once this couple was excluded. All of the other variables appeared to be normally distributed.

Psychometric Properties of Selected Measures

GRISS

GRISS: Test-retest reliability. The test-retest reliability of the Golombok-Rust Inventory of Sexual Satisfaction (GRISS) main scale and the subscales used in this study had not been firmly established in the existing literature on this measure. Therefore, the test-retest correlation coefficients found in the present study were examined. The SPSS Correlation program was used to calculate Pearson correlation coefficients separately for both males and females in the control group by comparing pre-treatment scores to scores from the second administration at the end of the ten week wait-list period. Test-retest correlation coefficients of 0.70 or greater were judged to reflect an adequate level of test-retest reliability.

Analysis of GRISS main scale scores resulted in a test-retest correlation coefficient of 0.84 for females and 0.92 for males. For females, analysis of the four GRISS subscales of interest in this study (sexual avoidance: GRISS-AVD, sexual infrequency: GRISS-INF, sexual dissatisfaction: GRISS-DSAT, and sexual noncommunication: GRISS-NCO) resulted in test-retest correlation coefficients ranging from 0.92 to 0.64, with a mean value of 0.76 (see Table 1). Only the sexual dissatisfaction subscale (0.64) failed to reach an adequate level of test-retest

reliability. For males, analysis of these subscales resulted in test-retest correlation coefficients ranging from 0.84 to 0.61, with a mean value of 0.76 (see Table 1). Again, only the sexual dissatisfaction subscale failed to reach an adequate level of test-retest reliability. In subsequent analysis, the dissatisfaction subscale was not used because of this limitation.

SDTPS

SDTPS: Factor analysis. Since the Sexual Desire Toward Partner scale (SDTPS) was developed by the primary experimenters of this study as a general measure of sexual desire towards one's partner, its psychometric properties were examined. First, a factor analysis was performed in order to investigate the underlying factor structure of this measure. The SPSS Factor program with Principle Axis Factoring, Varimax Rotation, and Kaiser-Meyer-Olkin-Measure Of Sampling Accuracy options was utilized. In order to maximize the sample available for the factor analysis, the data pool consisted of all subjects' first administration of the SDTPS scale ($n = 130$). Prior to the actual factor analyses, the SPSS Frequencies program was used to investigate univariate outliers on the SDTPS scale at an individual item level. Next, the BMDPAM statistical program was used to investigate multivariate outliers on the SDTPS scale at an individual item level. One subject was found to be a multivariate outlier at the item level. This subject's scores were not entered into the factor analysis, but their data were retained for analyses using the SDTPS total score. Overall, data for 129 subjects was entered into the factor analysis.

The Kaiser-Meyer-Olkin measure of sampling accuracy resulted in a value of 0.93, indicating that the intercorrelation of the items suggested that they could be factored and that conducting a factor analysis was warranted. Two factors were obtained. Following rotation, it was found that the first factor loaded heavily on all ten items except item eight, had an eigen value of 6.94, and accounted for 67.2% of the variance. Communality values for all items except item eight were in excess of .60. Factor two had an eigen value of 0.52, accounted for only 5.20% of the variance and was most clearly differentiated from factor one by item eight (communality 0.50). Overall, these two factors accounted for 72.40% of variance. These findings were judged to reflect a largely homogeneous item pool, with one main factor, interpreted as representing level of sexual desire towards partner, underlying the SDTPS scale.

Due to the low level of communality for item eight on factor one, the total SDTPS scores for all subjects were recalculated omitting item eight. Using the SPSS Correlation program, these new scores were correlated with the SDTPS total scores that included all ten items. The resulting Pearson correlation coefficient was 0.99, indicating that the absence of item eight had a negligible effect on the SDTPS total score. Therefore, it was decided to use the original ten item total SDTPS score in all subsequent analyses.

SDTPS: Internal consistency. Through use of the SPSS Reliability program, the internal consistency of the SDTPS scale was investigated by calculating Cronbach's alpha levels. First, a general Cronbach alpha was obtained for all

subjects. Subsequently, separate Cronbach alphas were derived for; 1) males and females, 2) males and females in ISD couples, and 3) males and females in the non-ISD comparison group. Cronbach alpha levels ranged from 0.94 to 0.78, with a mean of 0.89 (see Table 2). Thus, for all groups the SDTPS scale was found to have an adequate level of internal consistency.

SDTPS: Test-retest reliability. The SPSS Correlation program was used to investigate the test-retest reliability of the SDTPS scale. Correlation coefficients were calculated separately for males and females in the control group condition by comparing SDTPS total scores from the pretreatment administration to scores from the second administration at the end of the ten week wait-list period. Test-retest correlation coefficients of 0.79 and 0.86 were found for females and males respectively, indicating an adequate level of test-retest reliability.

Overall, given the results found in this investigation of the psychometric properties of the SDTPS scale, it was judged that the scale was adequate for the purposes of this study. Additional sampling and investigation would, however, be necessary in order to use this scale for broader purposes.

Integrity of Treatment Implementation

As indicated in the Method Section, two trained raters assessed the integrity of treatment implementation. For each treatment couple a random sampling of two therapy sessions from sessions two to nine were included. First and last sessions were not assessed due to their likely focus on rapport building and termination issues. Out of a total of 1401 therapist statements, a mean percentage

of 96.72% (1355) were rated as EFT statements (rater 1: 95.37%, rater 2: 98.07%). Only a mean of 3.28% (46) were rated as non-EFT statements (rater 1: 4.63%, rater 2: 1.93%). Of these the majority were information gathering and information providing statements. These results exceeded the set criterion of 75% that was established to indicate faithful implementation of EFT and suggested that therapists implemented EFT according to the treatment manual. Inter-rater reliability Kappa of concordance was found to be 0.93, demonstrating a high level of interrater reliability.

In addition to the implementation check, treatment couples' self-reported Couples-therapy Alliance scores were analyzed to investigate whether there was a differential therapist effect on this measure. If differences were found, the therapist would have been entered as a covariate in subsequent analyses. The results of a one way analysis of variance revealed no significant difference for therapist, $F(9,16) = 0.83, p > 0.05$. The mean Couple-Therapy Alliance score was 6.02 (SD = 0.66), out of a possible 7 points. This suggested that, on average, therapists established solid working alliances with couples. The lowest alliance score reported was 4.80, which was well above the pre-determined alliance score cut-off of 3.

Phase Two: Group Equivalence at Pre-Treatment

Demographic Variables

For continuous demographic variables (years married, female's age, male's age, number of children, duration of ISD) the SPSS Anova statistical program was used to test for pre-treatment differences between the treatment and control group for males and females separately (see Table 3). Using the SPSS NPAR program, Mann-Whitney U tests were performed for the discrete demographic variables (level of income, female's level of education, male's level of education) (see Table 4). Chi-square tests were performed for the categorical variables of: 1) sexual female's trauma in past and 2) type of ISD (see Table 5). An alpha level of $p < .05$ was maintained despite the number of tests performed in order to maximize the likelihood of detecting pre-treatment differences. It was found that the treatment group had a significantly greater number of children at pre-treatment than the control group, $F(1,47) = 6.10, p < .05$ (see Table 3). This variable was entered as a covariate in subsequent analyses.

Outcome Variables

Pre-treatment differences in outcome variables were analyzed using the same procedures described for demographic variables. No significant differences were found between the treatment and control conditions at pretreatment. For example, the means for the treatment and control group at pre-treatment on the DAS combined couple scores were 98.60 and 102.56 respectively, and this difference was not statistically significant, $F(1,47) = 1.38, p < 0.05$. Tables 6 to 8

display the pre-treatment experimental groups' scores on the other outcome variables and the values obtained in the above analyses. Considering the number of demographic and outcome variables used in this study the incidence of one significant difference at pretreatment would not be unexpected given the probability of chance alone. Overall, it appears the subject randomization procedure was largely successful.

Phase Three: Statistical and Clinical Differences

Between Treatment and Control Group at Post-Treatment

Statistical Differences

Continuous outcome variables. A multivariate analysis of covariance was performed to investigate post-treatment statistical differences between the treatment and control group on continuous outcome measures. For the treatment group, the scores used in this analysis were those collected immediately following the completion of therapy. For the control group the scores used were those collected immediately following the end of the ten week wait-list period. The treatment group referent of 'post-treatment' will be used to describe these scores for both the treatment and control group.

As noted previously, there was a statistically significant difference in the number of children reported by treatment and control group couples. The difference found on this variable were judged to be reliable in that data were collected through a straight-forward self-report question with both members of the couple present. The potential impact of this demographic variable was judged important enough for it to be entered as a covariate.

In addition, each of the pre-treatment measures on the continuous outcome variables were used as covariates. This procedure essentially equalizes the treatment and control group position on the outcome variables at pre-treatment and increases the likelihood that differences found at post-treatment are due to the effect of the independent variable of therapy and not error variance. Both

experimental groups' post-treatment scores on the dependent variables were therefore adjusted by this procedure to take into account and attenuate the possible effects of between group pre-treatment variance on outcome measures. This procedure is increasingly being advocated by clinical researchers who criticize statistical comparisons between groups that are based on gain scores alone (e.g., Book, 1975). Thus it was judged that the most appropriate way to analyze the data was to perform a multivariate analysis of covariance with the pre-treatment continuous dependent variables and number of children serving as covariates.

Separate analyses were performed for female and male subjects in each experimental group. This strategy allowed for the examination of possible sex differences in subjects' response to therapy which was of special interest since only female subjects reported distress at pretreatment on many sexual outcome measures, such as the GRISS and measures of sexual desire. The exception to separate male and female analyses was the DAS. In addition to examining DAS scores separately for females and males, couples' combined DAS scores were also examined. Combined DAS are commonly examined in the marital therapy literature (e.g., Johnson & Greenberg, 1985a) and are determined by adding the DAS scores for the male and female member of a couple and dividing by two.

The primary multivariate analysis of covariance performed was a treatment and control group post-treatment comparison on the continuous outcome measures (DAS, GRISS, SDTPS, SCL-GSI, and the BDI). This analysis was performed separately for female and male subjects. In addition an analysis of

covariance investigated a treatment and control group comparison of combined DAS scores at post-treatment. Secondary analyses consisted of treatment and control group post-treatment comparisons on preselected subscales of the above measures (i.e. the Sexual Infrequency, Sexual Avoidance, and Sexual Noncommunication subscales of the GRISS).

In each of these analyses the assumptions of multivariate analysis of covariance were examined and met. Levels of normality, linearity, and homogeneity were satisfactory. In addition, the relationship between the covariates and the dependent variables were found to be significant for all analyses at post-treatment, and the assumption of homogeneity of the regression slopes for both groups was met as evidenced by nonsignificant covariate by group interactions at post-treatment (Stevens, 1992).

It was found, however, that several of the primary outcome measures were significantly correlated with each other for both experimental groups and both sexes at pretreatment. For example, for females the correlations between: the DAS and GRISS (-0.34), DAS and SDTPS (0.39), and GRISS and SDTPS (-0.35) at pre-treatment were statistically significant at $p < 0.05$. Tabachnick and Fidell (1989) suggest that, although this situation is not unusual, having significantly correlated variables within an multivariate analysis raises the problem of inflated type 1 error rate on univariate F-tests. They recommend that, following interpretation of main effects, a stepdown analysis, such as the Roy-Bargman procedure, be performed to examine each dependant variable's level of

significance. In the stepdown analysis each dependent variable is assigned priority given its theoretical or practical significance. In the stepdown procedure, successive dependent variables are examined with greater priority dependent variables serving as covariates to investigate what, if anything, each dependent variable contributes to the dependent variables already tested (Tabachnick & Fidell, 1989). This type of analysis results in a more conservative test of significance than univariate F-tests by correcting for the potential confound of correlated dependent variables. Hence, when main effects were found in the multivariate analyses of covariance both the subsequent univariate F-tests and the Roy-Bargman stepdown analyses were examined, with greater interpretive weight given to the stepdown analysis. The ordering of dependent variables for the primary analyses was: DAS, GRISS, SDTPS, SCL-GSI, and BDI.

For the secondary subscale analyses involving GRISS subscales (Sexual Infrequency, Sexual Avoidance, and Sexual Noncommunication) there were no significant correlations among dependent variables at pre-treatment, and thus a stepdown analysis was unnecessary. For each of the multivariate analyses of covariance the SPSS Manova program was used.

For all the multivariate analyses of covariance main effects a significance level of $p < 0.05$ was chosen. The Wilks lambda criterion was used. The alpha levels for main effect post-hoc analyses were adjusted using the Bonferroni correction procedure to accommodate the number of dependent variables used in each analysis ($0.05/\text{number of dependent variables}$).

Before presentation of the results of the separate analyses for females and males, the results of the combined DAS score analyses at post-treatment will be reported. The combined DAS couple score adjusted means for the treatment and control group at post-treatment were 105.05 and 102.02, respectively. Analysis of covariance revealed that this difference was not statistically significant, $F(1,43) = 0.98$, $p < 0.05$. Observed power for this nonsignificant effect was calculated to be 0.17.

Treatment and control group means and adjusted means for females at post-treatment on the DAS, GRISS, SDTPS, SCL-GSI, and BDI, are presented in Table 9. For the DAS and SDTPS, higher scores indicate less distress, whereas lower scores reflect less distress on the GRISS, SCL-GSI, and BDI.

For females, the results of the multivariate analysis of covariance for continuous outcome variables revealed a significant main effect for group at post-treatment, $F(5,37) = 5.32$, $p < 0.05$. Post-hoc univariate F-tests indicated that the two groups did not differ significantly at post-treatment on the DAS ($F(1,41) = 1.88$, $p > 0.01$), the GRISS total score, ($F(1,41) = 7.60$, $p > 0.01$), the SCL-GSI ($F(1,41) = 2.00$, $p > 0.01$), or the SDTP ($F(1,41) = 5.61$, $p > 0.01$), using a corrected alpha level of 0.01. The two groups did differ significantly, however, on the BDI ($F(1,41) = 7.60$, $p < 0.01$) (see Table 10). Examination of the means suggested that this finding reflected significantly less distress for the treatment group of females than the control group of females on the BDI at post-treatment. It is interesting to note that the GRISS scale differences were at the exact cut-off

for significance. Roy-Bargman stepdown analyses also revealed a significant difference between the groups at post-treatment on the BDI, $F(1,37) = 15.36$, $p < 0.01$ (see Table 10).

Experimental group means and adjusted means for women on GRISS subscales are presented in Table 9. For all subscales (Sexual infrequency, Sexual avoidance, and Sexual noncommunication) a lower score indicates less distress. Multivariate analysis of covariance revealed no significant main effect for group between the treatment and control group female subjects at post-treatment, $F(3,37) = 2.52$, $p > 0.05$. Observed power for this nonsignificant result was 0.25.

For males, the means and adjusted means at post-treatment on the DAS, GRISS, SDTPS, SCL-GSI, and BDI are presented in Table 11. Again, higher scores on the DAS and SDTPS reflected less distress, whereas lower scores on the GRISS, SCL-GSI, and BDI reflected less distress. For males, the results of the multivariate analysis of covariance failed to reveal a significant main effect for group at post-treatment, $F(5,37) = 0.87$, $p > 0.05$. Observed power for this nonsignificant result was 0.28.

Male group differences on the GRISS subscales were examined. Means and adjusted means for Sexual infrequency, Sexual Avoidance, Sexual Noncommunication are presented in Table 11. Multivariate analysis of covariance revealed a main effect for group, $F(3,41) = 3.47$, $p < 0.05$. Post-hoc univariate F-tests indicated that treatment group males scored significantly lower on the Noncommunication subscale than control group males at post-treatment, $F(1,43)$

= 10.02, $p < 0.017$ (see Table 12). Lower scores on this scale reflected less distress. Thus it would appear that treatment group males perceived less difficulty communicating sexually with spouses at post-treatment, than did control group males.

Non-parametric outcome variable. In addition to the above measures, one non-parametric exploratory outcome variable was also assessed at post-treatment. This variable each consisted of a single item self-report measure from the Sexual History Form dealing current level of sexual desire (SHFD). For females and males, the median values on this measure for the treatment and control groups at pre-treatment and post-treatment, are displayed in Table 13. The SPSS NPAR program was used to perform Mann Whitney U tests test of differences between the treatment and control group at post-treatment. An alpha level of 0.05 was used for this exploratory outcome variable. A significant difference was found between treatment and control group females at post-treatment ($U = 149.50$, $p = 0.00$), see Table 13. As the median values suggest, treatment females reported significantly higher levels of sexual desire after treatment, than control females did after the ten week wait-list period. For males, the median values for this items are displayed in Table 13. Using the same statistical procedures described above, no significant difference were found between the treatment and control males at post-treatment ($U = 233.00$, $p > 0.05$), see Table 13.

Clinical Significance at Post-treatment

Clinically significant differences between treatment and control subjects at post-treatment were assessed. These analyses were performed separately for males and females. As described in the data analysis section of chapter two, Jacobson and Truax's (1991) operationalization of recovery, improvement and deterioration was used. A cut-off score is used to indicate percentage of individuals recovered, and a reliable change index is used to indicate percentage of individuals improved and deteriorated. Percentages were rounded off to the nearest percentage point. Recovery rates are reported only on those measures for which the term recovery was deemed appropriate (i.e., those measures with mean pretreatment scores that reflected distress - the sexual outcome measures). Rate of improvement could not be calculated for the BDI because subtraction of the reliable change index resulted in a value of less than zero for many subjects.

Table 14 shows the percentage of treatment and control group females clinically recovered, improved or deteriorated at post-treatment. A greater percentage of treatment females recovered or improved on almost all outcome measures, as compared to control females. Percentage of subjects recovered and improved on outcome measures ranged from 4-36% and 20-48% respectively for the treatment females, and 0-4% and 0-17% respectively for the control group females. Improvement rates for treatment females were most pronounced on the SDTPS (48%) and the DAS (40%).

Percentage of deteriorated individuals for treatment females was lower or equivalent to levels of deterioration found for control group females. The range of deterioration percentages on outcome measures were 0-4% and 4-16% for the treatment and control females respectively.

Table 15 shows the percentage of treatment and control males recovered, improved, or deteriorated at post-treatment. For males, recovery was examined only on the two measures that indicated distress at pre-treatment. On these measures (GRISS-INF, and GRISS-NCO) a greater percentage of treatment males recovered. Rates of clinical improvement were also higher for those measures for which improvements rates could be calculated. Percentage of subjects improved on outcome measures ranged from 0-40% for treatment males, and 0-25% for control males. Improvement rates for treatment males was most pronounced on the DAS (40%) and the SCL-GSI (36%). Percentage of deterioration on outcome measures was fairly equivalent in both groups. Percentage of deterioration ranged from 0-4% and 0-17% for treatment and control males respectively.

Phase IV: Treatment Group Statistical and Clinical

Changes Across Time

In addition to investigating differences between treatment and control subjects at post-treatment, analyses were performed to investigate treatment group changes over the three time periods of pre-treatment, post-treatment, and three

month follow-up. These analysis did not allow for a control group comparison in that the control group wait-list period ended after ten weeks, and therefore did not extend into the treatment group three month follow-up period. The focus of these analysis were treatment group changes over time. Again, except for combined DAS couple scores, these analyses were performed separately for female and male subjects. As indicated in the method section, in analyses involving the follow-up period, data for only 23 of the original 25 treatment group couples was available (92% of the original treatment sample).

It was decided that the most meaningful method of exploring changes across time for continuous variables was to perform trend analyses. The SPSS MANOVA statistical program with repeated measures across time was used. When main effects were obtained, both univariate and Roy-Bargman stepdown F-tests were performed for those variables found to be significantly correlated at pre-treatment. In all instances in which significant main effects for time were obtained for such variables, however, the subsequent Roy-Bargman stepdown F-tests were found to be statistically nonsignificant. Given that there is both a quadratic and a linear trend tested for each of the variables, it is likely the increased number of tests accounted for the lack of significant effects on the Roy-Bargman stepdown F-tests. Since significant main effects were obtained, however, the univariate F-tests were interpreted. A Bonferroni correction was applied to univariate F-tests to take into account the number of dependent variables used in each analysis.

For the non-parametric outcome measures (SHFD) Wilcoxon within-group statistical tests were performed using the SPSS NPAR program. Differences between treatment group scores on the SHFD from pre-treatment to post-treatment were investigated, and these were compared with treatment group differences found from pre-treatment to follow-up. Separate analyses were performed for male and female subjects.

Changes Across Time on Parametric Measures

Before the results of the separate female and male analyses are examined, the results of the combined DAS couples scores across time will be presented. The mean combined DAS couple scores at pre-treatment, post-treatment, and follow-up were 99.26 (SD = 11.28), 103.5 (SD = 11.59), and 105.00 (SD = 12.13), respectively. Analysis of variance with repeated measures across time resulted in a significant linear trend, $F(1,22) = 10.89, p < 0.05$, indicating that treatment couples improved significantly across all time periods.

The means and standard deviations for female treatment subjects on the DAS, GRISS, SDTPS, SCL-GSI, and BDI, at pre-treatment, post-treatment and follow-up are displayed in Table 16. Using these variables, multivariate analysis with repeated measures across time resulted in a main effect for time, $F(10,13) = 3.03, p < 0.05$. This indicated that among dependent variables across time, there was at least one dependent variable whose scores differed significantly across time.

Subsequent univariate F-tests failed to reveal either significant linear, $F(1,22) = 3.25, p > 0.01$, or quadratic, $F(1,22) = 1.01, p > 0.01$, trends across time for

the DAS. Similarly, on the GRISS, neither linear, $F(1,22) = 5.51, p > 0.01$, nor quadratic, $F(1,22) = 2.97, p > 0.01$, trends were found to be statistically significant. Non-significance was also obtained on the SCL-GSI for both linear, $F(1,22) = 3.62, p > 0.01$, and quadratic, $F(1,22) = 0.53, p > 0.01$, trends, at the Bonferroni corrected alpha level of $p < 0.01$ (see Table 17).

For the SDTPS, univariate F-tests demonstrated a significant linear trend, $F(1,22) = 16.09, p < 0.01$, and a significant quadratic trend, $F(1,22) = 17.32, p < 0.01$ (see Table 17). By examining of the means it can be seen that female treatment subjects did improve across time, but that at follow-up the level of improvement was less than that found at post-treatment, but still above pre-treatment levels (see Table 16).

For the BDI, univariate F-tests revealed a significant quadratic trend across time $F(1,22) = 21.22, p < 0.01$ (see Table 17). Examination of the means across time for this variable suggested that treatment females' mean level of depression decreased from pre-treatment to post-treatment, but that this improvement was no longer present at follow-up (see Table 16).

The means and standard deviations for male treatment subjects on the DAS, GRISS, SDTPS, SCL-GSI, and BDI, at pre-treatment, post-treatment, and follow-up are displayed in Table 18. Multivariate analysis with repeated measures across time demonstrated a significant main effect for time, $F(10,13) = 6.70, p < 0.05$. Subsequent univariate F-tests failed to reveal significant linear, $F(1,22) = 6.06, p < 0.01$, or quadratic, $F(1,22) = 0.01, p < 0.01$, trends across time on the GRISS.

Similarly, on the SDTP neither the linear, $F(1,22) = 2.08$, $p < 0.01$, nor quadratic, $F(1,22) = 0.00$, $p < 0.01$, trends were found to be statistically significant, at the Bonferroni corrected alpha level of $p < 0.01$ (see Table 19).

Univariate F-tests did demonstrate statistically significant linear trends across time on; the DAS, $F(1,22) = 16.86$, $p < 0.01$, the SCL-GSI, $F(1,22) = 49.02$, $p < 0.01$, and the BDI, $F(1,22) = 14.94$, $p < 0.01$ (see Table 19). No statistically significant quadratic trends were found. A statistically significant linear trend, in absence of a statistically significant quadratic trend, suggested that subjects continued to improve across time. Inspection the means on Table 18 demonstrated that on the DAS male subjects' mean scores improved at all three time periods. On the SCL-GSI and the BDI, however, inspection of the means revealed that male treatment subjects' follow-up mean scores were slightly lower than those at post-treatment, suggesting that at follow-up the level of improvement found at post-treatment was maintained but had levelled out. It would appear that the significant linear trend found across time for combined couple DAS scores is accounted for by male partner improvement on the DAS across time, in that significant trends across time on the DAS were found only for males and not females.

Treatment group changes over time were also investigated for the GRISS subscales; Sexual Infrequency (GRISS-INF), Sexual Avoidance (GRISS-AVD), and Sexual Noncommunication (GRISS-NCO). The same statistical procedures used in the above analyses were again implemented.

The means and standard deviations for female treatment subjects on the GRISS subscales across the three time periods are displayed in Table 16. Multivariate analysis with repeated measures across time revealed a significant main effect for time, $F(6,17) = 3.33, p < 0.05$. Subsequent univariate F-tests failed to demonstrate statistically significant linear, $F(1,22) = 0.78, p > 0.017$, or quadratic, $F(1,22) = 5.31, p > 0.017$ trends on the GRISS-INF, at the Bonferroni corrected alpha level of $p < 0.017$ (see Table 20). Although no statistically significant quadratic trends were found, statistically significant linear trends were found, however, for GRISS-AVD, $F(1,22) = 11.13, p < 0.017$, and GRISS-NCO, $F(1,22) = 13.70, p < 0.017$. This suggested that on these two measures subjects improved across time. Inspection of the means showed that subjects' scores continued to improve across time on these measures (see Table 16). The comparatively small amount of change positive found between post-treatment and follow-up means for these measures suggested that the level of improvement found for female subjects from pre to post-treatment had levelled off at follow-up.

The means and standard deviations for male treatment subjects on the three GRISS subscales of interest are displayed in Table 18. Multivariate analysis with repeated measures across time revealed no main effect for time, $F(6,17) = 2.12, p > 0.05$. The observed power of this non-significant effect was 0.59.

Changes on Non-Parametric Measure Across Time

The SPSS NPAR program was used to perform Wilcoxon within-group tests that assessed differences between treatment subjects' pre-treatment to post-

treatment, and pre-treatment to follow-up, scores on the SHFD. Separate analyses were conducted for female and male subjects. An alpha level of 0.05 was maintained in these analyses.

Median values on the SHFD for treatment females and males at pre-treatment and post-treatment are displayed in Table 21. For females, Wilcoxon analysis found a statistically significant difference on the SHFD ($z = -3.74$, $p = 0.00$) indicating significant improvement from pre-treatment to post-treatment on this measure (see Table 21). Table 22 displays the median values for treatment females and males at pre-treatment and follow-up on the SHFD. Wilcoxon analyses found a statistically significant differences between treatment group females' pre-treatment and follow-up scores on the SHFD ($z = -3.52$, $p = 0.00$) (see Table 22). These findings suggest that gains made by female treatment subjects on the SHFD from pre-treatment to post-treatment were maintained at follow-up.

The median values for male treatment subjects on the SHFD at pre-treatment and post-treatment are displayed in Table 21. Wilcoxon analysis failed to find a significant difference between pre-treatment and post-treatment scores on the SHFD ($z = -0.47$, $p > 0.05$) (see Table 21). Table 22 displays the median values for treatment males on the SHFD at pre-treatment and follow-up. Wilcoxon analysis revealed no statistical difference between male pre-treatment and follow-up scores on the SHFD ($z = -1.08$, $p > 0.05$).

Clinical Significance at Follow-up

Percentage of treatment subjects recovered, improved, or deteriorated at follow-up was compared to the levels of recovery, improvement and deterioration found at post-treatment. Table 23 demonstrates that the percentage of female subjects recovered and improved on outcome measures at follow-up ranged from 17-26% and 13-39% respectively, compared to 4-36% and 20-48% respectively at post-treatment. Overall, at follow-up, percentage of deterioration on outcome measures was low (ranging from 0-13% at follow-up and 0-4% at post-treatment).

For males, the percentage of subjects recovered and improved on outcome measures at follow-up ranged from 4-9% and 0-61% respectively, compared to 8-16% and 0-40% respectively at post-treatment (see Table 24). Overall, the percentage of deterioration on outcome measures at follow-up was low (ranging from 0-4% at both follow-up and post-treatment). Decline in percentage of improvement was most pronounced on the SCL-GSI.

Table 25 summarizes which outcome variables maintained percentage of improvement found at post-treatment, and which deteriorated at follow-up, for males and females separately. In this instance, the term deteriorated is used to indicate that the percentage of individuals improved at post-treatment dropped by more than 4% (one individual) from post-treatment to follow-up. Females maintained levels of improvement on five of eight outcome measures. Males maintained levels of improvement on six of eight outcome measures.

Phase V: Predictors of Post-Treatment Score

Analyses were performed to investigate pre-treatment predictors of sexual desire (SDTPS) and sexual adjustment (GRISS) at post-treatment. Analyses were limited to treatment group female subjects ($n = 25$) because they, rather than males, displayed distressed scores on these variables at pre-treatment. Two hierarchical multiple regression analyses were performed. In the first, female SDTPS scores at post-treatment were entered as the predicted criterion variable, and female partner DAS scores at pre-treatment and type of ISD were entered as predictors. In the second, female GRISS scores at post-treatment were entered as the predicted criterion variable, and, once more, female partner DAS scores at pre-treatment and type of ISD were entered as predictors. In each case the ratio of subjects per predictor was well above the five to one ratio suggested by Tabachnick and Fidell (1989). The SPSS REGRESSION program was used in these analyses. The alpha level was maintained at $p < 0.05$ for both analyses.

In the first analysis, neither pre-treatment female partner DAS scores nor type of ISD accounted for a significant proportion of the variance in female partner SDTPS scores at post-treatment (see Table 26). In the second analysis, Female partner DAS scores at pre-treatment did account for a significant proportion of the variance in female partner GRISS scores at Post-treatment (0.43%). The negative correlation found between female partner DAS scores at pre-treatment and female partner GRISS scores at post-treatment (-0.43) suggested that treatment females with higher DAS scores at pre-treatment had

lower GRISS scores at post-treatment (lower scores on the GRISS reflect less sexual distress). Type of ISD did not account for a significant proportion of the variance in GRISS scores at post-treatment, see Table 27.

Phase VI: ISD vs Non-ISD Comparison

In addition to the treatment component in this study, a comparison was made between ISD and non-ISD couples. The ISD group consisted of the treatment and control group couples used in the treatment component of this study ($n = 49$). The non-ISD group consisted of couples in which the woman was receiving psychotherapy for a concern other than ISD (females : $n = 17$; participating male partners: $n = 15$). The details concerning the subjects involved appear in the method section. The measures on which these couples were compared consisted of the outcome measures and demographic variables used in the treatment component of this study. ISD couple pre-treatment scores were used in this analysis.

The above comparison was conducted using two different methods. In the first method, the non-ISD couples were compared to the entire sample of ISD couples. In the second method, the non-ISD couples were compared to the ISD couples according to ISD subtype. For this purpose, ISD couples were divided into two groups: 1) partner-specific ISD couples ($n = 27$), and 2) global ISD couples ($n = 22$). Global non-lifelong ISD and global lifelong ISD couples were combined to form the global ISD group. Separate analyses were carried out for female and male subjects.

The results of these two methods of analysis were identical. Therefore, only the results of the primary ISD vs non-ISD comparison will be reported in detail. The results of the comparison utilizing ISD subtypes will be summarized.

ISD vs Non-ISD

ISD and non-ISD couples were first compared on the demographic variables used in this study. Means and standard deviations for continuous demographic variables are presented in Table 28. The SPSS Anova program was used to investigate differences on continuous demographic variables. Analysis of variance revealed no statistically significant group differences for: number of years married ($F(1,58) = 0.03, p > 0.01$), number of children, ($F(1,58) = 0.21, p > 0.01$), age of female ($F(1,58) = 0.00, p > 0.01$), or age of male ($F(1,58) = 0.08, p > 0.01$), at the Bonferroni corrected alpha level of $p < 0.01$.

Group differences on the nonparametric demographic measures were examined using the SPSS NPAR program. Mann-Whitney U tests were performed. No statistically significant group differences were found using the Bonferroni corrected alpha level of $0.05/3 = p < 0.017$ (see Table 29). Group differences in the 'presence of sexual trauma in female partner's past' was investigated using a Chi-square test, and no statistically significant differences were found ($p < 0.05$) (see Table 30).

Analysis of differences between ISD and non-ISD couples were performed separately for female and male subjects except for combined DAS couple scores. The Mean combined DAS couple scores for the ISD and Non-ISD groups were

100.54 (SD = 11.85) and 92.73 (SD = 13.39), respectively. This difference was found to be statistically significant, $F(1,62) = 4.69, p < 0.05$, demonstrating that the non-ISD group had significantly lower combined DAS couple scores, than did the ISD group. The combined couple DAS scores of non-ISD group receiving marital therapy ($n = 9, M = 91.22, SD = 12.80$) were compared to the combined DAS scores of the non-ISD group not receiving marital therapy ($n = 6$: two male partner scores not available, $M = 95.00, SD = 15.16$), and no significant difference was found ($F(1,13) = 0.27, p > 0.05$).

The means for female ISD and non-ISD subjects on the DAS, GRISS, SDTP, SCL-GSI, and BDI are displayed in Table 31. The SPSS MANOVA program was used to investigate group differences on these measures. Multivariate analysis of variance revealed a significant main effect for group, $F(5,59) = 16.40, p < 0.05$. Subsequent univariate F-tests and Roy-Bargman stepdown F-tests revealed no statistically significant differences between the two groups on the DAS, SCL-GSI, or BDI, at the Bonferroni corrected alpha level of $p < 0.01$ (see Table 32). Both univariate F-tests, $F(1,63) = 19.29, p < 0.01$, and Roy-Bargman stepdown F-tests, $F(1,62) = 26.86, p < 0.01$, did, however, demonstrated a statistically significant group difference on the GRISS. A statistically significant group difference was also found on the SDTPS using both univariate, $F(1,63) = 46.32, p < 0.01$, and Roy-Bargman, $F(1,61) = 34.11, p < 0.01$, F-tests (see Table 32). This demonstrated that the ISD group females reported significantly more distress on the GRISS and SDTPS, than did the non-ISD females.

Table 31 displays the means for female subjects on the GRISS subscales investigated. Multivariate analysis of variance revealed a main effect for group for these variables, $F(3,61) = 8.69, p < 0.05$. Subsequent univariate F-tests revealed no statistically significant group differences on the GRISS-INF or GRISS-NCO, at the Bonferroni corrected alpha level of $p < 0.017$ (see Table 33). A statistically significant group difference was found, however, on the GRISS-AVD, $F(1,63) = 26.23, p < 0.017$. This finding demonstrated that the ISD females were significantly more distressed on the GRISS sexual avoidance subscale, than were the non-ISD females.

The SPSS NPAR program was used to perform Mann-Whitney U tests that investigated group differences for females on the SHFD. Statistically significant group differences were obtained on the SHFD ($U = 83.00, p = 0.00$), see Table 34. This demonstrated that the ISD females reported less sexual desire, than did the non-ISD females.

For males, means for the DAS, GRISS, SDTPS, SCL-GSI, and BDI are displayed in Table 35. Using the same statistical procedures described for female subjects, multivariate analysis of variance failed to reveal a main effect for group on these measures, $F(5,58) = 1.70, p > 0.05$. Observed power for this analysis was 0.55. Male subjects' mean scores for the GRISS subscales investigated are displayed in Table 35. Multivariate analysis of variance also demonstrated no main effect for group on these measures, $F(3,61) = 2.56, p > 0.05$. Observed power for this analysis was 0.60. These findings suggested that ISD male partners

were not different from their non-ISD counterparts on any of the above outcome variables.

For males, group differences on the SHFD were investigated using the same statistical procedures described earlier for female subjects. No statistically significant difference was obtained on the SHFD ($U = 349.00$, $p > 0.05$), see Table 34.

ISD Subtype vs Non-ISD

As noted previously, considering the high degree of similarity between the results obtained in the ISD subtype analysis and those obtained in the ISD vs non-ISD analysis, the results of the subtype analysis will be summarized. The same statistical procedures were used in both analyses.

No statistically significant differences were found between non-ISD, partner-specific ISD, and global ISD couples on demographic variables. Partner-specific and global ISD couples did not have statistically different scores on duration of ISD.

For females, non-ISD subjects were found to be significantly less distressed on the GRISS, and SDTPS, than were partner-specific, or global ISD subjects, at the Bonferroni corrected alpha level of $p < 0.01$. Female non-ISD subjects were also significantly less distressed than both the ISD subtype groups on the GRISS-AVD subscale ($p < 0.00$) and SHFD ($p < 0.00$). In addition, no statistically significant differences were found on any demographic or outcome variable when partner-specific ISD females were compared with global ISD females (i.e., no

differences between ISD subtypes). For males, no statistically significant differences were found between non-ISD male partners and their partner-specific ISD and global ISD counterparts. No statistically significant differences were found between the partner-specific-ISD male partners and global-ISD male partners on any variable investigated.

Summary of Results

Treatment and control group comparisons at post-treatment revealed statistically significant differences, reflecting improvement, for treatment females on the BDI (level of depressive symptoms), and SHFD (an exploratory measure of sexual desire). For males, treatment and control group comparisons revealed significant differences at post-treatment on GRISS-NCO (sexual communication). With respect to clinically significant rates of improvement at post-treatment, differences between the treatment and control group were most pronounced for females on the DAS (overall dyadic adjustment) and the SDTPS (a measure of sexual desire). For males, differences in clinically significant improvement were most pronounced on the DAS (dyadic adjustment), and SCL-GSI (global measure of psychological and physical distress).

Across time, combined DAS treatment couple scores revealed gains across all time periods. For Females, treatment subjects evidenced gains on the SDTPS (direct measure of sexual desire), GRISS-AVD (measure of sexual avoidance), and GRISS-NCO (measure of sexual communication), SHFD (an exploratory

measure of sexual desire), and BDI (measure of depressive symptoms) from pre-treatment to post-treatment. With the exception of the BDI, gains found post-treatment were present at follow-up. Males evidenced gains on DAS, SCL-GSI, BDI, from pre-treatment to post-treatment. These gains were maintained at follow-up. With respect to clinically significant rates of improvement at follow-up, on five of eight measures females maintained the improvement found at post-treatment. On six of eight measures, males maintained the improvement found at post-treatment. Multiple regression analysis involving female treatment subjects revealed that higher levels of dyadic adjustment (DAS) at pre-treatment predicted less overall sexual distress on the GRISS at post-treatment.

Comparison of ISD and non-ISD couples revealed that non-ISD couples had significantly lower combined DAS couple scores, and thus reported more dyadic distress, than ISD couples. ISD females were significantly more distressed than non-ISD females on a number of measures of sexual functioning: the GRISS, GRISS-AVD, SDTPS, SHFD. No differences were found between ISD and non-ISD male partners. Identical results were obtained in a comparison of partner-specific-ISD, global-ISD, and non-ISD couples.

CHAPTER IV

DISCUSSION

This research project contrasted marital therapy interventions for the treatment of ISD in women to a wait-list control group condition. Predictors of outcome were examined. In addition, a comparison was made between couples in which the female partner reported ISD and couples in which the woman was receiving psychotherapy for a concern other than ISD. The hypotheses were based on an interpersonal conceptualization of ISD which emphasised the potential relationship between level of dyadic adjustment and level of sexual desire towards one's partner. This discussion reviews the results obtained and presents recommendations for future investigation in this area.

Treatment and control group comparisons showed that following marital therapy treatment group females had significantly higher levels of sexual desire on an exploratory measure of sexual desire, and lower levels of depressive symptoms, than the control group following the wait-list period. These treatment and control group comparisons revealed no significant group differences for females on measures of marital adjustment, overall sexual adjustment, sexual desire toward partner, sexual frequency, sexual avoidance, sexual communication, or level of global psychological distress. Treatment group rates of clinically significant improvement were superior to those of control group couples. Treatment group within-group comparisons across time demonstrated a number of areas of

improvement which were maintained at follow-up. Treatment group females' pre-treatment levels of dyadic adjustment were found to predict post-treatment levels of overall sexual adjustment. The major differences between ISD and non-ISD couples were in the area of sexual functioning.

Hypothesis #1a: Statistically Significant Effects of Marital Therapy on Dyadic Adjustment

Hypothesis #1a was not supported by the data. It was expected that treatment group post-treatment Dyadic Adjustment Scale (DAS) scores would be significantly higher than control group DAS scores at the end of the wait-list period. Neither female nor male treatment subjects were found to have DAS scores at the conclusion of therapy that were significantly higher than those of their control group counterparts at the end of the wait-list period. The same finding was obtained when combined couple scores of dyadic adjustment were examined. These findings were surprising considering previous research which has demonstrated EFT to be effective in increasing dyadic adjustment (e.g., Johnson & Greenberg, 1985,b). The most recent EFT outcome study (Gordon-Walker, 1993) found that 10 sessions of EFT led to meaningful increases in the dyadic adjustment of maritally distressed couples with chronically ill children. Treatment group level of improvement was found to be statistically and clinically superior to that found in the wait-list control group condition. The finding of the present study was also disappointing because the interpersonal conceptualization of ISD

used in the present study anticipated that gains made in overall sexual adjustment and sexual desire would be achieved through increases in dyadic adjustment.

There are several possible reasons for the lack of significance obtained. One possible explanation is the nature of the subjects in this study. In research studies in which EFT was found effective in increasing dyadic adjustment (Dandeneau, 1989; Dessaulles, 1990; Johnson & Greenberg, 1985a; Johnson & Greenberg, 1985b; & Gordon-Walker, 1993) couples presented with the specific complaint of marital distress, expressed a specific need to improve marital functioning, and/or presented with DAS scores that were clearly in the distressed range. In the present study, the presenting concern was loss of sexual desire and not marital conflict. In addition, neither member of the couple had to have a DAS score in the distressed range. Although the mean DAS scores for ISD couples approximated the cut-off for marital distress (females: $M = 99.37$, $SD = 13.21$; males: $M = 101.71$, $SD = 12.45$), 69% of both female and male subjects had pre-treatment DAS scores that were above the suggested cut-off for marital distress (97 points) recommended by Spanier (1976).

Originally, inclusion in this study was to be limited to couples presenting with both marital distress and partner-specific ISD. The clinical literature suggested that such couples may possibly respond optimally to treatment focused on improving the quality of the marital relationship (e.g., Schover, 1986). A final decision was made to only limit inclusion to couples whose DAS scores were above the level of divorced couples (70). The decision not to limit inclusion to

subjects whose DAS scores were below the cut-off for distress was made for two reasons. First, this study was the first controlled-outcome study to explore the treatment of ISD, and therefore it was decided that restricting inclusion to a specific subtype of ISD or subjects with specific characteristics was premature. It was reasoned that subsequent research could build upon this broader foundation and investigate differential effects. Second, no cut-off scores on the DAS were established in the interest of facilitating the recruitment a sufficient number of couples experiencing ISD.

The couples who received EFT in this study were therefore different from couples in other EFT outcome studies in three ways: 1) they were not presenting with a primary complaint of marital distress, 2) they did not have to be in the distressed range of the DAS, and 3) they all presented with a primary complaint of ISD. These differences, alone or in combination, may have resulted in the nonsignificant effects of EFT compared to a wait-list control condition.

To use a comparative example, Gordon-Walker (1993) conducted an EFT treatment-outcome study for maritally distressed couples with chronically ill children. Her study used the same number of EFT sessions, had the same clinical supervisor, and largely the same group of EFT therapists. In her study, a significant increase in treatment subjects' DAS scores was obtained, as compared to a control group condition. The primary difference between her study and the present study was the subject population.

The finding that marital therapy did not improve marital functioning is also contrary to most of the literature examining the effect of marital therapy on the marital functioning of couples experiencing sexual problems. In most studies, marital therapy has led to a significant increase in marital functioning for such couples (e.g., Bennun, Rust, & Golombok, 1985). In most studies, however, the subject population consisted of couples who presented with marital distress and also had sexual concerns (Bennun, Rust, Golombok, 1985; O'Leary and Arias, 1983) and/or couples with ISD were either excluded or there was no investigation of how they responded as compared to couples with other sexual problems (Hartman & Daly, 1983; O'Leary & Arias, 1983; Bennun, Rust, and Golombok, 1985; Zimmer, 1987). Low frequency of sexual intercourse has been found to be a predictor of poor prognosis in behavioral marital therapy and communication skills training (Hahlweg et al., 1984). Low frequency of intercourse was a defining characteristic of the ISD couples in the present study. Hence, once more the findings in this study may be due to the nature of the subject population: couples seeking treatment for a sexual problem rather than marital distress, and all couples experiencing ISD.

Regardless of the level of marital distress reported, couples entering marital therapy with the specific goal of resolving ISD difficulties, may respond differently to marital therapy than couples entering marital therapy with the specific goal of resolving marital conflict.

In addition, it is possible that the relatively high DAS scores at pre-treatment resulted in a ceiling-effect which decreased the likelihood of finding statistically significant differences at post-treatment.

Furthermore, although many couples presented with DAS scores that more closely approximated a non-distressed rather than a distressed population, the overall clinical picture obtained by the experienced therapists working with these couples reflected both immediate and chronic relationship discord. Discussion of how the subject population may have influenced the effectiveness of EFT is purely speculative, but considering the amount of clinically relevant information gained working with these couples it appears worthwhile to offer some comment. Female subjects commonly reported that the symptom of ISD developed in response to unresolved relationship or interpersonal conflict. It was the impression of therapists that couples often chose to centre conflict around the rigid and escalating negative interaction pattern associated with the concrete symptom of ISD rather than underlying relationship issues. This clinically observed phenomenon may have accounted for the relatively high DAS scores of couples who were perceived by therapists as maritally distressed. By focusing on the symptom of ISD, couples may have masked general relationship distress on the DAS that would have been apparent if underlying relationship concerns were expressed directly in their relationships.

It was the consensus of the therapists and clinical supervisor in this project that these were the most clinically challenging couples they had encountered,

despite the large proportion of couples with DAS scores above the distressed range. With a limit of ten EFT sessions, it was difficult to reduce tension around the ISD interaction pattern to a point that allowed couples to work on underlying issues, achieve resolution of underlying relationship issues, and integrate these gains into sexual functioning. The speculative conclusion based on clinical observation was that the symptom of ISD appeared to mask discord on the DAS and presented a clinical scenario that was difficult to resolve in only ten sessions.

Therefore, four main factors may have played a role in the results obtained. First, the primary presenting complaint of these couples (ISD) was different from the primary presenting complaint of couples in other EFT and marital therapy outcome studies. Second, pre-treatment DAS scores were fairly high and may have led to somewhat of a ceiling effect. Third, although pre-treatment DAS scores were fairly high, the clinical impression was that most couples demonstrated considerable underlying marital distress and rigid negative interaction patterns around the issue of sexual interaction which were difficult to resolve in a relatively brief treatment format. The low observed power of statistical analyses may also have been a factor. Low observed power in the analyses involving the DAS (e.g., 0.17) may have limited the probability of finding significant results.

An alternative explanation for the lack of significant differences between the treatment and control group on the DAS at post-treatment is that ISD couples as a group are not very maritally distressed, do not require couples counselling, and

thus do not benefit from receiving it. The clinical picture established in this study, however, suggests that this is not the case.

Hypothesis #1b: Clinically Significant Effects of Marital Therapy on Dyadic Adjustment

Hypothesis #1b was partially supported by the data. It was expected that at post-treatment the treatment group would have superior rates of clinical improvement, and less deterioration on the DAS, as compared to the control group at the end of the wait-list period. Observed rates of improvement and deterioration were markedly better for treatment subjects. The largest observed differences were found on rates of improvement. Subjects defined as clinically improved evidenced increases on the DAS of greater magnitude than that expected from measurement error alone. Forty percent of both female and male treatment subjects improved on the DAS following treatment, whereas only 17% of control female and 25% of control males improved following the end on the wait-list period. Clinical improvement was still lower, however, than the improvement rate found in Gordon-Walker's (1993) recent EFT treatment-outcome study which found a 69% clinical improvement rate on the DAS for treatment subjects (control group improvement rate was 13%).

Hypothesis #2a: Statistically Significant Effects
of Marital Therapy on Sexual Desire

Hypothesis #2a was unsupported by the data. It was expected that at post-treatment treatment group females would report significantly higher levels of sexual desire on all three measures of sexual desire (GRISS-AVD, SDTP, SHFD), than control group females at the end of the wait-list period. EFT was found to have a statistically significant positive effect on the female partner's level of sexual desire on only one of three measures of sexual desire, as compared to a wait-list control condition. No significant differences were found between the treatment and control group on the Sexual Desire Toward Partner Scale (SDTPS), or the Golombok-Rust Inventory of Sexual Satisfaction Sexual Avoidance subscale (GRISS-AVD). Significant differences were found on the Sex History Form question assessing current level of sexual desire toward partner (SHFD). Examination of the median values for the SHFD demonstrates that at pre-treatment the typical treatment group female desired to have sex less than once a month, whereas at post-treatment she desired to have sex once every two weeks. This represented a statistically significant positive change in reported level of sexual desire, as compared to control group females, but did not appear to reflect an optimal increase in sexual desire. In addition, findings related to this measure must be viewed with caution considering its psychometric limitations.

Level of sexual avoidance (GRISS-AVD) had not decreased significantly beyond that of the wait-list control condition, and this finding suggested that the

difference on the SHFD was not related to a decrease in sexually avoidant feelings or behaviors beyond that found in the wait-list control condition.

The discrepancy between the two direct measures of sexual desire (SHFD and SDTPS) may be explained by differences in the nature of the two measures. The SHFD is a global one item measure of sexual desire, whereas the SDTPS total score is based on ten items examining different aspects of sexual desire towards partner. One may argue that the one item SHFD may be the more direct of the two measures. Alternatively the SDTPS may offer a more complex and accurate assessment of sexual desire. The SDTPS, however was developed specifically for this project, but preliminary psychometric analyses performed in this study showed promising results. Sexual History Form items have been used in previous ISD outcome research (Schover & LoPiccolo, 1982) and studies examining the effect of marital therapy on sexual problems (O'Leary & Arias, 1983), but investigation of their psychometric properties have been limited, and thus results must be viewed with caution.

As to the question of why positive changes on one of the measures of sexual desire was not accompanied by positive changes in measures of sexual avoidance, treatment focused on improving couples' dyadic adjustment and not on improving sexual desire or sexual behaviour directly. Sexual desire was expected to increase in response to significantly heightened levels of dyadic adjustment and this change failed to occur. It remains an empirical question whether meaningful changes in

dyadic adjustment would have resulted in increases on all indicators of sexual desire.

No predictions were made with respect to how males would change on measures of sexual desire. Males in this study did not report difficulties with sexual desire, but theorists such as Zilbergeld and Ellison (1980) suggest that one successful outcome in the treatment of ISD may be a decrease in the non-symptomatic partner's level of sexual desire, and thus a decrease in the desire discrepancy reported by the couple. No significant differences in sexual desire were found between the treatment and control group males at post-treatment. For example, the typical male in both the treatment and control group desired sex (SHFD) three or four times a week at both pre-treatment and post-treatment.

Hypothesis #2b: Clinically Significant Effects of Marital Therapy on Sexual Desire

Hypothesis #2b was partially supported by the data. It was expected that post-treatment treatment group females would have markedly better rates of clinical recovery, improvement, and deterioration on measures of sexual desire, as compared to control group females at the end of the wait-list period. For females, rates of deterioration on the three measures of sexual desire are comparable, but rates of recovery and improvement are clearly superior for the treatment group. Only on the SDTPS was the improvement rate for the control group above 10%. Whereas, the improvement rates for the treatment group on the SDTPS, SHFD,

and GRISS-AVD were 48%, 24%, and 32%, respectively. These results are somewhat encouraging and, with half of the treatment females improved on the SDTPS, suggest that more marital therapy sessions may have led to even higher rates of clinical improvement.

Hypothesis #3a: Statistically Significant Effects of Marital Therapy on Sexual Adjustment

Hypothesis 3a was not supported by the data. It was expected that at post-treatment treatment group scores on measures of sexual adjustment (GRISS, GRISS-INF, GRISS-NCO) would be significantly better than those of the control group following the end of the wait-list period. Female treatment group subjects' scores on measures of sexual adjustment at post-treatment were not found to be significantly better than those of female control group subjects following the ten week wait-list condition.

Although overall sexual adjustment and sexual communication are considered important measures of sexual interaction (e.g., Rust & Golombok, 1986), the lack of significant differences in frequency of sex was of particular importance given that it is the measure of sexual adjustment most closely related to sexual desire (LoPiccolo, 1980).

For males, scores at pre-treatment reflected distress related to frequency of sex (GRISS-INF), and at least moderate levels of distress with respect to sexual communication (GRISS-NCO). Male total sexual adjustment scores did not

reflect distress (GRISS). The GRISS total score largely assesses specific sexual symptoms and general sexual functioning, and the males in this study were largely non-symptomatic. Following marital therapy, the only significant difference found between the treatment and control group males was that treatment group males reported significantly less difficulty communicating verbally with their partner about sex (GRISS-NCO). This finding is interesting, but positive changes in sexual communication cannot, in isolation, be interpreted as an overall change in sexual functioning. The low level of power observed in the nonsignificant sexual adjustment analyses (e.g., 0.25) may have contributed to the lack of significant findings. As would be expected, like females the males did not report a significant increase in sexual frequency. Sexual frequency is considered an important outcome measure in the treatment of ISD (e.g., Lopiccolo, 1980). This finding suggested that from the partner's perspective treatment was not effective.

Hypothesis #3b: Clinically Significant Effects

of Marital Therapy on Sexual Adjustment

This hypothesis was partially supported by the data. It was expected that at post-treatment treatment group subjects would have markedly better levels of clinical recovery, improvement and deterioration on measures of sexual adjustment, as compared to the control group at the end of the wait-list period. For both males and females, recovery and deterioration rates were comparable

for the treatment and control group, but treatment group improvement rates following marital therapy, although less than ideal, were superior to those obtained by the control group following a wait-list condition.

In summary, it is difficult to compare the results obtained for hypotheses 1, 2, and 3 (treatment and control group comparisons) with the existing literature. O'Carroll (1991), in the first review of controlled outcome studies in the area of ISD, concluded that there was a marked lack of adequate treatment studies and that no controlled outcome studies had been performed in this area. The results of this project represented a first step in the development of such a literature base. In addition, no treatment study in this area has systematically examined the clinical significance of the results obtained. The results of this controlled outcome study must therefore stand alone in the literature until further controlled studies are performed.

Hypothesis #4: Relationship Between Initial Level
of Marital Distress and Sexual Adjustment and Sexual
Desire at Post-Treatment

Hypothesis #4 was not supported by the data. It was expected that lower levels of dyadic adjustment at pre-treatment would predict higher levels of sexual desire and sexual adjustment in females at post-treatment. For sexual desire (SDTPS), the results of hierarchical multiple regression analysis demonstrated that female pre-treatment dyadic adjustment did not predict sexual desire at post-

treatment. For sexual adjustment, the results of hierarchical multiple regression analysis were the opposite of what was expected. Higher levels of marital adjustment (DAS) at pre-treatment predicted higher levels of overall sexual adjustment (lower GRISS scores) in females following therapy. The basis for the hypothesis #4 was that the higher the level of initial marital distress, the more ISD would likely be related to couple conflict, and thus marital therapy was expected to have a greater impact on sexual functioning. As reported, for females at pre-treatment a statistically significant negative correlation was found between dyadic adjustment (DAS) and overall sexual distress (GRISS -higher scores reflect greater distress), and a significant positive correlation was found between dyadic adjustment and sexual desire toward partner (SDTPS). This suggests that at pre-treatment poorer marital adjustment was related to lower sexual desire and sexual adjustment.

There are several possible explanations for why hypothesis #4 was not supported by the data. The lack of statistically significant improvement found in marital functioning following marital therapy may suggest that ten sessions of EFT was not sufficient to meaningfully improve the marital functioning of couples with ISD. The results of the multiple regression analyses found that higher levels of marital adjustment at pre-treatment predicted higher levels of sexual adjustment following marital therapy. These results appear to suggest that following therapy, couples who were less maritally distressed to begin with had higher levels of sexual adjustment. It is possible that in ten sessions only those couples with less couple

distress were able benefit from marital therapy to an extent that sexual functioning was improved. Couples with higher levels of couples distress may have required a treatment of longer duration before they reported significant improvements in sexual functioning. The impression of therapists in this project was that couples did benefit from marital therapy, but that ten sessions was insufficient to achieve meaningful changes in both marital and sexual functioning. At follow-up interviews, when couples were asked how they would improve the treatment package offered, the most common suggestion was that length of treatment be extended. Recently, Johnson and Greenberg (in press) have stated that although EFT has been shown to be effective in as little as eight sessions, twenty available sessions is considered optimal. The relatively short length of treatment may, therefore, have been a factor in the disappointing results found in the treatment and control group comparisons, and may explain why higher initial levels of marital adjustment predicted higher levels of sexual adjustment following therapy.

It is interesting that initial levels of dyadic adjustment at pre-treatment did not predict sexual desire at post-treatment. It is possible that this finding is also related to the generally low levels of improvement found following therapy.

Type of ISD was not found to predict sexual desire or sexual adjustment at post-treatment. This finding is interesting in that some theorists suggest that a global loss of ISD is an indicator that factors other than the couple's relationship, such as organic dysfunction, may be involved in the loss of sexual desire (e.g., Schover, 1981). Alternatively, other theorists suggest that when individuals lose

sexual desire for their partner they sometimes also lose overall sexual interest because sexual desire has been so closely identified with the partner (Lief, 1988). Schover and Lopiccolo (1982) found that type of ISD did not predict treatment outcome for sex therapy. It may be that type of ISD is not a major predictor of response to treatment. Alternatively, the probability of obtaining differential outcome effects based on ISD subtype may have been lowered by the overall limited gains found following treatment in this study. In addition, subjects were screened for ISD related to organic factors, and this may have led to a biased sample of global-ISD females (i.e., global-ISD females whose symptoms were more related to loss of sexual desire for partner than to organic factors).

Hypothesis #5: Maintenance of Improvement at Follow-up

Hypothesis #5 was partially supported by the data. It was expected that significant differences found between treatment subjects' pre-treatment and post-treatment outcome scores would be maintained at follow-up. Analyses of female treatment subject within-group changes from pre-treatment to post-treatment demonstrated significant improvement in: sexual desire (SDTPS, SHFD), level of sexual avoidance (GRISS-AVD), sexual communication (GRISS-NCO), and level of depression (BDI). At follow-up gains were maintained in all areas except level of depressive symptoms (BDI).

It is encouraging that from pre-treatment to post-treatment female treatment subjects improved significantly on four of six measures of sexual desire and sexual functioning. It is also encouraging that these gains were maintained at follow-up.

This reflected improvement from initial scores. For example, the typical treatment female desired sex less than once a month at pre-treatment, and once every two weeks at post-treatment and follow-up. This does not, however, reflect a fully satisfying and active sexual relationship. In addition, significant improvement was not found on the measure of sexual frequency (GRISS-INF).

From pre-treatment to post-treatment males evidenced significant gains in: dyadic adjustment (DAS), psychological and physical symptoms (SCL-GSI), and depressive symptoms (BDI). These gains were found to be maintained at follow-up. As in the case of females, males demonstrated no significant improvement in frequency of sex (GRISS-INF) even in within-group comparisons. This reflected less than optimal levels of sexual functioning at post-treatment and follow-up.

It is worth noting that improvement in level of depressive symptoms (BDI) was found to decrease significantly for female subjects in both the treatment-control group comparisons and within group comparisons at post-treatment. Within-group comparisons for males demonstrated a significant decrease in both level of depressive symptoms (BDI) and level of psychological and physical symptoms (SCL-GSI). The mean level of depression found for treatment females at pre-treatment did not reflect a high level of depressive symptoms (BDI: $M = 10.44$ $SD = 7.75$). It is possible that reduction in level of depressive symptoms at

post-treatment reflected a nonspecific effect of receiving therapy that had dissipated at follow-up. Alternatively, theorists have suggested that ISD may be related to even subclinical levels of depression (e.g., Schiavi, 1985). In addition, marital therapy has been found to be effective in reducing depression (Beach & O'Leary, 1986), so it is possible that the sexual treatment gains found in within-group comparisons following marital therapy may have been related to a lowering of female level of depressive symptoms. Female improvement in level of depressive symptoms was no longer present at follow-up and this may have contributed to other areas of deterioration found at follow-up. This possibility remains an intriguing question for future research in this area.

Levels of clinically significant rates of improvement were largely maintained for both males and females as were statistically significant levels of improvement. The measure used to assess maintenance at follow-up was very stringent (no more than a 4% loss in number of subjects improved at post-treatment). Statistically significant gains for females on the BDI from pre-treatment to post-treatment were no longer present at follow-up, and it is possible that this loss contributed to deterioration in areas of clinically significant improvement at follow-up.

It must be noted that although the findings related to treatment group gains across time are encouraging, they are based only on within-group comparisons and not treatment and control group comparisons. The results of treatment and control group comparisons at post-treatment demonstrated that treatment gains in sexual functioning was limited to one measure of female sexual desire (SHFD).

The Control group wait-list period did not extend into the treatment group follow-up period, and therefore no treatment and control group follow-up comparisons could be made. Examining within-group treatment group comparisons alone, however, the results of this study are comparable to those of Schover and LoPiccolo (1982). In their archival study of the effect of sex therapy on ISD, pre-treatment, post-treatment, and follow-up within-group comparisons revealed post-treatment improvement which was maintained at follow-up. As in this study, within-group improvement in their study was characterized as reflecting significant positive changes which were less than optimal. In their study, however, significant improvements were found in frequency of intercourse.

Comparisons of ISD and Non-ISD Couples

No specific hypotheses were made concerning the results of this comparison. Given past research findings and the clinical description of ISD couples in the clinical literature, however, it was expected that ISD couples might very well report higher levels of marital distress. This expectation was not supported by the data. It was also expected that ISD couples may have significantly higher levels of sexual distress. This expectation was supported by the data.

In the existing literature comparisons have been made between: 1) ISD females and females not experiencing ISD and not receiving psychotherapy (Schreiner-Engel & Schiavi, 1986), and 2) ISD females and females not experiencing ISD, but part of a couple receiving therapy for another sexual

problem (Stuart et al., 1986). In previous studies, reports of desire disorders and ISD symptomology were absent in non-ISD couples. In the present study, subjects were not excluded on the basis of ISD symptoms. This permitted an investigation of variables distinguishing between women seeking treatment for ISD and women seeking treatment for other concerns. The potential confound of receiving psychotherapy was taken into account as it was by Stuart et. al. (1986). The range of psychotherapy was expanded beyond just sex therapy for sexual problems. In addition, comparisons were made between ISD and Non-ISD male partners on measures other than simply marital adjustment. Overall, the non-ISD sample used in this study added a new comparison base to the existing literature. It must be noted, however, that, as in previous comparisons reported in the literature, the sample size was small and this limits generalization of the results obtained. In addition, although data on ISD symptomology was obtained for subjects in the non-ISD group, a reliable diagnosis of presence or absence of ISD could not be made for all subjects. Furthermore, the sample was recruited from community private mental health settings. This may have led to a generally less psychologically distressed sample, than may have been obtained if subjects had been recruited from, for example, psychiatric hospital out-patient clinics.

The only significant differences found between ISD and non-ISD females were on measures of sexual desire and sexual functioning. ISD females were significantly more distressed on measures of: overall sexual adjustment (GRISS), sexual desire (SDTPS, SHFD), and sexual avoidance (GRISS-AVD). No

significant differences were found between ISD and non-ISD male partners. These findings demonstrated ISD females to have significantly poorer sexual adjustment and lower sexual desire than women in therapy for concerns other than ISD. This suggests that, on average, females seeking treatment for ISD have at least more intense sexual desire problems, than women in therapy for other concerns. These findings suggest that ISD is a separate diagnostic entity and not just a group of sexual symptoms common to women seeking therapy in general.

Like Stuart et. al (1987), no significant differences were found between the two groups on frequency of sex. All of Stewart et al.'s (1987) non-ISD women were free of ISD, but were receiving sex therapy. One interpretation of this consistent finding is that couples involved in the process of therapy do not have a high rate of sexual engagement. For couples not receiving treatment for ISD, however, the reasons for not having more frequent sex appear to involve factors other than the woman's level of sexual desire alone.

No significant differences were found between ISD and non-ISD females and males on: 1) demographic variables, 2) level of physical or psychological distress (SCL-GSI), or 3) level of depressive symptoms (BDI). The lack of significant differences on measures of depression and global physical and psychological distress was consistent with the results obtained by Scheiner-Engel and Schiavi (1986). In the present study, women seeking treatment for ISD were found to have significantly greater distress on measures of sexual functioning and sexual desire, than women in therapy in general, but levels of depression and

psychological distress were comparable in the two groups. These findings suggest that, although level of depression and psychological distress may be related to some cases of ISD, these variables alone do not distinguish between women with high levels and lower levels of ISD symptomology.

Although neither male nor female DAS scores were found to differentiate between ISD and Non-ISD couples. Combined couple DAS scores were found to be significantly higher (better) for the ISD group. These findings were contrary to the findings of Stuart et al. (1987). In their study, ISD couples were found to have significantly lower female and male DAS scores than non-ISD females their partners (combined couple scores were not examined). This discrepancy may be explained by differences in the non-ISD comparison sample. In Stuart et al.'s (1987) study, the non-ISD sample consisted of couples receiving sex therapy but not presenting with a primary complaint of marital distress. In the present study, 53% of the sample of non-ISD couples were receiving marital therapy and this may have biased dyadic adjustment scores towards distress. No significant differences in combined DAS scores, however, were found within the non-ISD sample in a comparison of those in marital therapy and those in other forms of therapy. Even the non-ISD couples not in marital therapy had mean combined DAS scores (95.00) below the cut-off for distress (97). Hence, based on both DAS scores and the percentage of couples in marital therapy, the non-ISD group appeared to have had a considerably high level of marital distress. Level of ISD symptomology, however, was found to be significantly lower in the non-ISD group.

In addition, eight of the eleven non-ISD couples completing the full diagnostic assessment were diagnosed as not having ISD, but were found to have mean DAS scores of 98, indicating marital distress. Furthermore, in the sample of ISD couples, DAS scores were found to range as high as 122. Taken together, these findings suggest that, although in some cases ISD may be related to marital distress, in other cases the presence of marital distress in a relationship is neither necessary nor sufficient to produce high levels of ISD symptomology.

The mean DAS score for ISD females in Stuart et al.'s (1987) study was 98.21 (SD = 16.23). This finding was comparable to the mean DAS score found for ISD females in the present study ($M = 99.37$, $SD = 13.21$), and was also higher than the cut-off for distress (97) (male scores were also comparable). This suggests that although ISD females and their partners' DAS scores have been found to be lower than couples in therapy for other sexual problems, it may be the norm that their DAS scores are on average above the cut-off level for distress.

None of the variables examined in this study point to a specific underlying factor that can suggest why some couples develop ISD and others do not. Given the variety of potential etiological factors for the development of ISD, it may be unrealistic to expect any one variable such as depression or marital distress to stand out as the definitive difference between ISD and non-ISD couples. As Kaplan (1979) suggests ISD may be caused by a number of factors either alone or in combination with each other.

The finding that ISD couples were more distressed, than non-ISD couples, only on measures of sexual functioning suggests that ISD is a separate clinical entity and not just the result of any one underlying problem such as marital distress or depression. Given these findings, it appears useful that DSM-III-R (APA, 1987) recognizes ISD as a distinct sexual dysfunction. DSM-III-R also recommends that the existence of potential underlying etiological factors be investigated in each case of ISD, and this also appears to a sound recommendation. The findings of this comparison need to be interpreted with caution given the heterogeneous nature of the non-ISD group and the small sample size.

It is useful to note that the measure developed specifically for this study, Sexual Desire Towards Partner Scale (SDTPS) did differentiate between ISD and non-ISD couples, as did the Sex History Form desire item (SHFD). These findings add to the validity of these measures.

As a final note on the results of this comparison, the incidence of sexual trauma in the female's partner's past was not found to be significantly different, but the differences were striking. Twenty-four percent of ISD females reported past sexual trauma, as compared to six percent for non-ISD females. Maltz (1988) suggested that past sexual trauma may be an important etiological factor in the development of ISD. Future studies comparing ISD and non-ISD females may wish to assess this variable.

Results of the comparison between non-ISD couples and couples with global or partner-specific-ISD were identical to the results of the overall ISD vs non-ISD comparison. In addition, comparisons between the two ISD subtypes resulted in no statistically significant findings. These findings suggested that global and partner-specific-ISD couples are very similar to each other. These findings support the views of Friedman and Hogan (1985) who argue against linking different ISD subtypes to specific potential etiological factors. These results are subject to the same limitations as those described above.

Summary

The hypotheses made in this study were largely unsupported by the data. Levels of statistically significant improvement in marital adjustment, sexual desire, and sexual adjustment following marital therapy were disappointing, when compared to a wait-list control condition. Treatment group level of improvement from pre-treatment, to post-treatment, to follow-up was more encouraging, but less than ideal, and lacked a control group comparison at follow-up. Levels of clinically significant improvement were encouraging, but also less than ideal. Contrary to the interpersonal conceptualization of ISD used in this study, lower levels of dyadic adjustment at pre-treatment did not predict better sexual adjustment and higher levels of female sexual desire following treatment. Contrary to the interpersonal conceptualization of ISD, non-ISD couples were found to have lower level of combined couple dyadic adjustment than ISD

couples. As expected, ISD couples were found to have lower level of female sexual desire and sexual adjustment than non-ISD couples. Couples experiencing different subtypes of ISD were not found to be significantly different from each other on the variables examined.

In general, the results of this study offered little support for the interpersonal conceptualization of ISD and the use of marital therapy in the treatment of ISD. Marital therapy was, however, shown to result in some significant treatment gains. For example, following marital therapy, treatment females had significantly higher sexual desire scores as measured by the SHFD, than did females in the wait-list control condition, and this post-treatment gain was maintained at follow-up. Considering the large body of clinical-theoretical literature supporting the use of marital therapy in the treatment of ISD, it would be premature to conclude that marital therapy is not an effective treatment for ISD on the basis this one controlled-outcome study. This study was subject to several limitations which may in part explain the disappointing results obtained. The following section will outline the study's strengths and limitations, and offer further suggestions for future investigations in this area.

Strengths, Limitations, and Recommendations for Future Investigations

Strengths

Operationalization of ISD. O'Carroll (1991) has stressed the need in ISD treatment studies for operationally defined definitions of ISD that incorporate both subjective self-reports of desire and objective criteria. In the present study, ISD was operationalized in such a manner.

Homogeneity of ISD sample. A major criticism of past research in this area is that researchers have not constructed subject populations composed solely of couples experiencing sexual desire disorders (O'Carroll, 1991). The present study utilized a homogeneous subject population, in that all women in the treatment and control groups were experiencing ISD.

Control group. A major criticism of past research has been the lack of control group comparison (O'Carroll, 1991). The present study was the first ISD treatment outcome study to use a homogeneous sample and control group comparisons.

Treatment implementation. The treatment administered in this study was standardized, there was a treatment manual, and therapist interventions were monitored. All therapists in this study were experienced in implementing Emotionally Focused Therapy for Couples (EFT). The results of the implementation check showed that a very high proportion of therapist statements were coded as EFT statements. Therapists attended weekly clinical supervision

session in which their interventions were monitored through both verbal descriptions of interventions with clients and by listening to taped segments of therapy sessions. The clinical supervisor was satisfied that all therapists had faithfully implemented EFT. These indicators suggested that EFT was faithfully implemented throughout the study. Couple-Therapy Alliance scores suggested that therapists developed solid working alliances with couples. No differential effect for therapist was found on this measure.

Limitations

Sample characteristics. Subjects in this study had to meet numerous inclusion criteria, and undergo a rigorous screening and assessment process. Demographic data reflected that couples in this project represented a well-educated middle class sample. These considerations may have influenced the degree to which couples in this project were representative of ISD and non-ISD couples in general.

Initial Levels of Dyadic Adjustment. The relatively high levels of dyadic adjustment found at pre-treatment may have resulted in somewhat of a ceiling effect which decreased the probability of finding differences in dyadic adjustment at post-treatment. Future studies in this area may wish to limit inclusion to subjects in which at least one member is reporting a distressed level of dyadic adjustment.

In addition, it is possible that ISD couples focus marital conflict on ISD symptoms and interaction patterns and avoid underlying relationship issues. There is support in the clinical-theoretical literature for this hypothesis (e.g., Kaplan,

1979). In addition to general measures of marital functioning, future studies may wish to incorporate measures of couple attachment or intimacy that may be more sensitive to detecting lack of emotional closeness and trust. ISD couples may report greater distress on these measures than on general measures of couple functioning. If so, the likelihood of finding statistically significant differences on relationship measures following therapy would be increased.

Therapist ratings of distress. The impression of therapists in this study proved useful in forming speculative hypotheses concerning the results obtained. These impressions were collected informally and no structured ratings of therapists' impressions of couples relationship and sexual distress were collected. Future investigations would likely benefit from documenting therapists' standardized ratings of couple distress at pre-treatment and again at post-treatment.

Length of treatment. The length of treatment in this study was fairly brief (ten sessions). In retrospect, therapists and subjects felt that marital therapy was useful, but that ten sessions was often insufficient to achieve desired treatment gains. As noted previously, EFT has been demonstrated to be an effective marital therapy (e.g., Gordon-Walker, 1993), and has elements that are considered ideal for the relationship focused treatment of ISD. Short length of treatment may have played a role in the lack of significant results following marital therapy. Future investigations in this area may wish to extend the duration of treatment to at least 20 sessions.

Comparisons of treatment formats. This study compared the effectiveness of only one type of treatment to a wait-list control condition. Future research in this area may wish to build upon these findings by comparing the effectiveness of: different forms of marital therapy (e.g., EFT vs behavioral marital therapy), different forms of therapy (e.g., marital therapy, sex therapy, combined sex and marital therapy, therapy for depression).

Assessment of ISD. As noted, there is a need for the development of psychometrically sound measures of sexual desire with well established normative data. Until such instruments are developed researchers will be limited to using the multidimensional approach to sexual desire assessment used in this study (as recommended by O'Carroll, 1991). With additional research, the Sexual Desire Toward Partner Scale (SDTPS) developed for this study may prove useful in meeting this need.

Size of subject sample. Compared to most other treatment studies in the area of sexual disorders, the number of couples in this study was fairly large ($n = 49$). For example, Bennun et al.'s (1985) study included only twenty couples. A larger sample size in the present study would, however, have increased observed power. Mean level of observed power on nonsignificant analyses was 0.37, indicating only a 37% probability of detecting significant differences if they existed. Higher levels of observed power may have led to the detection of greater statistical differences between the treatment and control group. Sample size in the non-ISD comparison group was comparatively small ($n = 17$), despite

strenuous effects to recruit such couples. Future studies may have to offer incentives beyond an assessment of marital and sexual functioning in order to recruit large numbers of non-ISD couples.

In conclusion, this study was the first controlled treatment-outcome study in the area of ISD. Hopefully, this study will encourage others to correct the limitations of this project and conduct additional controlled treatment-outcome studies in this challenging area.

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APPENDIX A
Potential Biological Causes of ISD

Potential Biological Causes of ISD

Common Organic Causes

- 1) Disease states that reduce testosterone
- 2) Depression
- 3) Severe stress
- 4) Drugs that impair the sex circuits of the brain: beta blockers, narcotics, alcohol*

Medical Determinants of Low Sexual Desire

- 1) Neurologic Disorders
 - Temporal lobe epilepsy
 - Brain tumours
 - Parkinson
- 2) Hormonal Disorders
 - Primary hypogonadism
 - Hypogonadotropic hypogonadism
 - Hyperprolactinemia
 - Thyroid disorders
 - Addison's disease
 - Cushing's disease
- 3) Metabolic Disorders
 - Chronic hepatitis
 - Hepatic failure (cirrhosis)
 - Chronic renal failure
 - Diabetes**

Pharmacological Determinants of Low Sexual Desire

Prescription Drugs

Drugs of Abuse

Endocrine Drugs

Alcohol

- Cyproterone Acetate
- Barbiturates
- Medroxyprogesterone
- Marijuana
- Estrogen (Men)

Antihypertensives

- Reserpine
- Alpha-methyldopa
- Clondine
- Spironolactone
- Beta adrenergic blockers

Psychoactive Drugs

- Phenothiazines

MAO Inhibitors
Haloperidine
Benzodiazepines
Antihistamines**

*Kaplan (1985)

**Schiavi, in Kaplan (1985)

APPENDIX B
EFT Intervention Manual for ISD
Couples Format

Emotionally Focused Therapy Intervention Manual for ISD

This intervention manual is a guide of how to use emotionally focused couples therapy (EFT) in the treatment of inhibited sexual desire (ISD). Essentially, the interventions, process, and format of treatment described in this manual are identical to that used in EFT with couples with general marital distress. The specific focus is on identifying how problematic interactions, problematic responses, and unexpressed feelings and needs impact negatively on the female partner's level of sexual desire, and removing such interpersonal barriers to sexual desire.

Overview for Therapists

Sexual interaction does not take place in a vacuum. The couple's relationship provides the larger context for their sexual interaction. EFT proposes that, unless there is an organic basis for a sexual disorder, sexual interaction usually reflects the rules and structure of the relationship in general (Greenberg & Johnson, 1988). Strong negative emotions, particularly fear and anger, seem to be incompatible with the positive experience of sexuality. Only when both partners feel safe and accepted in their relationship and can communicate openly, are the maximum conditions for the development of a satisfying sexual relationship met (Greenberg & Johnson, 1988).

In general, level of sexual desire has been thought to be related to the amount of closeness, safety, and acceptance in the couple's overall relationship. Inhibited sexual desire (ISD) can originate from several sources, such as an organic disorder or intrapsychic conflict. To a greater extent than any other sexual disorder, however, theorists have emphasized the potential for relationship discord to serve as an etiological and/or maintenance factor in ISD. Empirical evidence has shown that couples in which the woman is experiencing ISD have poorer relationships than couples in which the woman suffers from other forms of sexual problems. A number of theorists have constructed interpersonal models of ISD, and have recommended couples therapy treatment strategies. Case study evidence has shown promising results using such approaches. Some theorists in this area have emphasized the need for therapy to address both the couple's interaction cycles and the emotional responses of the couple. Emotionally focused therapy is an integration of both the systemic and experiential traditions in psychotherapy, and therefore should be an excellent treatment approach for ISD.

Rationale (given to the couple)

During these sessions, we are going to be looking at what happens between the two of you that gets in the way of you feeling closer and more sexual towards each other. Sex between two people who care about each other usually follows the

rules and patterns of the overall relationship. Couples generally have positive intentions toward one another, but sometimes they both act in ways that lead them to become stuck in certain patterns, certain dances, that makes it difficult to have a safe and accepting atmosphere in which they can be open with each other and share what they are feeling. Usually, people need to feel accepted, safe and cared for by their partner before they can feel sexual and express those feelings to their partner. One of the things that can happen when couples lose some of the closeness, safety, and acceptance in the relationship, and can't express their feelings and needs, is that one or both partners will lose some of the desire to share and be close sexually.

Of special interest here will be to explore how you interact at those special times when there is a chance to be sexual with each other. We will especially focus on the emotional responses that occur that may get in the way of feeling close and sexual towards each other. We will look at where you get stuck in certain patterns, and what happens for each of you that derails the process of feeling sexual. So I am going to focus on typical patterns and incidents in your sexual relationship, and related larger patterns in your overall relationship, and be asking you to explore your emotional responses as we look at those patterns. The end result of this process is that couples become more close and open with each other, see their partner's feelings and needs more clearly, and learn to respond to each other in a way that promotes a sense of acceptance, safety, and sharing, thus creating an atmosphere that lends itself to sexual feelings and expression. Throughout this process, it will be important to remember that both partners play a role in creating the sexual tone of a relationship, and that each, in their own way, contributes equally to patterns that inhibit sexual feelings.

Timetable - Sequence

Session 1. Give rationale of approach to couple (see "Rationale"). Take a relationship history. Explore couple's presenting complaints (i.e. ISD, and dyadic distress) through the larger context of the overall relationship. Assess interaction patterns. Formulate and explore hypotheses related to how the couple's interaction patterns may be acting as, or contributing to, blocks to sexual feelings and expression. Frame the couple's cycle, and stress mutual responsibility.

It may require more than the first session to accomplish these goals, but the process of framing the loss of sexual desire as related to relationship issues and patterns should begin in the first session. The goal is not to force the couple to accept that their interaction patterns are causing the loss of sexual desire, but to help the couple identify and explore the potential ways in which larger cycles and patterns of emotional response in their relationship may contribute to, and/or maintain, the loss of sexual desire. The first session, or sessions, will therefore focus on the first two steps in the process of EFT; 1) delineation of conflict issues in the core struggle, and 2) identify the negative interaction cycle.

Example

Wife: Ralph is always after me to make love. There's never a day when he's not pressuring me. Sometimes, I can hardly bear to be in the same house with him.

Husband: Sharon never wants to make love. I'm always the one who has to get things going. If it was up to her we'd never have any sex.

Therapist: So when it comes to sex you two seem to have a pretty fixed pattern going. Ralph is the one to pursue, and you, Sharon, are the one who withdraws. I'm wondering, is this how the two of you are together in general?

Sessions 2-8 During these sessions the focus will be on accessing the couple's underlying feelings, facilitating the expression of needs and wants, framing the loss of desire and related interaction patterns in terms of these underlying feelings and needs. As this process evolves, the therapist will promote identification with disowned needs and promote the acceptance of each partner's experience. This process represents steps three to seven of EFT. With this specific population the larger goal will be two-fold. The first will be to identify how the "sexual problem" is related to emotional responses and resulting patterns of interaction which go beyond the sexual domain. The second is to promote a new perception of self and other which allows for new patterns of emotional response and interaction positions that are conducive to closeness and sexual feelings.

Example

Wife: When ever I try to talk to Ralph about what I'm feeling or what is important to me, he always says he's too busy or starts to criticise me. The only thing he ever seems to want or need from me is sex.

Therapist: How do you feel when you say that?

Wife: I'm feeling angry.

Husband: That's true, she's always angry or in a bad mood.

Therapist: I'll get how you are feeling in moment, Ralph. Right now I want to concentrate on Sharon. I'm wondering, Sharon, if part of you also feels hurt?

Wife: Yes...part of me does feel hurt. I feel like sex is all I'm good for and that that's the only reason he stays in this marriage. I feel so alone sometimes, and by then I can't talk to him because he's so frustrated with me. I feel so alone.

Therapist: Can you tell him that?

Wife: Sometimes I feel so lonely, Ralph, and I'm afraid to tell you. I'm afraid that you won't care.

Therapist: What happens for you when you hear Sharon tell you how lonely and afraid she gets?

Husband: I never knew that. I always feel that she finds me repulsive or has no feelings for me. When she won't have sex, I'm afraid that she doesn't love me any more, so I try harder to get her to make love.

Therapist: Can you tell her how afraid you are that she doesn't love you?

Husband:I'm afraid that you don't love me any more.

Wife: I've never stopped loving you, Ralph.

Husband: I love you too.

Wife: It's so hard for me to believe that or want to be close to you when you only seem to want sex.

Therapist: Can you tell him what you need to feel loved?

Wife: I need you to listen to me. To want to listen to me. I need to feel that you love me, and that I mean more to you than just someone to have sex with. When I start to feel that you just want me for sex, I turn off completely.

Therapist: Do you feel that he's listening and that he cares right now?

Wife: Yes.

Therapist: Tell him that.

Wife: I feel so close to you right now. Sometimes I miss you so much.

Husband: I miss you to. Sometimes I lose sight of you completely after we haven't made love for a long time.

Therapist: What is it that you need at those times, besides sex?

Husband: I need to know that you still love me and that you don't find me repulsive.

Wife: I never feel that you're repulsive, Ralph. I get scared that if I do anything affectionate, you'll want to have sex, and then if I don't, you'll get even more angry at me.

Therapist: What do you need at those times, Sharon?

Wife: I need to know that it's o.k. for me not to feel like making love and that I don't have to protect myself from you. It's when I feel safe and that you love me that I want to be close, in every way.

Therapist: What seems to happen is that when Sharon feels alone and shut out she doesn't feel the closeness she needs to want to make love. When you don't want to make love, Ralph is afraid that you don't love him any more. He tries to reassure himself of your feelings by pursuing you even more for sex. This leaves Sharon feeling that all you want from her is sex, and she feels even more hurt and on guard against showing you any affection. By this time you are both feeling hurt and alone, and the cycle almost takes over. What we see here today is that when Ralph listens to how you feel, and you feel how much he cares, then it is easy for you to reassure him of your love for him and want to be close. When Sharon lets you know how alone she feels and that she needs you to show that you care about her, and don't just need her for sex, then you stop attacking and share more of your self with her.

Experts in the area of ISD have described some of the common emotional concomitants related to this disorder. For example Kaplan (1979) argues that tenderness and affection are the usual emotional concomitants to erotic feelings, and that anger towards one's spouse is a prevalent cause of ISD. Anger related issues such as power struggles, resentment, and disappointments can also lead to ISD.

Kaplan feels that anger must be resolved before sexual desire can emerge. She notes that sexual pleasuring is the most vulnerable way in which couples interact. It is essential that therapists in this study identify the emotions related to the blockage of desire, and access the underlying unacknowledged feelings such as fear and vulnerability.

Some theorists in this area have described the importance of assessing the couples interaction patterns, with respect to emotional closeness and distance. ISD may be a reaction to too little closeness, or alternatively, it may be a defensive reaction in response to experiencing the level of closeness as too threatening or overwhelming.

Kaplan also describes the emotional reaction that the nonsymptomatic spouse may demonstrate. Many such partners feel threatened and rejected due to their

spouse's lack of desire. This may evoke old insecurities or lead to obsession with the problem. This can lead to a destructive cycle of pressure to have sex from one spouse and increased reluctance from the other. Such a pattern can further aggravate the condition. Therapists in this study will focus on the emotional responses of both members of the couple and identify how they interact to help maintain the loss of sexual desire.

Sessions 9-10. The focus in the final sessions will be to continue to help the couple establish new solutions to their usual interaction patterns, and to help consolidate new positions. This involves steps eight and nine of EFT. The therapist will provide a metaview of the relationship that incorporates the issue of sexual desire, contrast the new and old cycles, summarize learning, and help the couple to plan to maintain new closeness and sexual interest.

At this point in therapy, couples will have made gains in breaking the old patterns that led to relationship discord and can impact negatively on the woman's level of sexual desire for her partner. It is possible that the new levels of closeness, security, and safety in the relationship will have lent itself to an emotional atmosphere that has restored the woman's level of sexual desire. At the very least, the rigid couple patterns that helped to maintain the ISD should be loosened such that they impinge less upon the sexual strand of the relationship.

Example

Therapist: We now know that when Sharon feels shut out and alone she loses her desire to make love, and withdraws. When this happens Ralph feels afraid that you don't love him and pursues you even more for sex in order to reassure himself of your love, which has Sharon feeling like the only thing you need her for is sex. What the two of you have learned is that when you can show Sharon, by listening to how she feels and telling her how you feel, that you do care for her, then it's easier for her to feel close, and it feels safe for her to let her sexual feelings come out more. At the same time, by being affectionate and telling you that she still cares for you when she doesn't want to make love, you don't feel as afraid of losing her and don't pursue her for sex as much. Sharon is now able to feel that sex is only one of the many things you want from her, and one more way for you two to express your love for each other. Ralph more is able to express what he wants and needs in ways other than sex. It is also easier for him to give you the space you need when you feel less like having sex. Lets talk about some of the ways that you two can hang on to this new pattern and make it even more satisfying.

N.B. Although the process of therapy has been presented as a linear sequence of steps, EFT actually progresses in a circular rather than a linear manner. A deepening and development occur over the sessions as new previously unacknowledged emotional responses slowly become accessed, acknowledged, and

communicated in the relationship.

Process and technique

The therapist attempts to grasp what the interaction is like for each partner as concretely as possible and to make it alive again by focusing on particulars, patterns, affect laden phrases, sequences of behaviour, and by being specific and explicit. The therapist then explores the positions and responses of the couple in terms of the emotional responses they evoke in each other, and the experience underlying each response. There is a strong focus on what is occurring in the present between the partners. These feelings are explored fully, in terms of their personal meaning and how they impact on the partner.

In the case of ISD, there is one partner who carries a symptom (i.e. a loss of sexual desire) for the couple. Therefore, although it is essential to be equally accepting of the realities of both partners, and legitimize and validate each partner's responses and experience within the context of the relationship, there may be a tendency for some of the nonsymptomatic spouses to assign blame to their symptomatic spouse. Hence, the therapist must be alert to such attempts to make the symptomatic spouse the identified patient. Although the therapist must be accepting of each spouse's experience of reality, the symptom of ISD must be framed within the context of relationship patterns, for which both partners share responsibility.

The techniques that are employed to implement the treatment strategy are the same as those normally used in EFT. They are presented in the EFT treatment manual which has been made available to all therapist in this project.

The treatment manual for training in this approach contains the nine steps outlined below:

- 1) Delineate conflict in the core relationship.
- 2) Identify the negative interaction cycle.
- 3) Access unacknowledged feelings.
- 4) Reframe the problem in terms of underlying feelings.
- 5) Promote identification with disowned needs.
- 6) Promote acceptance of partner's experience.
- 7) Facilitate expression of needs and wants.
- 8) Establish the emergence of new solutions.
- 9) Consolidate new positions.

Additional Reading Material

- 1) Greenberg, L. S., & Johnson, S. M. (1988). Emotionally focused therapy for couples. New York: The Guilford Press.
- 2) Kaplan, H. S. (1979). Disorders of sexual desire. New York: Simon and Schuster.
- 3) Macphee, D. C. (1990). An outcome study of the effect of marital therapy on Inhibited sexual desire. Unpublished research proposal.
- 4) The interventions except from the EFT Manual. Therapist Interventions: Tasks and techniques.

APPENDIX C

EFT Intervention Manual for ISD
Group Format

EFT Manual For ISD - Group Format

This intervention Manual is a guide of how to use Emotionally Focused Couples Therapy (EFT) in a group format in the treatment of ISD. The interventions and processes described in this manual are similar to those used in EFT with individual couples, but they have been adapted for a group format. There is more didactic discussion involved than is normally found in EFT, and counsellors expand their role with the couple to include interventions such as role playing and modeling. Couples also have the benefit of learning from the experiences of others in the group. At the same time the focus remains the identification of problematic interaction patterns and examining the role of emotional responding. The goal for each couple is to explore how negative interaction patterns (including the emotional response component), and not expressing feeling and needs, impacts negatively on the quality of their overall relationship and the female partner's desire. Couples will be encouraged to construct and practice new patterns of emotional responding which they find more satisfying and fulfilling. The rationale is that identifying problematic interaction patterns and learning to create more satisfying patterns may improve the quality of the relationship and create an atmosphere which lends itself more readily toward feeling sexual desire for one's partner.

In a group format, there will be less emphasis on couple- counsellor triadic interaction and achieving within-session change. Couple will learn a positive-change oriented process which they will practice both in the sessions and at home. There will be a greater emphasis on individually tailored "home work" assignments. Hence, couples will take with them knowledge, skills, and experiences which they can continue to use as building blocks in the construction of a satisfying relationship which will be conducive to feeling sexual desire towards one's partner.

Overview for Therapists

Sexual interaction does not take place in a vacuum. The couple's relationship provides the larger context for their sexual interaction. EFT proposes that, unless there is an organic basis for a sexual disorder, sexual interaction usually reflects the rules and structure of the relationship in general (Greenberg & Johnson, 1988). Strong negative emotions, particularly fear and anger, seem to be incompatible with the experience of sexuality. Only when both partners feel safe and accepted in their relationship and can communicate openly, are the maximum conditions for the development of a satisfying sexual relationship met (Greenberg & Johnson, 1988).

In general, level of sexual desire has been thought to be related to the amount of closeness, safety and acceptance in the relationship. Inhibited sexual desire (ISD) can originate from several sources, such as an organic disorder or intrapsychic conflict. To a greater extent than other sexual disorders, however, theorists have

emphasised the potential for relationship discord to serve as an etiological and/or maintenance factor in ISD. Empirical evidence has shown that couples in which the woman is experiencing ISD have poorer relationships than couples in which the woman suffers from other forms of sexual problems. A number of theorists have constructed interpersonal models of ISD, and have recommended couples therapy treatment strategies. Case study evidence has shown promising results using such approaches. Some theorists have emphasized the need for therapy to address both the couple's interaction cycles and the emotional responses of the couple. EFT is an integration of both the systemic and experiential traditions in psychotherapy, and therefore should be an excellent treatment approach for ISD. In the group format that you will be using, The goal will be to use the fundamentals of EFT to provide couples with knowledge, skills, and experiences which they can use to enhance their relationship not only during the counselling period, but also in their day to day interactions following counselling.

Rationale (given to the couples)

During our two days of counselling, you are going to be learning about how couples in general can fall into patterns that get in the way of feeling closer and more sexual towards each other. You will also be learning more about what happens between you and your partner that gets in the way of feeling closer, and more sexual, towards each other. As you learn more about how this happens in your relationship, you will also be developing new ways of being together in your relationship that can help you to create the type of relationship that you both want. The goal here is to provide each of you with the opportunity to learn more about yourself, your partner, the ways you presently interact and respond to each other, and to experience and practice new ways of interacting that you both find more satisfying. Some parts of this process will go on here in the sessions, by talking together as a group, talking alone with your spouse, and by talking with your spouse and a counsellor together. At least equally important, however, will be the work that you and your spouse do outside of the sessions. You will be encouraged to try out at home some of the things that you have learned and tried here in the sessions. The goal will be to provide you with knowledge, skills, and experiences that you can take with you at the end of these sessions and continue to use to make your relationship more satisfying.

We feel that sex between two people who care about each other usually follows the rules and patterns of the overall relationship. Couples generally have positive intentions toward one another, but sometimes they both act in ways that lead them to become stuck in certain patterns, certain dances, that makes it difficult to have a safe and accepting atmosphere in which they can be open with each other and share what they are feeling. Both partners play a role in both creating such patterns and keeping them in place.

Usually, people need to feel accepted, safe and cared for by their partner before they can feel sexual and express those feelings to their partner. One of the things that can happen when couples lose some of the closeness, safety, and acceptance in the relationship, and can't express their feelings and needs, is that one or both partners may lose some of their desire to share and be close sexually.

During these sessions you will be learning more about sexual desire, the loss of sexual desire, and how relationship patterns may effect how much sexual desire two people feel towards each other. Of special interest for you will be to explore with your partner and with a counsellor how you interact at those special times when there is a chance to be sexual with each other. You will be especially focusing on how the emotional responses that occur between you may get in the way of feeling close and sexual towards each other. You will explore where you get stuck in certain patterns, and what happens for each of you the derails the process of feeling sexual. So I will be asking each of you to identify typical patterns and incidents in your sexual relationship, and related patterns in your overall relationship, and be asking you to explore your emotional responses as you look at those patterns. The goal of this process is for couples to learn to become closer and more open with each other, see their partners needs more clearly, and learn to respond to each other in a way that promotes a sense of acceptance, safety, and sharing, thus creating an atmosphere which lends itself to sexual feelings and expression. The path towards reaching this goal will start during these sessions, but this is something that you will have to continue to work together on in order to create the type of relationship that you both want. Throughout this process it is important to remember that both partners play a role in creating the sexual tone of a relationship, and that each, in their own way, contribute to patterns that inhibit sexual desire.

Some of the activities that we will be engaging in here are group lectures and discussions on the topics of sexual desire, the loss of sexual desire, how the relationship can be involved in the members level of sexual desire for each other, how relationship patterns can be involved in the loss of sexual desire, the importance of expressing feeling and needs, and how couples can develop new patterns and ways of reacting to each other. Couples, if both members wish to, may supply examples in their own relationships that relate to these topics. Sometimes the counsellors will model and role play some of the ways these issues can work in a relationship, and, if both members wish, couples can work in front of the group with a counsellor in order to explore how these topics may relate to them. There will also be times when you and your partner will be asked to work privately together, or with a counsellor, to explore aspects of your relationship, such as identifying negative interaction patterns in your relationship, or to practice expressing feelings to one another. Individual "homework" assignments will also be given to each couple for you to complete during the week. Part of what will be important is for you to let us know what it is that you need from these sessions so that you can get the most out of them.

Timetable-Activity Sequence

WEEK ONE

Morning Session

1) Greeting of participants and introduction of counsellors. (Approximately 10 minutes)

2) Discussion of confidentiality

a) Members will be informed that they must not discuss with persons outside of the group any information related to other group members and must act to ensure the privacy of all group members). All members must verbally agree to uphold the members rights to confidentiality and privacy.

b) Answer any questions or concerns that members may have regarding the issue of confidentiality. Ensure that all members are comfortable with the arrangements that have been made to ensure confidentiality.

c) Distribution of name tags (first name only) to participants.
(Approximately 15 minutes)

3) Opening remarks

a) Provide rationale for group and outline the process of the group (see rationale for couples)

b) Outline the opportunity for group participation. No couple member need ever take part in any activity which they are not entirely comfortable with. Members should ensure that their partners are comfortable with any personal disclosures that they themselves wish to make to the group. Members should respect the feeling of others in the group and help foster a feeling of safety and acceptance.

c) Answer any questions related to these issues. (Approximately 15 minutes)

4) First Information and Discussion Session

a) Counsellors will present information on:

1) Sexual desire.

2) Loss of sexual desire.

- 3) Potential role of relationship factors in sexual desire and the loss of sexual desire (e.g. Sexual interaction as a strand in the cable of couple bonding, interactive influence of the overall relationship and the sexual cable of bonding, the importance of intimacy and acceptance in establishing an atmosphere conducive to sexual feelings).
- 4) Potential role of patterns of interaction and emotional response in relationship discord and how these larger patterns may relate to the loss of sexual desire (e.g. how chronic relationship patterns of pursuit and withdrawal may effect sexual desire, how partner's reaction to the loss of sexual desire can maintain the loss).

This information session will also involve questions, comments, and examples supplied by couples. (Approximately 1 hour)

- 5) Break (Approximately 15 minutes)
- 6) Second Information Session
 - a) Role of underlying feeling and unmet needs in the development and maintenance of interaction cycles. How the expression and acceptance of underlying feelings and needs can disengage old interaction cycles and promote the emergence of new solutions.
 - b) Potential role of anger, hostility, blame, resentment, etc in maintaining distance in a relationship, including sexual distance. Potential role of acceptance, sharing, openness, etc in helping couples become closer, including sexual closeness.

This information session will also involve questions, examples, and comments from couples. (Approximately 45 minutes)

The goal of the information sessions is not to compel couples to accept that their interaction patterns are causing the loss of sexual desire, but to help the couples identify the potential ways in which larger cycles and patterns of emotional response in their relationship may contribute to, and/or maintain, the loss of sexual desire. These information sessions will therefore focus on the first five stages in the process of EFT; 1) Delineate conflict in core relationship, 2) identify the negative interaction cycle, 3) access unacknowledged feelings, 4) reframe the problem in terms of underlying feelings, and 5) promote identification of with disowned needs.

7) Demonstration

The final activity of the morning session will be a demonstration involving

volunteer couples and counsellors. Two groups will be formed of approximately three couples and one therapist each. The goal of this demonstration will be for a volunteer couple in each group to work with a counsellor to identify a negative interaction cycle in their relationship, explore their individual contributions for this cycle, explore the feelings and needs underlying this cycle, and reframe the cycle in terms of underlying unacknowledged feelings and needs. The couple may choose any area of their relationship for this demonstration including loss of sexual desire. If no couple wishes to volunteer at this time, then the therapists will model this process. (Approximately 30 minutes to one hour)

(Total length of morning session - Approximately 3 to 3.5 hours)

8) Lunch break (1 hour)

Afternoon Session

1) Continuation Of Small Group Demonstrations

Couples will reform the two groups of three couples and continue to take turns working with their group's counsellor to practice and experience the first five stages of EFT. Counsellors will also review topics related to the information sessions which couples may wish to discuss further. Although the focus of this exercise will be on the first stages of EFT elements of the later stages, such as promoting acceptance of the partner's experience, and the emergence of new experiences may arise and be integrated into the exercise. There will be sufficient time allotted to this exercise for each couple to work with a counsellor. When conducting these exercises counsellors will emphasize the importance of using modes of interpersonal contact that promote closeness and acceptance, such as the use of "I statements" and focusing on immediate, present, feelings. (Approximate time 2 hours)

2) Individual Couple Exercise

Couples will then disperse so that they may continue to practice and experience the exercise in private. Counsellors will circulate among the three couples that they have been working with previously. Each couple will have ample opportunity to try out the stages of EFT alone with their partner, and will also have at least 45 minutes of time in which they will be working directly with a counsellor. (Approximate time 2 hours)

3) Homework

As the counsellor works individually with each couple he or she will assign "homework" which will be tailored specifically to that couple needs. Counsellors will encourage input from the couple in the formation of this assignment, and will ensure that both members of comfortable with it. In general, however, the homework assignments will focus on practising the skills that have been addressed during the session, such as working together to identify negative interaction patterns and expressing the unacknowledged feelings and unmet needs underlying those patterns in order to arrive at new interpersonal positions which allow those feelings and needs to be expressed and accepted.

- 4) The final activity of the day will be to briefly review what has been covered in the session, describe the agenda for the next session, address any questions or concerns that couples may have. Couples will be reminded that this session only represents the first step of a long-term process of working to achieve the type of relationship that they want. They will be cautioned against expecting any major positive changes at this time, and assured that just trying out at home the things they have learned will represent a positive step. They will be told that when people try new activities there is always a period of awkwardness, and they should not be discouraged if they are not totally successful at first. Couples with a loss of sexual desire in one partner often fall into a pattern in which one partner intensely peruses the other for sex, and the other partner reacts to this situation by refusals and further withdrawal. Therefore, couples will be told that there likely will not be little change at this point in the woman's level of sexual desire, and hence male partners may best serve the relationship at this point by not pursuing for sex, and thus allow for a breaking of this cycle. This would be a good way of allowing a new pattern to emerge. Couples will be told that if they need to consult with counsellors during the week, they may do so over the telephone. (Approximately 30 minutes)

(Total length of afternoon session 4.5 hours - Total length of first week session 8 hours.)

WEEK TWO

Morning Session

1) Description of Agenda

Following a description of the day's agenda, couples will be invited to ask any question and raise any concerns that they may have. (Approximately

time 15 minutes)

2) Review of Homework and Material Covered in Previous Session

As a group, couples will describe their experiences in the past week with regard to their relationship oriented "homework" assignments. Counsellors will provide feedback to the couples and make appropriate suggestions. Counsellors will also review the material covered in the previous session, and relate it to couples' experiences in the past week. (Approximately time 1 hour)

2) First Information Session

Counsellors will discuss the final four stages of EFT, with special emphasis on the emergence of new solutions and the consolidation of new interpersonal positions. These stages will be related specifically to issues surrounding the loss of sexual desire. Couples will be invited to ask question, provide examples, and give comments. (Approximately time 1 hour)

3) Break (15 minutes)

4) Demonstration

Couples will form two groups of three couples each and be joined by a counsellor. The same couples and counsellor who formed a working alliance in the previous session will again be working together. The counsellor will work with a volunteer couple in order to progress through the nine stages of EFT and reach a new solution to the problematic interaction or incident that the couple has chosen to work on. The other two couples in the group will observe the process. (Approximate time 1 hour)

(Total length of morning session 3.5 hours)

4) Lunch (1 hour)

Afternoon Session

1) Continuation of Small Group Demonstration

Couples will reestablish the two three couple groups and each couple will have the opportunity to work with the therapist to progress through the stages of EFT. Couples may chose any issue or concern to work on, but may address those related to the loss of sexual desire. (Approximate time

2 hours)

- 2) Couples will disperse and work with their partner to progress through the stages of EFT in an area related to the loss of sexual desire. During this period each couple will have the opportunity to work with a therapist in order to accomplish this goal. (Approximate time 2 hours)
- 3) Development of Long-Term Strategy

While working with each couple separately, counsellors will develop with the couple an outline of how they can best continue the work that they have begun during these sessions. Counsellors will offer feedback and advise to couples concerning areas of the relationship which they may wish to focus on, and how they can best consolidate the progress that they have made. Counsellors will encourage input from the couple in the formation of this outline, and will ensure that both members are comfortable with it.

- 4) The final activity of the day will be for the group to review and summarize the activities of the sessions, and a discuss of how couples can continue to use the knowledge, skills, and experiences that they have gained in order to
 - continue to improve their relationships and further create an interpersonal atmosphere that lends itself to feelings of sexual desire for one's spouse. Couples will be encouraged to provide feedback concerning the sessions, and will be given the opportunity to raise any final questions or concerns that they may have. Couples will be reminded that in order to achieve lasting, and further, improvement they will need to continue to make use of the knowledge, skills, and experiences that they have obtained during the sessions. Couples will also be reminded that developing the type of relationship that is satisfying to both of them is a long-term process that will inevitable have moments of disappointment and setbacks. Couples will be informed that, unless they object, a counsellor will telephone them in the following two weeks in order to enquire as to how they are progressing. (Approximately 30 minutes)

(Total time afternoon session 4.5 hours - Total length of second session 8 hours)

Process and Techniques

EFT places importance on the alliance between the counsellor and each member of the couple. In a group format there will be less counsellor-couple direct contact, and, therefore, it will be a greater challenge for the counsellors and couples to achieve a firm alliance. Hence, counsellors must be continuously alert to this issue, and make a strong effort to assess and maximize their alliance with couple members.

Relationship issues, especially those related to sexuality, represent sensitive areas for most individuals. Therefore, counsellors should make every effort to ensure that couple members are comfortable with the EFT interventions they are invited to engage in, and should ensure that couple members' feelings, needs, and experiences are normalized and framed in a way which is acceptable to them. Some individuals may, at first, be reluctant to engage in counselling activities in the presence of other group members. Such feelings should be respected and normalized. Counsellors should also point out the potential benefits to be gained by learning from the experiences of others, and encourage an interpersonal atmosphere in which the feelings and perceptions of members are respected and accepted by the group.

This manual focuses on how to utilize EFT in a group setting. In the individual couple exercises, counsellors will be engaging in interventions identical to those used in EFT with individual couples for which counsellors have previously been trained. Hence, this manual is only one component of the counsellor's preparation for using EFT in a group format with couples in which the woman has a loss a sexual desire. It is, therefore, essential that counsellors also study the EFT intervention manual for ISD (individual couples).

Additional Reading Material

- 1) Greenberg, L. S., & Johnson, S. M. (1988). Emotionally focused therapy for couples. New York: The Guilford Press.
- 2) Kaplan, H. S. (1979). Disorders of sexual desire. New York: Simon and Schuster.
- 3) MacPhee, D. C. (1990). An outcome study of the effect of marital therapy on inhibited sexual desire. Unpublished research proposal.
- 4) EFT Manual for ISD.
- 5) The interventions exert from the EFT Manual. Therapist interventions: Tasks and techniques.

APPENDIX D

Telephone Screening, Information,
Consent and Demographic Forms

STANDARDIZED TELEPHONE SCREENING PROCEDURE

Thank you for calling.

We will be conducting a marital therapy research study aimed at helping couples in which the woman has lost some of her interest in having sex. The study has been approved by the by the Research Ethics Committee of the University of Ottawa and is conducted by counsellors experienced in working with couples. The project is supervised by a registered psychologist.

In a moment, I will ask you some questions that will help me determine if you might be suitable for this study. If your relationship and concerns fit with the study we are conducting you will be asked to come to the Centre for Psychological Services of the University of Ottawa to complete some questionnaires, and answer other questions, that will help to determine if you can participate in this study.

If you are selected, you will be placed in one of two groups. The members of the first group will each receive a total of ten consecutive couple counselling sessions. For the members of this group, the sessions will begin approximately two weeks after the questionnaires have been completed. The members of the second group will receive two day-long couple counselling sessions in a small group format. This group will not begin until approximately twelve weeks after the questionnaires have been completed. In the event that you may be placed in the group sessions and must wait approximately twelve weeks before starting the sessions, would you still be willing to participate in the study?

YES ___

NO ___

Answer must be YES

REFERRAL SOURCE

How did you find out about this study?

Specific source of referral _____

I would like to ask you some questions to help see if you and your partner are suitable for this study. These questions are important for the subject selection process. You may choose at any time not to answer these questions

1) Are you and your partner currently living together?

YES ___

NO ___

Answer must be YES

2) How long have you been living together?

_____years/months

Minimum: 2 years

3) Are you both English-speaking or fluently bilingual?

YES___ NO___

Answer must be YES

4) Are either of you currently receiving any other psychological treatment?

YES___ NO___

Answer must be NO

5) Will either of you be participating in any form of psychological treatment in the next three to four months?

YES___ NO___

Answer must be NO

Must not be involved in other treatment or marital enrichment (marriage encounter etc.) for the duration of the study

6) Do either one of you experience any problems related to alcohol or drugs?

YES___ NO___

Answer must be NO to both

N.B. If caller reports substance abuse ask if they wish to be referred for treatment elsewhere.

T r e a t m e n t f o r a l c o h o l a n d / o r d r u g a b u s e :

Al-Anon 725-3431

Rideauwood Institute 234-3006

Royal Ottawa Hospital 724-6508

7) Is there currently any, and has there ever been any, physical abuse in your relationship?

YES___ NO___

Answer must be NO

N.B. If caller reports physical abuse ask if they wish to be referred for treatment elsewhere.

Treatment for physical abuse:

Catholic Family Service 233-8478
Family Service Centre 725-3601

8) Have you (or "Has your spouse" if male partner is calling):

A) (are you/spouse) currently pregnant?

YES___ NO___

B) given birth within the last six months?

YES___ NO___

Answer must be NO to both.

9) Do you feel that you have lost some or all of your interest in having sex?

(or "Does your spouse report that she has lost some or all of her interest in having sex with you?" if male partner is calling)

YES___ NO___

Answer must be YES

N.B. If answer is NO and caller reports other sexual problems in the relationship ask if they wish to be referred elsewhere

10) Has the loss of sexual interest been present for at least six months?

YES___ NO___

Answer must be YES

N.B. If answer is NO ask caller if they would like to be referred elsewhere for treatment.

Treatment for sexual problems:

Ottawa Academy Of Psychology 235-2529

11) Do you and your partner want to address the loss of sexual desire through a marital counselling approach?

YES___ NO___

Answer must be YES

Disposition of call

Does not meet criteria

If the caller does not meet inclusion criteria, explain why and thank them for their interest in the study.

Has caller been referred elsewhere for treatment?

YES___ NO___

If YES, please specify_____

Meets criteria

If couple meet telephone inclusion criteria, obtain the names of the potential subjects and their phone numbers.

Names:_____ Tel. (H)_____ (W)_____

_____ Tel. (H)_____ (W)_____

Set up appointment for initial assessment interview. Maximum duration of this

appointment is two hours. Remind subjects that additional inclusion criteria must be met before they may be accepted into the study.

Date: _____ Time: _____

Location: Centre for Psychological Services - give appropriate directions.

Facilitation of Sexual Desire Project

Information and Consent Form

ISD Couples

Information Form

The purpose of this study is to examine how marital counselling can help couples in which the woman has lost some or all of her sexual desire. The goal of counselling is to improve the overall relationship, and thus move towards an interpersonal atmosphere that lends itself more readily to having sexual desire for one's spouse.

Counselling Approach and Format Used in this Study

The couple counselling approach used in the ten-session couple format of this study focuses on how partners respond to each other emotionally, and the patterns of interactions in which couples are engaged. The same basic approach will be used in the group format, but it will have been adapted specifically for a group format.

The intention of the two counselling processes used in this study is to have people feeling better about themselves, their partner, and the relationship. As in any form of counselling, however, there may be periods in which the "work" done in counselling leads to some emotional discomfort. For example, discovering new aspects of yourself and your partner, or developing new patterns in the relationship, may not always be easy and, at least initially, may involve emotional discomfort. Your counsellor, and his or her supervisor, are aware of this, and every attempt will be made to ensure that couples are comfortable with the process and content of counselling.

Couples counselling is only one of the ways in which couples may wish to address a loss of sexual desire. Other forms of counselling, such as sex therapy, are also available for this difficulty. If at any time you would prefer to have another form of counselling for this problem, then we will provide appropriate referral information.

Sometimes, couples have more than one type of sexual difficulty. It is possible for any type of sexual difficulty to have a physical cause. Either of you may wish, therefore, to consult your physician if you have any type of sexual difficulty. The ~~ita~~ behind this study is that improving the quality of the couple's overall relationship may enhance the woman's level of sexual desire. Although you and your partner's overall level of sexual satisfaction, and other potential sexual difficulties other than the woman's loss of sexual desire, will be assessed in this study, it is not expected that any

sexual difficulties, other than the woman's loss of sexual desire, may be improved because of your participation in this study.

For this study, we are looking for couples in which neither member of the couple is currently receiving, or is expecting to be receiving within the next three to four months, any other form of psychological counselling or taking any psychiatric medication. If, however, you are selected as a subject in this study, there will be no penalty for entering into any form of psychological, psychiatric, medical, or other form of treatment that you feel you require (including treatment for other sexual problems).

You can contact either Susan Johnson-Douglas or David MacPhee at the Centre for Psychological Services of the University of Ottawa (564-6875) to answer any questions or concerns that you may have. Debriefing on the more detailed procedures of the study will be offered after the completion of the follow-up questionnaires, and a summary of the results of this study will be sent to you as soon as they are available.

Facilitation of Sexual Desire Project

Consent Form

Major Procedures

If you agree to participate in this project, both you and your partner will be required to complete questionnaires and engage in couple (both members present) and individual (each partner seen separately) interviews in order to assess your suitability for this study (total time required is approximately two and a half hours). If you do not meet the inclusion criteria for this study, you will be given feedback on your testing results and be referred elsewhere for counselling if you so desire.

If you meet our criteria for participation, you will then be assigned to one of two groups. In both groups, counselling sessions will be conducted by experienced doctoral level students under the supervision of Susan Johnson-Douglas, a registered clinical psychologist at the Center for Psychological Services of the University Of Ottawa. All sessions will be audio-taped for supervision purposes and to ensure that the approach is faithfully implemented. The counselling sessions are free and will take place on the campus of the University of Ottawa.

If you are in the first group, you and your partner will be seen together for ten weekly, one-hour to one and a half hour, sessions of couple counselling. If you are in the second group, after a twelve week waiting period, you will receive two all day counselling sessions (each approximately eight hours in length) in a small group format (approximately five other couples will be attending these sessions with you and your partner). These sessions will be spaced one week apart from each other.

Testing

Both partners of the couples in this study will be required to complete research questionnaires and engage in interviews which address: 1) the quality of the relationship, 2) level of sexual desire, 3) sexual functioning, 4) sexual satisfaction, 5) state of health, 6) level of depression, 7) level of psychological distress. If you are in the first group, testing includes the initial assessment before the beginning of counselling, as well as testing after the final counselling session, and at the twelve week follow-up. Each of these last two testing periods will last approximately one hour. In addition, each partner in the ten counselling session group will be required to complete a short questionnaire after each the fifth session (approximately five minutes required). This additional questionnaires will assess each partner's perception of the counselling process. If you are in the second group, testing includes the initial assessment, testing after the twelve week waiting period, and testing after the final counselling session. All testing is done free of charge.

Confidentiality

The names of subjects, electronic recordings, written responses to questionnaires, as well as progress notes written by the counsellors, will be kept in a confidential and secure file at the Centre for Psychological Services, and be seen only by researchers directly involved in this project.

I, _____, understand that I am being asked to participate in a research study. I have received a copy of this information and consent form and I have read and understood it. I hereby agree to participate in the testing, and in this research project, if I am selected.

My participation in this study is voluntary and I may withdraw from this study at any time and/or request that tapes be erased without penalty and without jeopardizing access to further counselling.

Signature of Participant: _____ Telephone: (H) _____

Signature of Researcher: _____ (W) _____

Signature of Witness: _____

Date: _____

Confirmation Of Consent

I have been accepted into this study. I hereby confirm my consent to participate in this study.

Signature of Participant: _____

Signature of Researcher: _____

Signature of Witness: _____

Date: _____

Non-ISD CouplesInformation FormA Research Project

You and your spouse are invited to participate in one part of a larger study. The larger study is examining the effect of marital therapy on inhibited sexual desire. In order to complete the larger study we need to see how Couples who are not receiving treatment for loss of sexual desire respond to the questionnaires we are using in our study. This will allow us to find out if there are any differences between couples who are seeking treatment for inhibited sexual desire and couples in which the woman is receiving other psychological services. If you are a woman and; 1) are not receiving treatment for low sexual desire, 2) are cohabitating in a heterosexual relationship, 3) have no history of physical abuse or substance abuse in your present relationship, and are over 18 years of age, then we would like you and your spouse to participate in this research project.

What we are asking of you is that you engage in a brief interview and complete a number of questionnaires. The total amount of time necessary to complete the interview and questionnaires is approximately one hour. This assessment will take place at the Centre for Psychological Services of the University of Ottawa, at a time that is convenient for you.

The questionnaires that we are asking you to complete deal with depression, psychological stress, marital adjustment, and sexuality. The interviewing process involves a brief 5 minute interview with both members of the couple in which demographic data is collected (eg. number of children). Following this, the woman and man will engage in individual interviews addressing current level of sexual desire. If you wish, you may receive a feedback session in which you will learn more about your responses to these questionnaires. You have the option of receiving feedback individually or as a couple. If you wish, a summary of the results of the larger project will be supplied to you once it is completed.

The confidentiality of your responses will be protected. Your name will only be known to the researchers who are directly involved in this project. Published results will be presented in a group format and no individual will be identified. All responses will be kept in a confidential and secure location at the Centre For Psychological Services. There is no cost for this service.

To obtain more information about this project and/or make an assessment appointment, please call David C. MacPhee or Susan Johnson Douglas at the Centre for Psychological Services, 564-6875. At the beginning of the assessment appointment, you will be asked to read, and if you wish, sign a consent form. If you wish you may have the assessment appointment and feedback session conducted by

a woman.

You may still participate in this project and receive an assessment and feedback, even if your spouse does not wish to participate.

Female Consent Form

I, _____, understand that I am being asked to participate in a research study in which I will be asked to complete a series of questionnaires dealing with depression, psychological stress, marital adjustment, and sexuality. I will also be asked to engage in an interview concerning my current level of sexual desire. The total time necessary to complete the interview and the questionnaires is approximately one hour. The confidentiality of my responses will be protected. My name will only be known to the researchers directly involved in this project. Published results will be presented in a group format and no individual will be identified. All responses will be kept in a confidential and secure location at the Centre for Psychological Services.

My participation in this study is voluntary and I may withdraw from this study at any time without penalty. There are two copies of this consent, one of which I may keep.

I can contact Susan Johnson-Douglas (a registered psychologist) at the Centre for Psychological Services of the University of Ottawa (564-6875) in order to address any questions I may have regarding my participation in this study. If I have any personal concerns that might come about from participating in this study I should raise them with my therapist. I also understand that I can receive feedback concerning my responses to these questionnaires if I so desire. A summary of the overall results of this research study will be sent to me as soon as they are available, if I so desire.

I have received a copy of this information and consent form and I have read and understood it. I hereby agree to participate in this research project.

Signature of Participant: _____

Signature of Researcher: _____

Signature of Witness: _____

Date: _____

If you wish to receive feedback concerning your responses to these questionnaires, please provide your phone number.

(H) _____

(W) _____

If you wish to receive a summary of the results of this research project, please provide your mailing address.

Address: _____

Male Consent Form

I, _____, understand that I am being asked to participate in a research study in which I will be asked to complete a series of questionnaires dealing with depression, psychological stress, marital adjustment, and sexuality. I will also be asked to engage in an interview in order to gather demographic information and explore concerns with sexual desire. The total time necessary to complete the interview and the questionnaires is approximately one hour. The confidentiality of my responses will be protected. My name will only be known to the researchers directly involved in this project. Published results will be presented in a group format and no individual will be identified. All responses will be kept in a confidential and secure location at the Centre for Psychological Services.

My participation in this study is voluntary and I may withdraw from this study at any time without penalty. There are two copies of this consent, one of which I may keep.

I can contact Susan Johnson-Douglas (a registered psychologist) at the Centre for Psychological Services of the University of Ottawa (564-6875) in order to address any questions I may have regarding my participation in this study. If I have any personal concerns that might come about from participating in this study I should raise them with my therapist. I also understand that I can receive feedback concerning my responses to these questionnaires if I so desire. A summary of the overall results of this research study will be sent to me as soon as they are available, if I so desire.

I have received a copy of this information and consent form and I have read and understood it. I hereby agree to participate in this research project.

Signature of Participant: _____

Signature of Researcher: _____

Signature of Witness: _____

Date: _____

If you wish to receive feedback concerning your responses to these questionnaires, please provide your phone number.

(H) _____

(W) _____

If you wish to receive a summary of the results of this research project, please provide your mailing address.

Address: _____

Demographic Data Questionnaire

Couple Number _____

- 1) How many years have you lived together as a couple? _____
- 2) How many children do you have? _____
- 3) Have the two of you ever had any marital counselling before taking part in this project? Yes _____ No _____
- 4) Please check the category within which your gross family income falls:
 - ___ Under \$15,000
 - ___ \$15,000 - 25,000
 - ___ \$26,000 - 35,000
 - ___ \$36,000 - 45,000
 - ___ \$46,000 - 55,000
 - ___ Above \$55,000

** Questions 5 to 8 are completed by the Female partner only:

- 5) Please state your age (in years) _____
- 6) What is your present occupation? _____
If you are not presently employed please state reasons why.

- 7) Have you had a previous marriage? Yes ___ No ___
- 8) Please check the category which best describes your level of education:
 - ___ Grade 10 or less
 - ___ Grade 13 or less
 - ___ 2 years of post secondary education
 - ___ Community college program completed
 - ___ University degree completed
 - ___ Graduate program completed
 - ___ Ph.D. or equivalent completed.

** Questions 9 to 12 completed by the Male partner only:

- 9) Please state you age (in years) _____
- 10) What is your present occupation? _____
If you are not currently employed please state reasons why

- 11) Have you had a previous marriage? Yes___ No___
- 12) Please check the category which best describes your level of education:
- ___ Grade 10 or less
 - ___ Grade 13 or less
 - ___ 2 years of post secondary education
 - ___ Community college program completed
 - ___ University degree completed
 - ___ Graduate program completed
 - ___ Ph.D. or equivalent completed

Thank you

APPENDIX E
Screening and Outcome Measures

Sexual Desire Towards Partner Scale

This questionnaire is designed to measure how much sexual desire you have recently felt towards your spouse. Because people are different, there are no right or wrong answers to these questions. Please read each item carefully and answer all ten as honestly and accurately as you can by indicating to the left of each the number that comes closest to describing you according to the following key:

- 1) Never Or Almost Never
- 2) Rarely
- 3) Occasionally
- 2) Often
- 1) Always Or Almost Always

- 1)___ Do you feel a desire to engage in kissing and petting with your spouse?
- 2)___ Do you feel a desire to engage in sexual intercourse with you spouse?
- 3)___ Do you feel sexually attracted to your spouse?
- 4)___ Do you feel like responding to your spouse's sexual advances by accepting with pleasure?
- 5)___ Do you feel like making sexual advances towards your spouse?
- 6)___ Do you look forward to having sex with your spouse?
- * 7)___ Do you feel that you are less interested in having sex with your spouse than you once were?
- * 8)___ Do you find that you are more interested in sex when your spouse is not around or when you are thinking of some past or fantasy partner?
- * 9)___ Do you feel like responding to your spouse's sexual advances by refusing?
- *10)___ Do you feel that you are less interested in sex with your spouse than you would ideally like to be?

Thank You

* Reverse Scored

APPENDIX F

Use of Instruments Schedule

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Use of Instruments ScheduleISD COUPLESScreening and Pre-treatment

Telephone screening procedure
Information and consent form
Demographic information form
Standardized Interview Schedule

Dyadic Adjustment Scale DAS
Golombok-Rust Inventory of Sexual Satisfaction GRISS
Sexual Desire Toward Partner Scale SDTPS
Sexual History Form SHF
Beck Depression Inventory BDI
Symptom Checklist-90-Revised SCL-90-R

Mid-test

Couple Alliance Scale (AS) (After Session #5, EFT Group Only)

Post-Treatment and Post-Wait-List Period

DAS
GRISS
SDTPS
SHF
BDI
SCL-90-R

Follow-Up (Experimental Group Only)

DAS
GRISS
SDTPS
SHF
BDI
SCL-90-R

Non-ISD Couples

Telephone screening Procedure
Information and consent form
Demographic questionnaire
Standardized Interview Schedule

DAS
GRISS
SDTPS
SHF
BDI
SCL-90-R

APPENDIX G

Standardized Interview Schedule

Standardized Interview Schedule

There were three stages involved in the assessment interview process. The first was an interview with both members of the couple together. The purpose of this phase was to establish a rapport with the couple and to gather information concerning; the history of the relationship, the current quality of the relationship, the nature of the couples presenting complaints. At the beginning of the couple interview, the interviewer provided the couple with the information and consent forms, explained the reasons for the interview process, outlined the schedule of the interview process (couple interview, female partner interview, male partner interview), and addressed questions and concerns.

The second phase of the interview process was an interview with the female partner. The purposes of this phase was to explore the nature of the woman's loss of sexual desire, and to determine the relationship between her loss of sexual desire and any other sexual problems that the couple was experiencing. In order to be accepted into this study it was necessary that the woman's had a significant loss or absence of sexual desire that was of at least six months duration. Furthermore, she must have reported that she and her partner were interacting sexually once every two weeks or less, unless a higher frequency was due to factors other than the woman's level of sexual desire (e.g. a fear of losing her partner). In addition, the woman's loss of sexual desire must have been distressing for her, and she must have been willing to explore the loss of desire through a marital therapy intervention. The interviewer explored the female partner's ISD in sufficient depth to identify the subtype of ISD that she was experiencing (i.e. lifelong - nonlifelong, global - situational).

The interviewer also explored with the woman other sexual problems that the couple had. This process was facilitated by the Sexual History Form (SHF) which assesses possible dysfunctions in each phase of the sexual process for both members of the couple (desire, arousal, orgasm, coital pain). For each item on the SHF that the female member of the couple reported a problem (e.g., male reaches orgasm while he is trying to enter woman's vagina 50% of the time, item 10), the interviewer noted the onset, history, frequency, and severity of the problem. The interviewer asked the female partner whether she felt that difficulties in this area of the couple's sexual functioning was responsible for her loss of sexual desire. In order to be accepted into this study, the woman must have reported that any other sexual difficulties were not responsible for her loss of sexual desire. Couples in which there was reason to conclude that the female partner's loss of sexual desire was due to another sexual disorder would likely have benefited from sex therapy with respect to the restoration of sexual desire. Such couples were not be accepted into this study, were informed of the reason why, and given appropriate referral information if they so desire (see Standardized Telephone Screening Procedures, appendix E, for referral sources).

In the interview with the female member of the couple, the interviewer next asked questions concerning the subject's state of health, medical and medication history, and enquired whether she had a medical condition, was taking any drugs or medication, or experiencing any current life situation (e.g., severe stress) which could have been responsible for her loss of sexual desire. In addition, the interviewer enquired whether the female's loss of sexual desire was due to a homosexual orientation.

Another purpose of this interview was to provide the woman with an opportunity to reveal any information that she may have been reluctant to disclose in the presence of her partner, and to confirm information provided during the telephone screening procedure (e.g., no physical abuse in the relationship). The interviewer also ensured that the woman was not present due to pressure from her spouse.

The third phase of the interview process involved an interview with the male partner. Like the female partner, the male partner must have reported that he felt that there had been a loss in the woman's level of sexual desire, that he was distressed by this loss, and that he wished to work towards a restoration of her sexual desire. The male partner must also have reported that frequency of sexual interaction with his partner was currently once every two weeks or less. The interviewer also explored with the male partner any other sexual problems that the couple had, and explored how he felt these problems were related to the woman's loss of sexual desire. The interviewer also provided the male partner with the opportunity to reveal any information that he may have been reluctant to disclose in the presence of his spouse. The interviewer confirmed information obtained in the telephone screening procedure (e.g. presence of drug or alcohol problem, and ensured that the male partner was not present due to coercion from his partner.

In EFT, as in any other form of counselling, assessment is an ongoing process. This interview process was designed to rule out etiological factors which would suggest that marital therapy might not be an appropriate treatment strategy (e.g., loss of sexual desire due to another sexual disorder, loss of sexual desire due to a medical condition or medication). During the training workshops, however, therapists in this project were trained to be alert for new information supplied by the couple which indicated that another form of treatment might have been more useful for the couple (e.g., female partner revealed that she does have a drug or alcohol problem, female partner revealed that another sexual problem is responsible for her loss of desire).

Couple Interview

- 1) The interviewer began by providing the couple with the information and consent form and answering any questions that they may have had. The interviewer then asked nonthreatening questions that provided more information about the couple and built rapport.

a) "How did the two of you first meet?"

Female: _____

Male: _____

b) "What originally attracted you to each other?"

Female: _____

Male: _____

c) "How long have you two been together?"

Male, Female: _____

d) "How would you describe your relationship today?"

Female: _____

Male: _____

- 2) The interviewer then focused on the couple's presenting complaints by first asking open ended questions.

a) "Now I'd like each of you in turn to describe the problem or problems that brought you here?"

Female: _____

Male: _____

The interviewer then asked the couple if they had any questions that they wanted to ask. Next the interviewer escorted the male partner to a separate location where he completed the screening measures. The interviewer then returned to the female member and began the separate interview with her.

Female Partner Interview

General opening statement: I am going to ask you some questions that will help us find out more about the concerns that you and your partner have expressed. If you have any questions, before I begin, or at any point during our discussion, please feel free to ask them. If you do not feel comfortable answering these questions, then you may stop at any time.

1) Exploring the Loss of Sexual Desire

a) Female: "Do you feel that you have lost a considerable amount of, or all of, your sexual desire?" : _____

Answer must be YES

b) Female: "Are yo distressed by this loss? : _____

Answer must be YES

c) Female: "Do you want to work towards regaining your sexual desire?" : _____

Answer must be YES

d) Female: "Do you feel that low sexual desire has been a life long concern for you?" : _____

e) Female: "Have you experienced a loss of desire to make love in all other sexual relationships (if any) that you have had? : _____

f) Female: "Was there a time in your current relationship in which you felt a higher level of sexual desire? : _____

g) Female: "When did your loss of sexual desire begin?" : _____

Loss of sexual desire must have been of at least six months duration.

h) Female: "Are you currently experiencing a marked decrease in your desire to make love with your spouse?" : _____

i) Female: "Do you feel that you are experiencing only a loss of desire to make love with your spouse, and not a loss in your overall sexual interest and desire"? : _____

j) Female: "How often do you and your spouse currently make love?" : _____

Answer must have been once every two weeks or less, unless a higher frequency was due to reasons other than the woman's level of sexual desire (e.g., fear of hurting spouse's feelings). If answer was more than once every two weeks, interviewer asked: "Are you currently making love with your spouse for reasons other than feeling a desire to make love?" (if yes, then describe reasons):

k) Female: "Do you currently engage in other sexual behaviours less often than you did in the past?"

- i) Masturbation _____
- ii) Sexual dreams and fantasies _____
- iii) Reacting sexually to attractive people of the opposite sex _____
- iv) Other areas that the subject may spontaneously indicate: _____

l) Female: "Are you willing to explore your loss of sexual desire through couples counselling?" : _____

Answer must be YES

At this stage of the interview, the interviewer asked the female the questions contained in the Sexual History Form (SHF). For each item that she reported a problem or concern (if any), the interviewer recorded the onset, history, frequency, and severity of the concern. The interviewer then explored with her whether the sexual concern was related to the her loss of sexual desire, and enquired whether she felt that this concern was responsible for her loss of sexual desire. Once the SHF was completed, the interviewer asked whether she had any sexual concerns that have not yet been addressed, and if so explored the relation of these concerns to the loss of sexual desire. It should be noted that the interviewer will enquired not only about sexual difficulties that the woman had, but will also explored sexual difficulties related to her perception of the male partner's sexual functioning (e.g. the erectile functioning of the male partner).

2) A) Sexual Concerns or Difficulties Identified on the Sexual History Form

1) _____ (SHF item # ___)

i) Onset:

ii) History:

iii) Frequency:

iv) Severity:

a) Female: "Do you feel this concern is related to your loss of sexual desire? (if yes, then how is it related?)

b) Female: Do you feel that this concern is responsible for your loss of sexual desire?" _____

Answer must be NO

(This procedure was repeated for any other sexual concerns or problems identified by the female on the SHF)

2) B) Any Other Sexual Concerns or Problems Identified by the Female

1) _____

i) Onset:

ii) History:

iii) Frequency:

iv) Severity:

a) Female: "Do you feel this Concern is related to your loss of sexual desire? (if yes, then how is it related?)" : _____

b) Female: "Do you feel that this concern is responsible for your loss of sexual desire?" : _____

Answer must be NO

d) Female: "When looked at altogether, do you feel that the sexual problems

and concerns that you have described are responsible for your loss of sexual desire?" : _____

Answer must be NO

3) Organic Factor Screening

At this point the focus of the interview was the woman's state of health, the need to screen for certain medical conditions, and medication use which might have been impacting negatively on the woman's level of sexual desire.

8) "Please describe any health problems or medical conditions that you have":

9) "Please describe any medication that you are taking":

10) "When did you last receive a physical examination by your physician?":

If the woman had not received a physical examination since the onset of her loss of sexual desire, then the interviewer suggested that she may wish to do so as a precaution that there might have been a physiological component to her loss of sexual desire.

The interviewer then asked the subject whether she had any of the specific medical conditions, was taking any medication, or experiencing any current life situation (e.g., severe stress) identified as a potential organic etiological factor in ISD (see appendix A). The subject's response must have been no for all items listed in appendix A. Any subject who had any of the items listed in appendix A was excluded from the study. In addition, the interviewer recommended to such subjects that they seek a medical opinion concerning the potential organic basis for their loss of sexual desire.

4) Confirmation of Inclusion Criteria

At the beginning of this portion the separate couple member interviews, the couple member was informed that one the purposes of the separate interview was to confirm information obtained during the telephone screening procedure.

The interviewer began with an open-ended question.

1) "Is there anything that you would like to tell me now that hasn't come up already?" : _____

- 2) "Do either you or your spouse experience any problems related to alcohol or drugs?" _____

Answer to both must be NO. If subject reported substance abuse, she was asked whether she wished to be referred elsewhere.

- 3) "Is there currently any, and has there ever been any, physical abuse in your relationship?" : _____

Answer must be NO. If subject reported physical abuse, she was asked if she wished to be referred elsewhere.

- 4) "Have you come here today due to pressure, coercion, or threats from your spouse?" : _____

Answer must be NO. If subjects reported coercion, she was asked whether she wished to be referred elsewhere for treatment or support.

- 5) "Are you currently engaged in an extramarital sexual relationship?"

Answer must be NO.

- 6) "Do you feel that your loss of sexual desire for your spouse is because you would prefer a sexual partner who is a woman?" _____

Answer must be NO. If answer is yes, she was asked whether she wished to be referred elsewhere for support.

The interviewer then asked the woman whether she had any questions. Following this, the interviewer escorted her to a separate location where she completed the assessment and outcome measures. The interviewer then interviewed the male partner.

Male Partner Interview

General opening Statement: I am going to ask you some questions that will help us find out more about the concerns that you and your partner have expressed. If you have any questions before I begin, or at any time during our discussion, please feel free to ask them.

1) Exploring the Loss of Sexual Desire

a) Male: "Do you feel that your partner has lost a considerable amount, or all of, her sexual desire?" : _____

Answer must be YES

b) Male: "Are you distressed by this loss?" : _____

Answer must be YES

c) Male: "Do you want to work toward restoring your partner's desire to make love with you?" : _____

Answer must be YES

d) Male: "Was there a time in your current relationship in which your partner's level of desire to make love was not a concern for you?" : _____

e) Male: "When did your partner's level of desire to make love first become a concern to you?" : _____

Loss of desire must be of at least six months duration.

f) Male: "How often do you and your spouse currently make love?" : _____

Answer must be once every two weeks or less, unless it had been established that a higher frequency was due to factors other than the female's level of sexual desire.

g) Male: "Are you willing to explore your partner's loss of sexual desire through couples counselling?" : _____

Answer must be YES

2) Sexual concerns or Difficulties Identified on the Sexual History Form

1) _____ (SHF item # ____)

Onset :

History:

Frequency:

Severity:

a) Male: "Do you feel this concern is related to your partner's loss of sexual desire? (if yes, then how is it related?)" : _____

(This procedure was repeated for any other sexual concerns or problems reported by the male on the SHF)

Any Other Sexual Concerns or Difficulties Identified by the Male Partner

1) _____

Onset:

History:

Frequency:

Severity:

a) Male: "Do you feel this concern is related to your partner's loss of sexual desire? (if yes then how is it related?)": _____

b) Male: "When looked at all together, how do you feel the sexual problems and concerns that you have identified are responsible for your partner's loss of sexual desire?" _____

3) Confirmation of Inclusion Criteria

The interviewer began with an open-ended question.

1) "Is there anything that you would like to tell me now that hasn't come up

already?" _____

- 2) "Do you or your partner experience any problems related to drugs or alcohol?"

Answer must be NO to both. If answer was yes, the subject was asked whether he wished to be referred elsewhere for treatment.

- 3) "Is there currently any, and has there ever been any, physical abuse in your relationship?"

Answer must be NO. If answer was yes, the subject was asked whether he wished to be referred elsewhere for treatment.

- 4) "Are you here today due to pressure, coercion, or threats from your spouse?"

Answer must be NO. If answer was yes, subject was asked whether he wished to be referred elsewhere for treatment.

- 6) "Are you currently engaged in an extramarital sexual relationship?"

Answer must be NO.

Note: Both members of the couple were also asked separately about the presence of sexual abuse in the past. If sexual abuse was present in the subject's past the interviewer explored this issue further.

Portions of the interview process used, and some specific items, originated from Friedman and Hogan (1985).

APPENDIX H

Advertisements for recruitment

ISD Couples**COUNSELLING**

Couples in which one member is experiencing a loss of sexual desire are invited to participate in a counselling research project at the University of Ottawa (all counselling for this project is offered free of charge and is conducted by experienced counsellors). The privacy and confidentiality of all participants will be respected. For more information, please call the Centre for Psychological Services at the University of Ottawa. Ask for David C. MacPhee
564-6875

Non-ISD Couples**Women in Counselling**

Women receiving psychological counselling and their spouses are invited to participate in a research project at the University of Ottawa. Participants will be given the opportunity to complete questionnaires which assess marital adjustment, psychological distress, and sexual adjustment.

Participants will receive feedback on the results approximately two weeks after completing the questionnaires.

Both the assessment and the feedback sessions are free of charge. For more information, please contact David MacPhee at the Centre for Psychological Services at the University of Ottawa: 564-6875

APPENDIX I

Implementation Check Instructions, Coding Form, and Examples

Implementation Checklist Instructions

For each of the tapes listed below, please rate the therapist statement as EFT or non-EFT. For EFT statements check the EFT category that most closely characterizes the nature of the therapist intervention. For statements not rated as EFT, please provide a brief characterization of the statement on the checklist. Use a separate checklist sheet for each tape rated and note the statement number of each statement rated. At the top of each sheet note the couple and session number. For each tape, you are to rate the ten minute segment starting at number 100 and ending at 210 (using a standard CPS tape recorder).

A therapist statement is defined as a segment of speech by the therapist that continues until a clear transition to a client statement occurs. A therapist statement may therefore be a few words or several sentences long. If a therapist statement is briefly interrupted by client verbalization, rate the segments of speech as one therapist statement. If a client statement is overlapped by a minimal encourager by the therapist, do not rate this as a therapist statement (e.g., I see, um hum). Minimal encouragers are not to rated as either EFT or non-EFT. If a statement is inaudible to you, do not rate that statement.

EFT IMPLEMENTATION CHECKLIST

Rater: _____

Couple: _____ Session #: _____ Therapist: _____

This implementation checklist is used to rate therapist statements made during two ten minute segments of therapy. Place a checkmark on the line beneath an intervention each time it is used during the segment. The checkmarks are added to provide the total number of responses coded. If you cannot code an intervention with the categories provided, give it a descriptive label and provide a brief example of the statement. For example, "Bargaining/contracting" would be a good description if the therapist says: "OK, but would you promise to take out the garbage if Louise is more affectionate with you?".

1. Defining the problem in terms of underlying emotions and unmet needs.

2. Clarifying/elaborating the basic positions & patterns of interaction. Can include framing behaviour in terms of the cycle and elaborating/exploring patterns of closeness & distance. Also may include interpreting/validating how each partner experiences & is defined in the negative cycle of interaction or externalizing the negative cycle of interaction (dance).

3. Validating/interpreting/framing blame & negative messages in terms of underlying needs & feelings/emotions.

4. Probing for, heightening, elaborating emotional experience (especially vulnerable primary emotions such as sadness, fear, loneliness, isolation, & rejection). Can include clarifying/reframing triggers & responses to emotional experience.

5. Interpreting/elaborating upon emotional experience. Can include enacting negative cycle and or/using evocative & empathic responses to carry forward emotional experience.

6. Clarifying the impact of the relationship on personal vulnerabilities & link to individual behaviour.
-

7. Exploring blocks/resistance to listening to others' communication (partner's or therapist) in terms of underlying feelings, self-concept, or experience in the family of origin or past intimate relationships.
-

8. Facilitating expression of emotional needs & wants. Can include encouraging/inviting partners to express emotional needs and wants to each others each other.
-

9. Facilitating new perceptions & responses to the partner.
-

10. Clarifying/elaborating shared perspectives & new positions.
-

OTHER RESPONSES

Descriptive Label:

Example:

TOTAL # EFT RESPONSES: _____

TOTAL #OTHER RESPONSES _____

EXAMPLES OF IMPLEMENTATION CATEGORIES

1. So the problem for you in this relationship is that you basically feel isolated from Jim?

2. So your basic approach to this relationship is that you need to manage it, to take control so that your wife will be able to overcome what you see as her problem. Your approach on the other hand is to resist his taking control, not by confronting him but by withholding yourself from him.

3. You're feeling pretty angry right now Penny?
Yes he is always logical, and that makes me feel...?
Powerless perhaps? Like you can't get through to him?

4. What happens to you when Linda turns her head like that as you talk?

or

So as Cory tries to take control of the situation you feel more and more afraid, like a little child is afraid?

5. So although you feel hostile and overwhelmed when he does this you are too unsure of yourself and afraid of his disapproval to tell him so?

6. Tom, when you experience Sue withdrawing from you it seems like you become afraid that you are not important to her and you demand reassurance, but then Sue you panic, when people demand responses from you, you tend to feel that you are being taken over, and so you withdraw more.

7. It seems like you find it hard to accept that Linda is sometimes afraid of you, that you might create that kind of response in her?

or

What happens to you when Mary gets mad like this?...you know I had the image of your mother attacking you, the way you described earlier.

8. Brenda, can you tell Cory what it is you really want from him right now?
How he can reassure you?

9. So Cory, this is a new view for you, to understand that Barbara is truly afraid to have sex with you, to let you in. How do you respond to that?

"I feel softer, not so angry".

So you feel closer to her? Perhaps you would like to comfort her right now?

10. So John, it seems that you are able to help Anne feel more secure in the relationship now and that she is therefore more accessible to you and you are feeling more accepted.

Table 1

Golombok-Rust Inventory of Sexual Satisfaction (GRISS): Test-Retest Reliability for Control Groups Subjects from Pretreatment to End of Wait-List Period

Variable ^a	Pearson
GRISS	
Females ^b	0.84
Males ^c	0.92
GRISS-INF	
Females	0.77
Males	0.81
GRISS-AVD	
Females	0.92
Males	0.84
GRISS-DSAT	
Females	0.64
Males	0.61
GRISS-NCO	
Females	0.71
Males	0.80
Mean Subscale Test-Retest Value	
Females	0.76
Males	0.76

^aGRISS = Golombok-Rust Inventory of Sexual Satisfaction; GRISS-INF = GRISS Sexual Infrequency Subscale; GRISS-AVD = GRISS Sexual Avoidance Subscale; GRISS-DSAT = GRISS Dissatisfaction Subscale; GRISS-NCO = GRISS Sexual Non-Communication.

^bFor all scales, $n = 24$.

^cFor all scales, $n = 24$.

Table 2

SDTPS (Sexual Desire Toward Partner Scale) Internal Consistency Levels for Females and Males

Group	<u>n</u>	Cronbach Alpha
All Subjects	130	0.94
All Females	66	0.91
All Males	64	0.90
ISD Subjects ^a		
Females	49	0.78
Males	49	0.89
Non-ISD Subjects ^b		
Females	17	0.92
Males	15	0.92
Mean for All Groups	-	0.89

^aSubjects in the treatment or control conditions.

^bSubjects in the comparison group condition.

Table 3

Analysis of Variance Assessment of Pre-Treatment Group Equivalence on Continuous Demographic Variables

Variable		Treatment ^a	Control ^b	df	F	p
Female's Age	M	40.08	41.25	(1.47)	0.24	0.63
	SD	7.27	9.51			
Male's Age	M	41.80	42.75	(1.47)	0.15	0.70
	SD	7.65	9.35			
Years Married	M	14.57	13.40	(1.47)	0.22	0.64
	SD	8.28	9.07			
Number of Children	M	1.92	1.21	(1.47)	6.10	0.02 ^c
	SD	1.04	0.98			
Duration of ISD	M	6.30	7.08	(1.47)	0.36	0.55
	SD	4.58	4.56			

^an = 25 couples

^bn = 24 couples

^cSignificant at alpha level $p < 0.05$.

Table 4

Median Values and Mann-Whitney U Assessment of Pre-Treatment Group Equivalence on Non-Parametric Demographic Variable

Variable	Treatment ^a	Control ^b	U	p
Level of Income	6	6	278.50	0.57
Female Level of Education	4	5	245.50	0.26
Male Level of Education	5	4.5	277.00	0.64

^a $n = 25$ couples

^b $n = 24$ couples

Table 5

Chi-Square Assessment of Pre-Treatment Group Equivalence on Non-Parametric Demographic Variables

	Treatment ^a	Control ^b		
Variable	Observed frequency	Observed frequency	X ²	p
Sexual Trauma in Female's Past				
Yes	7	5	0.34	0.56
No	18	19		
Type of ISD				
Partner Specific	12	15	2.54	0.11
Global	13	9		

^a $n = 25$

^b $n = 24$

Table 6

Analysis of Variance Assessment of Pre-Treatment Group Equivalence on Continuous Outcome Variables for Females

Variable ^a		Treatment ^b	Control ^c	F	p
DAS	M	97.28	101.54	1.28	0.26
	SD	12.03	14.27		
GRISS*	M	43.88	47.79	1.43	0.24
	SD	9.99	12.80		
GRISS-INF*	M	6.60	6.54	0.02	0.90
	SD	1.19	2.02		
GRISS-AVD*	M	8.72	8.71	0.00	0.99
	SD	2.56	3.21		
GRISS-NCO*	M	5.48	5.29	0.12	0.73
	SD	1.69	2.07		
SDTPS	M	21.88	20.79	0.45	0.50
	SD	5.40	5.92		
SCL-GSI*	M	53.84	58.08	2.81	0.10
	SD	9.90	7.60		
BDI*	M	10.44	12.67	1.09	0.30
	SD	7.74	7.19		

^aDAS = Dyadic Adjustment Scale; GRISS = Golombok-Rust Inventory of Sexual Satisfaction; GRISS-INF = GRISS Sexual Infrequency Subscale; GRISS-AVD = GRISS Sexual Avoidance Subscale; GRISS-NCO = GRISS Sexual Non-Communication; SDTPS = Sexual Desire Toward Partner Scale; SCL-GSI = Symptom Checklist-90-R Global Severity Index; BDI = Beck Depression Inventory.

^b $n = 25$

^c $n = 24$

* Lower scores reflect less distress.

Table 7

Analysis of Variance Assessment of Pre-Treatment Group Equivalence on Continuous Outcome Variables for Males

Variable ^a		Treatment ^b	Control ^c	F	p
DAS	M	99.92	103.58	1.06	0.31
	SD	12.90	11.94		
GRISS*	M	24.24	28.04	1.75	0.19
	SD	7.15	12.37		
GRISS-INF*	M	6.40	6.13	0.38	0.54
	SD	1.47	1.65		
GRISS-AVD*	M	1.60	2.00	0.39	0.53
	SD	1.96	2.52		
GRISS-NCO*	M	4.28	4.46	0.14	0.71
	SD	1.46	1.89		
SDTPS	M	41.08	37.58	3.02	0.09
	SD	7.00	7.08		
SCL-GSI*	M	57.20	51.79	3.45	0.07
	SD	10.35	10.00		
BDI*	M	8.76	6.50	2.65	0.11
	SD	0.96	3.75		

^a DAS = Dyadic Adjustment Scale; GRISS = Golombok-Rust Inventory of Sexual Satisfaction; GRISS-INF = GRISS Sexual Infrequency Subscale; GRISS-AVD = GRISS Sexual Avoidance Subscale; GRISS-NCO = GRISS Sexual Non-Communication; SDTPS = Sexual Desire Toward Partner Scale; SCL-GSI = Symptom Checklist-90-R Global Severity Index; BDI = Beck Depression Inventory.

^bn = 25

^cn = 24

* Lower scores reflect less distress.

Table 8

Median Values and Mann-Whitney U Assessment of Pre-Treatment Group Equivalence on Non-Parametric Outcome Variable

Variable ^a	Treatment ^b	Control ^c	U	p
SHFD				
Female	8	8	267.00	0.49
Male	3	3	228.00	0.13

^aSHFD = Sex History Form - Desire Item.

^b $n = 25$

^c $n = 24$

Note: Lower scores reflect less distress.

Table 9

Means and Adjusted Means for Females on Continuous Outcome Measures at Post-Treatment^a

Variable ^b		Treatment	Control
DAS	M	101.88	101.63
	SD	13.97	14.80
	Adjusted M	103.68	99.83
GRISS*	M	37.60	45.38
	SD	11.68	12.12
	Adjusted M	38.05	44.93
SDTPS	M	28.92	23.67
	SD	8.79	7.51
	Adjusted M	28.48	24.10
SCL-GSI*	M	50.68	56.75
	SD	9.38	7.25
	Adjusted M	51.68	55.75
BDI*	M	10.44	11.42
	SD	7.75	7.32
	Adjusted M	10.84	10.97
GRISS-INF*	M	5.80	6.58
	SD	2.06	1.75
	Adjusted M	5.87	6.52
GRISS-AVD*	M	6.92	7.79
	SD	3.20	3.79
	Adjusted M	7.18	7.53
GRISS-NCO*	M	4.40	4.71
	SD	1.95	2.03
	Adjusted M	4.23	4.87

^aPost-treatment for treatment group - End of 10-week wait-list period for control group.

^bDAS = Dyadic Adjustment Scale; GRISS = Golombok-Rust Inventory of Sexual Satisfaction; SDTPS = Sexual Desire Toward Partner Scale; SCL-GSI = Symptom Checklist-90-R Global Severity Index; BDI = Beck Depression Inventory; GRISS-INF = GRISS Sexual Infrequency Subscale; GRISS-AVD = GRISS Sexual Avoidance Subscale; GRISS-NCO = GRISS Sexual Non-Communication.

* Lower scores reflect less distress.

Table 10

Univariate F-Tests and Roy-Bargman Stepdown F-Tests for Main Effect of Group for Females on Continuous Outcome Variables

Source/Variable ^a	F	df	p
<u>Univariate F-Tests</u>			
DAS	1.88	(1.41)	0.18
GRISS	7.60	(1.41)	0.01
SDTPS	5.61	(1.41)	0.02
SCL-GSI	2.00	(1.41)	0.17
BDI	15.50	(1.41)	0.00 ^b
<u>Roy-Bergman F-Tests</u>			
DAS	1.88	(1.41)	0.18
GRISS	5.73	(1.40)	0.02
SDTPS	0.60	(1.39)	1.45
SCL-GSI	0.05	(1.38)	0.83
BDI	15.36	(1.37)	0.00 ^b

^aDAS = Dyadic Adjustment Scale; GRISS = Golombok-Rust Inventory of Sexual Satisfaction; SDTPS = Sexual Desire Toward Partner Scale; SCL-GSI = Symptom Checklist-90-R Global Severity Index; BDI = Beck Depression Inventory.

^bSignificant at Bonferroni corrected alpha level of $p < 0.05/5 = 0.01$.

Table 11

Means and Adjusted Means for Males on Continuous Outcome Measures at Post-Treatment^a

Variable ^b		Treatment	Control
DAS	M	105.64	105.00
	SD	11.52	14.00
	Adjusted M	106.81	103.83
GRISS*	M	22.68	27.04
	SD	7.67	10.72
	Adjusted M	23.80	25.92
SDTPS	M	42.12	39.50
	SD	5.54	5.78
	Adjusted M	40.79	40.83
SCL-GSI*	M	50.08	49.71
	SD	11.85	9.59
	Adjusted M	47.43	52.35
BDI*	M	4.56	5.50
	SD	4.84	3.39
	Adjusted M	4.04	6.02
GRISS-INF*	M	5.72	6.25
	SD	1.67	1.60
	Adjusted M	5.71	6.26
GRISS-AVD*	M	1.64	1.58
	SD	1.89	2.17
	Adjusted M	1.69	1.54
GRISS-NCO*	M	3.64	4.75
	SD	1.50	2.19
	Adjusted M	3.61	4.78

^aPost-treatment for treatment group - End of 10-week wait-list period for control group.

^bDAS = Dyadic Adjustment Scale; GRISS = Golombok-Rust Inventory of Sexual Satisfaction; SDTPS = Sexual Desire Toward Partner Scale; SCL-GSI = Symptom Checklist-90-R Global Severity Index; BDI = Beck Depression Inventory; GRISS-INF = GRISS Sexual Infrequency Subscale; GRISS-AVD = GRISS Sexual Avoidance Subscale; GRISS-NCO = GRISS Sexual Non-Communication.

* Lower scores reflect less distress.

Table 12

Univariate F-Tests for Main Effect of Group for Males on Golombok-Rust Inventory of Sexual Satisfaction Subscales

Source/Variable ^a	F	df	p
<u>Univariate F-Tests</u>			
GRISS-INF	2.47	(1.43)	0.13
GRISS-AVD	0.14	(1.43)	0.71
GRISS-NCO	10.02	(1.43)	0.00 ^b

^aGRISS-INF = Griss Sexual Infrequency Subscale; GRISS-AVD = Griss Sexual Avoidance Subscale; GRISS-NCO = Griss Sexual Non-communication Subscale.

^bSignificant at Bonferroni corrected alpha level of $p < 0.05/3 = 0.017$.

Table 13

Median Values and Mann-Whitney U Assessment of Non-Parametric Outcome Variables at Post-Treatment^a

Variable ^b	Pre-Treatment		Post-Treatment		U	p
	Treatment ^c	Control ^d	Treatment ^e	Control ^d		
SHFD						
Female	8	8	6	8	149.50	0.00 ^f
Male	3	3	3	3	233.00	0.16

^aPost-treatment for treatment group. End of wait-list period for control group.

^bSHFD = Sex History Form - Desire Item.

^cn = 25

^dn = 24

^en = 23

^fSignificant at alpha level $p < 0.05$

Note: Lower scores reflect less distress.

Table 14

Percentage of Females Who Recovered, Improved, and/or Deteriorated on Outcome Measures at Post-Treatment^a

Variable ^b	Recovered		Improved		Deteriorated	
	Treatment ^c	Control ^d	Treatment	Control	Treatment	Control
DAS			40	17	4	8
GRISS	4	0	24	8	0	4
GRISS-INF	4	4	20	0	0	4
GRISS-AVD	16	0	32	4	4	4
GRISS-NCO	4	4	24	13	0	4
SDTPS	36	0	48	17	4	4
SHFD	12	0	24	8	0	4
SCL-GSI			32	8	0	16

^aPost-treatment for treatment group; end of 10-week wait period for control group.

^bDAS = Dyadic Adjustment Scale; GRISS = Golombok-Rust Inventory of Sexual Satisfaction; GRISS-INF = GRISS Sexual Infrequency Subscale; GRISS-AVD = GRISS Sexual Avoidance Subscale; GRISS-NCO = GRISS Sexual Non-Communication Subscale; SDTPS = Sexual Desire Toward Partner Scale; SHFD = Sex History Form - Desire Item; SCL-GSI = Symptom Checklist-90-R Global Severity Index.

^c $n = 25$

^d $n = 24$

Table 15

Percentage of Males Who Recovered, Improved, and/or Deteriorated on Outcome Measures at Post-Treatment^a

Variable ^b	Recovered		Improved		Deteriorated	
	Treatment ^c	Control ^d	Treatment	Control	Treatment	Control
DAS			40	25	4	17
GRISS			25	8	4	0
GRISS-INF	16	4	32	4	4	8
GRISS-AVD			8	4	4	0
GRISS-NCO	8	4	20	0	4	13
SDTPS			4	4	0	0
SHFD			0	4	0	0
SCL-GSI			36	17	4	0

^aPost-treatment for treatment group; end of 10-week wait period for control group.

^bDAS = Dyadic Adjustment Scale; GRISS = Golombok-Rust Inventory of Sexual Satisfaction; GRISS-INF = GRISS Sexual Infrequency Subscale; GRISS-AVD = GRISS Sexual Avoidance Subscale; GRISS-NCO = GRISS Sexual Non-Communication Subscale; SDTPS = Sexual Desire Toward Partner Scale; SHFD = Sex History Form - Desire Item; SCL-GSI = Symptom Checklist-90-R Global Severity Index.

^c $n = 25$

^d $n = 24$

Table 16

Means for Female Treatment Subjects at Pre-Treatment, Post-Treatment, and Follow-Up^a on Continuous Outcome Measures

Variable ^b		Pre-Treatment	Post-Treatment	Follow-Up
DAS	M	97.78	101.57	101.65
	SD	12.03	14.41	13.14
GRISS*	M	44.24	38.00	36.87
	SD	10.23	11.31	13.66
SDTPS	M	22.13	29.13	27.74
	SD	5.53	8.69	8.31
SCL-GSI*	M	52.78	49.91	49.17
	SD	9.61	9.25	9.68
BDI*	M	9.78	3.65	6.09
	SD	7.52	3.33	4.56
GRISS-INF*	M	6.61	5.82	6.22
	SD	1.61	2.02	2.07
GRISS-AVD*	M	8.70	6.87	6.44
	SD	2.67	3.25	3.35
GRISS-NCO*	M	5.52	4.44	4.13
	SD	1.65	2.05	2.24

^a $n = 23$ for all time intervals.

^bDAS = Dyadic Adjustment Scale; GRISS = Golombok-Rust Inventory of Sexual Satisfaction; SDTPS = Sexual Desire Toward Partner Scale; SCL-GSI = Symptom Checklist-90-R Global Severity Index; BDI = Beck Depression Inventory; GRISS-INF = GRISS Sexual Infrequency Subscale; GRISS-AVD = GRISS Sexual Avoidance Subscale; GRISS-NCO = GRISS Sexual Non-Communication Subscale.

* Lower scores reflect less distress.

Table 17

Trend Analysis Univariate F-Tests for Main Effect of Time for Females on Continuous Outcome Measures

Source ^a	Function	F	df	p
DAS	Linear	3.35	(1.22)	0.08
	Quadratic	1.01	(1.22)	0.32
GRISS	Linear	5.51	(1.22)	0.02
	Quadratic	2.97	(1.22)	0.10
SDTPS	Linear	16.09	(1.22)	0.00 ^b
	Quadratic	17.32	(1.22)	0.00 ^b
SCL-GSI	Linear	3.62	(1.22)	0.07
	Quadratic	0.53	(1.22)	0.47
BDI	Linear	6.97	(1.22)	0.02
	Quadratic	21.22	(1.22)	0.00 ^b

^aDAS = Dyadic Adjustment Scale; GRISS = Golombok-Rust Inventory of Sexual Satisfaction; SDTPS = Sexual Desire Toward Partner Scale; SCL-GSI = Symptom Checklist-90-R Global Severity Index; BDI = Beck Depression Inventory.

^bSignificant at Bonferroni corrected alpha level of $p < 0.05/5 = 0.01$.

Table 18

Means for Male Treatment Subjects at Pre-Treatment, Post-Treatment, and Follow-Up^a on Continuous Outcome Measures

Variable ^b		Pre-Treatment	Post-Treatment	Follow-Up
DAS	M	100.74	105.43	108.35
	SD	12.76	11.35	13.18
GRISS*	M	24.39	23.17	21.74
	SD	7.26	7.43	7.73
SDTPS	M	41.13	41.83	42.61
	SD	7.27	5.52	6.11
SCL-GSI*	M	56.57	49.09	46.78
	SD	10.57	11.68	13.01
BDI*	M	8.52	4.83	5.04
	SD	5.75	4.94	5.60
GRISS-INF*	M	6.44	5.65	5.74
	SD	1.41	1.67	1.79
GRISS-AVD*	M	1.61	1.78	1.39
	SD	2.04	1.88	1.75
GRISS-NCO*	M	4.26	3.74	3.64
	SD	1.51	1.51	1.87

^a $n = 23$ for all time intervals.

^bDAS = Dyadic Adjustment Scale; GRISS = Golombok-Rust Inventory of Sexual Satisfaction; SDTPS = Sexual Desire Toward Partner Scale; SCL-GSI = Symptom Checklist-90-R Global Severity Index; BDI = Beck Depression Inventory; GRISS-INF = GRISS Sexual Infrequency Subscale; GRISS-AVD = GRISS Sexual Avoidance Subscale; GRISS-NCO = GRISS Sexual Non-Communication Subscale.

* Lower scores reflect less distress.

Table 19

Trend Analysis Univariate F-Tests for Main Effect of Time for Males on Continuous Outcome Measures

Source ^a	Function	F	df	p
DAS	Linear	16.86	(1,22)	0.00 ^b
	Quadratic	0.32	(1,22)	0.58
GRISS	Linear	6.06	(1,22)	0.02
	Quadratic	0.01	(1,22)	0.92
SDTPS	Linear	2.08	(1,22)	0.16
	Quadratic	0.00	(1,22)	0.96
SCL-GSI	Linear	49.02	(1,22)	0.00 ^b
	Quadratic	2.17	(1,22)	0.15
BDI	Linear	14.94	(1,22)	0.00 ^b
	Quadratic	5.18	(1,22)	0.03

^aDAS = Dyadic Adjustment Scale; GRISS = Golombok-Rust Inventory of Sexual Satisfaction; SDTPS = Sexual Desire Toward Partner Scale; SCL-GSI = Symptom Checklist-90-R Global Severity Index; BDI = Beck Depression Inventory.

^bSignificant at Bonferroni corrected alpha level of $p < 0.05/5 = 0.01$.

Table 20

Trend Analysis Univariate F-Tests for Main Effect of Time for Females on Golombok-Rust Inventory of Sexual Satisfaction Subscales

Source ^a	Function	F	df	p
GRISS-INF	Linear	0.78	(1.22)	0.39
	Quadratic	5.31	(1.22)	0.03
GRISS-AVD	Linear	11.13	(1.22)	0.00 ^b
	Quadratic	2.37	(1.22)	0.14
GRISS-NCO	Linear	13.70	(1.22)	0.00 ^b
	Quadratic	2.07	(1.22)	0.17

^aGRISS-INF = GRISS Sexual Infrequency Subscales; GRISS-AVD = GRISS Sexual Avoidance Subscales; GRISS-NCO = GRISS Sexual Non-Communication Subscales.

^bSignificant at Bonferroni corrected alpha level of $p < 0.05/3 = 0.017$.

Table 21

Median Values and Wilcoxon Assessment of Treatment Subjects' Non-Parametric Outcome Measure Scores from Pre-Treatment to Post-Treatment

Variable ^a	Pre-Treatment ^b	Post-Treatment ^c	z	p
SHFD				
Female	8	6	- 3.74	0.00 ^d
Male	3	3	0.64	0.64

^aSHFD = Sex History Form - Desire Item.

^b $n = 23$

^c $n = 23$

^dSignificant at alpha level of $p < 0.05$

Note: Lower scores reflect less distress.

Table 22

Median Values and Wilcoxon Assessment of Treatment Subjects' Non-Parametric Outcome Measure Scores from Pre-Treatment to Follow-Up

Variable ^a	Pre-Treatment ^b	Post-Treatment ^c	z	p
SHFD				
Female	8	6	-3.52	0.00 ^d
Male	3	3	1.08	0.64

^aSHFD = Sex History Form - Desire Item.

^b $\underline{n} = 23$

^c $\underline{n} = 23$

^dSignificant at alpha level of $p < 0.05$.

Note: Lower scores reflect less distress.

Table 23

Comparison of Percentage of Female Treatment Subjects^a Who Recovered, Improved, and/or Deteriorated on Outcome Measures at Post-Treatment^a and Follow-Up^b

Variable ^c	Recovered		Improved		Deteriorated	
	Post-Treatment	Follow-Up	Post-Treatment	Follow-Up	Post-Treatment	Follow-Up
DAS			40	39	4	13
GRISS	4	26	24	26	0	9
GRISS-INF	4	13	20	13	0	9
GRISS-AVD	16	22	32	39	4	4
GRISS-NCO	4	17	24	17	0	0
SDTPS	36	26	48	39	4	0
SHFD	12	26	24	26	0	0
SCL-GSI			32	31	0	4

^a \bar{n} = 25

^b \bar{n} = 23

^cDAS = Dyadic Adjustment Scale; GRISS = Golombok-Rust Inventory of Sexual Satisfaction; GRISS-INF = GRISS Sexual Infrequency Subscale; GRISS-AVD = GRISS Sexual Avoidance Subscale; GRISS-NCO = GRISS Sexual Non-Communication Subscale; SDTPS = Sexual Desire Toward Partner Scale; SHFD = Sex History Form - Desire Item; SCL-GSI = Symptom Checklist-90-R Global Severity Index.

Table 24

Comparison of Percentage of Male Treatment Subjects^a Who Recovered, Improved, and/or Deteriorated on Outcome Measures at Post-Treatment^a and Follow-Up^b

Variable ^c	Recovered		Improved		Deteriorated	
	Post-Treatment	Follow-Up	Post-Treatment	Follow-Up	Post-Treatment	Follow-Up
DAS			40	61	4	4
GRISS			25	13	4	4
GRISS-INF	16	9	32	31	4	4
GRISS-AVD			8	9	4	4
GRISS-NCO	8	4	20	17	4	4
SDTPS			4	9	0	0
SHFD			0	0	0	0
SCL-GSI			36	9	4	0

^a $\underline{n} = 25$

^b $\underline{n} = 23$

^cDAS = Dyadic Adjustment Scale; GRISS = Golombok-Rust Inventory of Sexual Satisfaction; GRISS-INF = GRISS Sexual Infrequency Subscale; GRISS-AVD = GRISS Sexual Avoidance Subscale; GRISS-NCO = GRISS Sexual Non-Communication Subscale; SDTPS = Sexual Desire Toward Partner Scale; SHFD = Sex History Form - Desire Item; SCL-GSI = Symptom Checklist-90-R Global Severity Index.

Table 25

Summary of Maintenance and Deterioration for Improved Treatment Subjects at Follow-Up

Variable ^b	Status ^a	
	Female	Male
DAS	Maintained	Maintained
GRISS	Maintained	Deteriorated
GRISS-INF	Deteriorated	Maintained
GRISS-AVD	Maintained	Maintained
GRISS-NCO	Deteriorated	Maintained
SDTPS	Deteriorated	Maintained
SHFD	Maintained	Maintained
SCL-GSI	Maintained	Deteriorated

^aMaintained = Increase, no change, or decrease or no more than 4% (one subject) in percentage improved from post-treatment to follow-up. Deteriorated = Decrease or more than 4% (one subject) in percentage improved from post-treatment to follow-up.

^bDAS = Dyadic Adjustment Scale; GRISS = Golombok-Rust Inventory of Sexual Satisfaction; GRISS-INF = GRISS Sexual Infrequency Subscale; GRISS-AVD = GRISS Sexual Avoidance Subscale; GRISS-NCO = GRISS Sexual Non-Communication Subscale; SDTPS = Sexual Desire Toward Partner Scale; SHFD = Sex History Form - Desire Item; SCL-GSI = Symptom Checklist-90-R Global Severity Index.

Table 26

Hierarchical Multiple Regression Summary for Female Level of Sexual Desire Toward Partner at Post-Treatment, With Pre-Treatment Dyadic Adjustment and Type of ISD as Predictors

Variable	SDTPS ^a Post-Treatment	DAS ^b	B	β	SR ² (Incremental)
DAS	0.28		0.15	0.21	0.08
Type of ISD	0.28	0.31	3.70	0.21	0.04
M	28.92				R ² = 0.12
SD	8.79				Adjusted R ² = 0.04
					R = 0.34

^aSDTPS = Sexual Desire Toward Partner Scale.

^bDAS = Dyadic Adjustment Scale.

Table 27

Hierarchical Multiple Regression Summary for Female Golombok-Rust Inventory of Sexual Satisfaction at Post-Treatment, With Pre-Treatment Dyadic Adjustment and Type of ISD as Predictors

Variable	GRISS ^a Post-Treatment	DAS ^b	B	β	SR ² (Incremental)
DAS	- 0.43		- 0.32	- 0.33	0.43 ^c
Type of ISD	- 0.42	0.31	- 7.27	- 0.31	0.09
M	37.60				R ² = 0.28
SD	11.68				Adjusted R ² = 0.21
					R = 0.52

^aGRISS = Golombok-Rust Inventory of Sexual Satisfaction.

^bDAS = Dyadic Adjustment Scale.

^cSignificant at $p < 0.05$.

Table 28

Means for ISD and Non-ISD Couples on Continuous Demographic Outcome Variables

Variable		ISD ^a	Non-ISD ^b
Female's Age	M	40.65	40.60
	SD	8.37	10.74
Male's Age	M	42.27	43.07
	SD	8.45	12.78
Years Married	M	14.00	13.53
	SD	8.60	10.19
Number of Children	M	1.57	1.73
	SD	1.06	1.50

^a $n = 49$ ^b $n = 15$

Table 29

Median Values and Mann-Whitney U Assessment of ISD and Non-ISD Couples on Non-Parametric Demographic Variables

Variable	ISD ^a	Non-ISD ^b	U	p
Level of Income	6	6	591.00	0.69
Female Level of Education	4	4	342.00	0.68
Male Level of Education	5	5	281.50	0.16

^a $\underline{n} = 49$

^b $\underline{n} = 15$

Table 30

Chi-Square Assessment of ISD and Non-ISD Couples: Sexual Trauma in Female's Past

	ISD ^a	Non-ISD ^b		
Variable	Observed Frequency	Observed Frequency	X ² ^c	p
Sexual Trauma in Females' Past				
Yes	12	1	2.72	0.16
No	37	16		

^an = 49^bn = 17^cFisher's Exact Test Value

Table 31

Means for ISD and Non-ISD Females on Continuous Outcome Measures

Variable ^a		ISD ^b	Non-ISD ^c
DAS	M	99.37	93.13
	SD	13.21	12.26
GRISS*	M	45.80	31.25
	SD	11.50	11.50
SDTPS	M	21.35	33.94
	SD	5.63	8.49
SCL-GSI*	M	55.92	57.31
	SD	9.02	8.28
BDI*	M	11.53	9.00
	SD	7.48	8.28
GRISS-INF*	M	6.75	5.38
	SD	1.63	2.28
GRISS-AVD*	M	8.71	4.44
	SD	2.87	3.01
GRISS-NCO*	M	5.39	4.44
	SD	1.87	2.10

^aDAS = Dyadic Adjustment Scale; GRISS = Golombok-Rust Inventory of Sexual Satisfaction; SDTPS = Sexual Desire Toward Partner Scale; SCL-GSI = Symptom Checklist-90-R Global Severity Index; BDI = Beck Depression Inventory; GRISS-INF = GRISS Sexual Infrequency Subscale; GRISS-AVD = GRISS Sexual Avoidance Subscale; GRISS-NCO = GRISS Sexual Non-Communication Subscale.

^b $n = 49$

^c $n = 16$

* Lower scores reflect less distress.

Table 32

Univariate and Roy-Bargman Stepdown F-Tests for Main Effect of Group for ISD and Non-ISD Females on Continuous Outcome Measures

Source/Variable ^a	F	df	p
<u>Univariate F-Tests</u>			
DAS	2.78	(1.63)	0.10
GRISS	19.29	(1.63)	0.00 ^b
SDTPS	46.32	(1.63)	0.00 ^b
SCL-GSI	0.30	(1.63)	0.59
BDI	1.45	(1.63)	0.23
<u>Stepdown F-Tests</u>			
DAS	2.78	(1.63)	0.10
GRISS	26.86	(1.62)	0.00 ^b
SDTPS	34.11	(1.61)	0.00 ^b
SCL-GSI	0.01	(1.60)	0.95
BDI	1.40	(1.59)	0.24

^aDAS = Dyadic Adjustment Scale; GRISS = Golombok-Rust Inventory of Sexual Satisfaction; SDTPS = Sexual Desire Toward Partner Scale; SCL-GSI = Symptom Checklist-90-R Global Screening Index; BDI = Beck Depression Inventory.

^bSignificant at Bonferroni corrected alpha level of $p < 0.05/5 = 0.01$.

Table 33

Univariate F-Tests for Main Effect of Group for ISD and Non-ISD Females on Golombok-Rust Inventory of Sexual Satisfaction Subscale

Source/Variable ^a	F	df	p
<u>Univariate F-Tests</u>			
GRISS-INF	5.29	(1.63)	0.03
GRISS-AVD	26.23	(1.63)	0.00 ^b
GRISS-NCO	2.94	(1.63)	0.09

^aGRISS-INF = GRISS Sexual Infrequency Subscale; GRISS-AVD = GRISS Sexual Avoidance Subscale; GRISS-NCO = GRISS Sexual Non-Communication Subscale.

^bSignificant at Bonferroni corrected alpha level of $p < 0.05/3 = 0.017$.

Table 34

Median Values and Mann-Whitney U Assessment of ISD and Non-ISD Subjects' Non-Parametric Outcome Measure Scores

Variable ^a	ISD	Non-ISD	U	p
SHFD				
Female	8	5	83.00	0.00 ^b
Male	3	3	349.00	0.76

^aSHFD = Sex History Form - Desire Item.

^bSignificant at alpha level of $p < 0.05$.

Note: Lower scores reflect less distress.

Table 35

Means for ISD and Non-ISD Males on Continuous Outcome Measures

Variable ^a		ISD ^b	Non-ISD ^c
DAS	M	101.71	94.73
	SD	12.45	15.67
GRISS*	M	26.10	24.60
	SD	10.13	9.98
SDTPS	M	39.37	37.13
	SD	7.19	7.52
SCL-GSI*	M	54.55	54.93
	SD	10.44	10.49
BDI*	M	7.65	6.87
	SD	4.94	5.57
GRISS-INF*	M	6.27	5.53
	SD	1.55	2.50
GRISS-AVD*	M	1.80	3.07
	SD	2.24	1.90
GRISS-NCO*	M	4.37	3.80
	SD	1.67	2.04

^aDAS = Dyadic Adjustment Scale; GRISS = Golombok-Rust Inventory of Sexual Satisfaction; SDTPS = Sexual Desire Toward Partner Scale; SCL-GSI = Symptom Checklist-90-R Global Severity Index; BDI = Beck Depression Inventory; GRISS-INF = GRISS Sexual Infrequency Subscale; GRISS-AVD = GRISS Sexual Avoidance Subscale; GRISS-NCO = GRISS Sexual Non-Communication Subscale.

^b $n = 49$

^c $n = 15$

* Lower Scores reflect less distress.