

**THE IMPACT OF RELAXATION AND SENSORY-FOCUSED GUIDED IMAGERY
ON PERCEIVED FEMALE LOW SEXUAL DESIRE / INTEREST AND SEXUAL
DISTRESS**

A Dissertation

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fulfillment of the requirements of the degree of Doctor of Philosophy in Clinical
Sexology

By

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DISSERTATION APPROVAL

This dissertation, submitted by Tiffany Stanley, LPC-S, has been read and approved by three faculty members of the American Academy of Clinical Sexology.

The final copies have been examined by the Dissertation Committee, and the signatures which appear here verify the fact that any necessary changes have been incorporated and that the dissertation is now given final approval with reference to content, form, and mechanical accuracy.

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VITA

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ABSTRACT

Research indicates that there are many women today who struggle with low sexual desire / interest and sexual distress. The prevalence of these sexual issues in women can cause concerns such as low self-esteem, relationship distress, and sexual dissatisfaction. Research has also shown that guided imagery focused on relaxation and body and sensory awareness has the potential to positively impact an individual's emotional and physical wellbeing, overall relaxation, and help improve concentration. However, little research focuses on the impact guided imagery has specifically on treating concerns related to low sexual desire / interest and sexual distress in women. The purpose of this quantitative research is to determine the efficacy of a treatment intervention developed specifically to focus on the concerns of perceived low sexual desire / interest and sexual distress in women. The research intervention is a guided imagery recording focusing on relaxation and body / sensory awareness to which each participant listened for 6-week period. The representative sample consisted of 27 female participants with an average age of 40 years. The majority of the women reported that they were married, heterosexual, and in a relationship. The results of the study indicate that the research intervention significantly improved perceived low sexual desire, increased sexual interest, and improved sexual satisfaction for the participants compared to their pre-test scores. The results demonstrate the efficacy of the treatment intervention as a useful tool for the treatment of perceived low sexual desire / interest and sexual distress in women. Study limitations, recommendations, and conclusions are discussed.

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CHAPTER 1

INTRODUCTION

Research indicates that many women experience at least one sexual concern at some time in their lives. The most common complaints by women of all ages are absent or low sexual desire, low sexual interest, and sexual distress, and these are some of the main reasons women seek counseling to improve in their sexual functioning. These concerns are also some of the most difficult for counselors to treat.

Although occasional lack of desire is normal, two studies in 2008 indicated that the prevalence of women experiencing low sexual desire ranged from 36.2 - 55%, and of that percentage, 8.3 - 23% of the women experienced low desire and distress (West, et al., 2008; Witting, et al., 2008).

Low sexual desire and low sexual interest have the potential to significantly impact a woman's quality of life, partner relationship, sexual functioning, and to cause sexual distress. Physical, psychological and contextual factors are elements that all contribute to a woman's level of sexual desire / interest and the degree to which she experiences sexual satisfaction or sexual distress. However, the two most influential factors contributing to difficulties of low-level sexual desire / interest are conflicts within the partner relationship and physical and / or emotional issues.

Of those women who are experiencing low sexual desire / interest, not all will meet the diagnosis criteria for the sexual desire related dysfunction currently classified as *Female Sexual Interest / Arousal Disorder*. The criteria for diagnosis, as defined by the *Diagnostic and Statistics Manual-V (DSM-V)*, requires that the woman experience a lack of significantly

reduced sexual interest / arousal and experience the absence, or reduction, of at least three of the following factors:

- interest in sexual activity,
- sexual fantasies or erotic thoughts,
- initiation of sexual activity,
- receptiveness to partner's initiation,
- sexual excitement or pleasure during sexual activity (at least 75 - 100% of the time),
- sexual interest / arousal in response to any internal or external sexual cues, and
- genital and non-genital sensations during sexual activity in almost all, or all, sexual encounters (75 - 100% of the time).

Also, to be considered as *Female Sexual Interest / Arousal Disorder*, the symptoms should not be explained by nonsexual mental disorder or by a consequence of severe relationship distress or by other significant life stressors, and symptoms must be present for six months or more and be causing significant distress in the individual (2013).

The current psychotherapy treatments for women's low sexual desire / interest and sexual distress, whether diagnosed as *Female Sexual Interest / Arousal Disorder* or not, include sexual education, body and fantasy exploration, relationship skills training, and alternative methods, such as mindfulness training. In addition to psychotherapy treatments, the interest in the treatment of sexual dysfunctions has led to discoveries in the medical field with advances in medications and surgical procedures.

The current treatments for female sexual concerns, such as low sexual desire / interest and sexual distress, are some of the most difficult sexual issues to treat, and the current treatments do not appear to thoroughly address the multifaceted aspects that influence these issues in women. Today, there is no standard, uniform treatment for female sexual desire concerns. In addition to the therapeutic treatments being used today, there also need to be more resources that support women in accessing their own internal sexual constructs and internal wisdom and to access their connection with their senses, their imagination, and their own personal preferences for their own sexual pleasure and enjoyment.

Research indicates that guided imagery, focused on relaxation and sensory awareness, has the potential to positively impact an individual's emotional well-being, sense of calmness, and overall relaxation and also to help improve concentration. Therefore, guided imagery, focused on relaxation and sensory awareness, would appear to have the potential to be a viable resource for the treatment of sexual desire concerns.

This current research will evaluate the efficacy of the proposed intervention that combines relaxation and sensory-focused guided imagery for the improvement of sexual desire and sexual interest and for the relief of sexual distress in women, thereby filling the gap in the literature for intervention and treatment resources for low sexual desire, low sexual interest, and sexual distress in women.

Sexual Desire and Sexual Interest

Webster Collegiate Dictionary (2002) defines *desire* as “to long or hope for; 1. exhibit or feel desire for, 2. to express a wish for and (noun) conscious impulse toward something that promises enjoyment or satisfaction in its attainment. a. Longing, craving. b. sexual urge or

appetite.” *Interest* is defined as “to be between, make a difference, concern, (2) participation in advantage and responsibility, (4) special interest a. a feeling that accompanies or causes special attention to an object or class of objects, b. something that arouses such attention, c. a quality in a thing arousing interest. 1. to induce or persuade to participate or engage 2. to engage the attention or arouse interest of.”

Sexual Distress

Webster Collegiate Dictionary defines *distress* as “1. To subject to great strain or difficulties, 2. To force or overcome by inflicting pain, 3. pain or suffering affecting the body or mind, 4. To cause worry or be troubled” (2002).

Guided Imagery

Guided imagery is described as the “process of deliberately using your imagination to help your mind and body heal, stay well, or perform well. It’s a kind of directed, deliberate daydream, a purposeful creation of positive sensory images – sights, sounds, smells, taste, and feel- in your imagination” (Naparstek, B., 1994).

Guided imagery is thought to be “one of the most potent tools we have as individuals to manage stress, unleash creativity, change our attitudes, to set and reach goals, and tap into our inner wisdom, relax, stimulate peak performance, and activate our natural healing powers” (Schwartz, A., 1997). Guided imagery has also been studied and widely used and supported as an effective resource in rehabilitative medicine, health care, and in sports and performance training settings as well as therapeutic treatments.

Imagery, Emotions and Sensations

Gerald Epstein describes the connection of imagery to emotions and sensations in his book *Healing Visualization, Creating Health Through Imagery* as

Emotion can manifest itself as an image. Images give form to emotions. An image is the mental form of a feeling. But there is a physical form – sensations. A feeling has certain physical sensations associated with it, so does an image. There are no images without accompanying sensations. In imagery work, you use your images to change your emotions or your sensations (1989).

The effectiveness of guided imagery is grounded in the mind-body connection. As far as your body is concerned, “images are real events to the body. The body does not discriminate between sensory images in the mind and what we call reality” (Naparstek, B., 1994). Under the right conditions, your mind and body will believe what is imagined as real sensory experiences and respond as such. Therefore, one could then reason that “guided” imagery, focused on relaxation, fantasy, and body and sensory awareness, could subsequently generate the potential for an individual to access their own internal concepts of sexual awareness, sensuality, desires, interests, and sexual healing. This reasoning would then identify guided imagery as a helpful resource for the treatment for low-level sexual desire / interest and sexual distress.

Using a technique like guided imagery, something that is entirely within a person’s control, can create a sense of mastery over what is happening, also create a sense of empowerment and an increase in self-esteem. This influences the mind and body connection and connects to one’s own internal wisdom, thereby connecting a person to his / her emotions, images, and sensations. This whole person connection ultimately supports healing and change.

Imagination

The New Oxford American Dictionary (2010) defines *imagination* as the ability of the mind to be creative or resourceful. The part of the mind that imagines things.

Relaxation

Relaxation is described as a state of calm with the releasing of muscular tension and the quieting of the mind. Relaxation can be created through breathing and stretching exercises and also through massage and body-focused, tension-releasing activities such as progressive relaxation and imagination. “The mind and body work together in harmony to bring about relaxation. Physical relaxation creates peace of mind as a byproduct. Mental uncluttering slows down breathing and reduces tension” (Schwartz, 1997).

Martin Rossman (2000) states in his book *Guided Imagery for Self-Healing* that “learning to relax is fundamental to self-healing and a prerequisite for using imagery effectively.” Learning to relax helps to build confidence in one’s body, feelings, and thoughts.

Imagery and Psychoneuroimmunology

While in a relaxed state, guided imagery provides a platform for the mind and body connection to use real or imagined images, senses, emotions, and physical sensations to create a sense of calmness, utilize inner resources, and access healing potential. Martin Rossman refers to this guided imagery platform as the “interface between what we call body and what we call mind” (2000). Psychoneuroimmunology (PNI), is the field that studies the scientific relationship and the connection between the mind and body. PNI promotes the basic premise that thoughts and imagery influence the mind, the body, and the immune system and emphasizes that what we feel and think about can significantly affect the physiology of the body and vice versa. “PNI

demonstrates that images and thoughts with their accompanying mood states are actually accompanied by alterations in the biochemistry of the body. Images appear to activate the nervous system, sending neurohormones (chemical messengers) through the bloodstream to specific cells, where they trigger healing activity” (Naparstek, 1994).

Understanding the concepts of PNI, that thoughts and imagery can influence the connections of the mind, body and the immune system and applying them to sexual concerns, one could speculate that imagery, utilized in a guided format with focus on relaxation and sensory awareness, would subsequently generate the potential for an individual to access his / her own internal sexual desire and sexual interest resources and experiences. Therefore, one could then reason that “guided” imagery, focused on relaxation, and body and sensory awareness, could subsequently generate the potential for an individual to access his / her own internal concepts of sexual awareness, sensuality, desires, and interests, and sexual healing, thereby identifying guided imagery as a potentially helpful resource for the treatment for low-level sexual desire / interest and sexual distress.

Significance of the Study

The current treatments for female sexual concerns, such as sexual desire, sexual interest, and sexual distress, are some of the most difficult sexual issues for counselors to treat. And yet, there is still an insufficient variety of interventions that appear to thoroughly address all of the multifaceted aspects of these issues.

Despite the prevalence of women presenting with perceived low sexual desire, low sexual interest, and sexual distress and the deficiency in the existing research regarding these concerns,

not all sexual therapy interventions, medications, or surgeries can address the many mental, emotional, and physical factors that influence these issues for women. Also, the current inventions do not seem to support the individual's access to her own internal resources and wisdom and to her connection with her senses and imagination. An individual's access to her body and sensory awareness, her imagination and fantasy, and to her resource of relaxation can all be beneficial for improving sexual functioning. Guided imagery with a focus on these aspects has the potential to be a helpful resource for the treatment for low-level sexual desire / interest and sexual distress.

Currently, there is little research regarding the collocation and impact of relaxation and sensory-focused guided imagery as a resource tool for sexual desire and sexual interest and sexual distress in women. The current study proposes to examine and strengthen the body of research supporting the impact of utilizing guided imagery that combines relaxation and sensory-focused imagery as a resource tool for increasing sexual desire and sexual interest and for decreasing sexual distress in women.

Purpose of the Study

Female sexual concerns, such as low sexual desire, low sexual interest, and sexual distress are some of the most difficult sexual issues to treat, and current treatments do not appear to thoroughly address the multifaceted aspects of these issues. Today, there is no standard of treatment for female sexual desire concerns. Although there is plethora of research on sexual desire and other issues related to sexual dysfunctions and an ample amount of research on the impact guided imagery has on the emotional and physical concerns of women's sexuality, the research is lacking in the variety of resources available for the support and treatment of sexual

dysfunctions, and research is scarce on the impact of guided imagery on sexual desire, sexual interest, and sexual distress. There is a need for a variety of resources that support the various influences that cause sexual desire / interest concerns in women. In addition to therapeutic treatments, women need a resource that allows them to access their own internal sexual resources and internal wisdom and to access their connection with their senses, their imagination, and their own personal preferences for sexual pleasure and enjoyment. This current research endeavor fills the gap in the literature regarding the usage of guided imagery for the treatment of female, perceived low-level sexual desire / interest and sexual distress. Wakefield (2013) states

Many problems in life can be reduced to a failure of imagination. We get stuck in scripts and stories that are too small for the vastness of our souls. We live in boxes and constructs that limit our creative capacity and potential for fulfillment. The sexual psyche and the range of sexual archetypes available to women are a realm of great potential, largely unexplored.

Guided imagery with focus on relaxation and sensory awareness has the potential to positively impact an individual's emotional well-being, sense of calmness, overall relaxation, and also improve concentration. Therefore, guided imagery, specifically focused on relaxation and sensory awareness, would appear to have the potential to be a viable resource for the treatment of sexual desire concerns. The current research will evaluate the efficacy of the proposed intervention that combines relaxation techniques and sensory-focused guided imagery with the belief that it will improve sexual desire, sexual interest, and sexual distress in women, thereby enhancing the existing, traditional, and alternative treatments for female sexual desire concerns and also filling the gap in the literature concerning interventions and treatment resources for low sexual desire, low sexual interest, and sexual distress in women.

This quantitative research study will determine the efficacy of the developed treatment intervention. The evaluated treatment intervention is a guided imagery recording emphasizing

relaxation, present-moment sensory awareness, and non-judgmental and positive affirmations. The tool will be used by each participant daily for a 6-week period to determine the potentiality for improvement in each individual participant's state of relaxation, awareness, and receptiveness to pleasure and the improvement of sexual desire, sexual interest, and sexual distress.

The data and information obtained from this research is intended to expand the resources of effective interventions for treatment of sexual desire, sexual interest, and sexual distress concerns in women. It is intended to expand academic conversations regarding sexual desire in women and the use of guided imagery for sexual concerns. It is also intended to provide mental health professionals with an effective intervention for female clients presenting with the issues of perceived low-level sexual desire / interest and sexual distress. Therefore, the purpose of this research study is to fill the gap in the current knowledge for effective treatment resources for perceived low sexual desire / interest and for improving sexual distress in women and to identify an effective treatment method that addresses the multifaceted layers of these concerns.

Limitations of the Study

This study explored a resource intervention for the treatment of perceived low sexual desire, low sexual interest, and sexual distress in women.

One limitation of the research was that the guided imagery script and recording were developed by the researcher as a resource tool. The guided imagery script was created using current research base and the researcher's prior knowledge of various kinds of guided imagery:

- how the human mind and body receives, processes, and utilizes information,
- sexual functioning for women,

- the process of relaxation, and
- the use of sensory awareness and imagery for the potential to heal, expand resources, and call on the listeners own inner resources.

The guided imagery was created as a sample guided imagery recording. Keeping that in mind, it is important to note the limitation that not all material and dialogue used in the script would resonate with, or appeal to, all participants.

The factors that influence an individual's sexual desire and sexual interest can be vast and often multidimensional. Life stress, attraction to partner, history of sexual trauma, health concerns, relationship conflict, and self-esteem are some of these influencing factors. Therefore, the utilized tool cannot assume to be a resource for all individuals at all times and is a limitation to take into consideration.

Additionally, the sample size of 27 participants in this study is relatively small, and the sample group was representative of the researcher's typical client and referral population - heterosexual, married, and similar levels of emotional and life stress levels. Therefore, the sample does not fully represent the diversity of ethnicity, sexual orientation, and other possible characteristics of the larger population. Ethnicity was not inventoried or used as evaluative criteria for the study. Also, diversity of sexual orientation was not represented within the sample size - 23 participants' sexual orientation was heterosexual, and the remaining participants represented two bisexuals and two homosexual orientations.

CHAPTER 2

LITERATURE REVIEW

Sexual dysfunctions are one of the most prevalent psychological concerns, who seek counseling for these issues and sexual desire concerns present as the most prevalent of the sexual dysfunctions in women. “Concerns about low desire among women may be present in some 30 - 40% of women” (Basson, 2007). Low sexual desire and low sexual interest have the potential to significantly impact a woman’s quality of life, partner relationship, and sexual functioning and have the potential to cause sexual distress. Many factors, including those of the physical, psychological, and contextual nature, can contribute to a woman’s level of sexual desire and sexual interest and can impact the degree to which she experiences sexual distress. However, the two most influential factors that can cause these concerns / dysfunctions are most often conflicts within the relationship and physical and / or emotional concerns.

The current psychotherapy treatments for low sexual desire / interest and sexual distress in women include sexual education, body and fantasy exploration, relationship skills training, and alternative methods such as mindfulness training. In addition to psychotherapy treatments, the interest in the treatment of sexual dysfunctions has led to discoveries in the medical field with advances in medications and surgical procedures

Female sexuality is complex. The current treatments for female sexual concerns, such as low sexual desire, low sexual interest, and sexual distress do not appear to thoroughly address the multifaceted aspects of these issues. Today, there is no standard of treatment for female sexual desire concerns.

This chapter will define relevant terminology, describe the historical background of the topics related to the research, discuss the issues that impact the focus of the current study, discuss the theoretical foundations that apply to the problem addressed in this study and discuss the current empirical literature relevant to the research hypotheses. It is important to note that because this research study is dedicated to the treatment of the individual female experiencing sexual desire and sexual interest concerns, this literature review will discuss some aspects of the impact sexual desire / interest on the partner relationship but will emphasize the treatment for the individual female instead of the dynamics of the couple.

This literature review was conducted using various literary books, scholarly journals the New Oxford American Dictionary, Merriam-Webster's Collegiate Dictionary, the Diagnostic and Statistical Manual of Mental Disorders (DSM 4th and 5th editions), as well as the academic databases Google Scholar, PsycARTICLES, PsycINFO, PubMed, Taylor and Francis Online, Psychology and Behavioral Sciences Collection, and International Society of Sexual Medicine. Search terms included various combinations of the following words: sexual, sexuality, desire, interest, distress, sexual satisfaction, guided imagery, relaxation, neuroscience, pleasure, psychoneuroimmunology, sexual therapy, women and sexual dysfunctions, sexual distress, decreased desire, functioning, guided imagery (general and sexual / sensory), senses, imagination, fantasy, instruments, measurements, and SIDI-F questionnaire.

Female Sexual Dysfunction

The World Health Organization's (WHO) International Statistical Classification of Diseases and Related Health Problems, 10th Revision, defines *female sexual dysfunction* as the “inability to participate in sexual relationships as wished. Specific diagnoses include lack or loss

of desire, sexual aversion and lack of sexual enjoyment, vaginal dryness, markedly delayed or nonexistent orgasm, vaginismus and dyspareunia not attributable to physical problems and excessive sexual drive” (2010).

Data derived from the National Health and Social Life Study indicates that “the prevalence of sexual dysfunction of US women estimated to be 43%” and that “53.8% of women have experienced at least one sexual problem, that lasted 1 month, in the last 2 years” (Laumann, et. al (1999).

Sexual Desire and Sexual Interest

“The number one sexual problem facing American couples is inhibited sexual desire. The second most common sexual problem is discrepancies in sexual desire,” and “50% of married couples (and over 60% of unmarried couples) experience sexual dysfunction and sexual dissatisfaction” (McCarthy, B., 2003). Due to the magnitude of the issues related to sexual dysfunctions there is a need for classification of the disorders relating to these concerns.

- According to the New Oxford American Dictionary (2010), *desire* is defined as “(noun): A strong feeling of wanting to have something or wishing for something to happen. (mass noun) Strong sexual feeling or appetite. (verb) Strongly wish or want (something). Want (someone) sexually. (archaic) Express a wish to.”
- In their book, Barry and Emily McCarthy, *Rekindling Desire*, defines *sexual desire* as “the positive anticipation and feeling that you deserve sexual pleasure” (2003).

- The New Oxford English Dictionary (2010), defines *interest* as “The state of wanting to know or learn about something or someone. The quality of exciting curiosity or holding the attention. A subject about which one is concerned or enthusiastic.”

The classification and criteria for the sexual disorder related to sexual desire and sexual interest was previously termed within the *Diagnostic and Statistics Manual-IV-TR (DSM-IV-TR)* as *Hypoactive Sexual Desire Disorder (HSDD)* and was defined as:

Persistently or recurrently deficient (or absent) of sexual fantasies and desire for sexual activity; the disturbance causes marked distress or interpersonal difficulty, not better accounted for by another Axis 1 disorder (psychological conditions or stress) and is not due exclusively to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition (2000).

DSM-V has revised the classification and criteria for diagnosis pertaining to low sexual desire concerns. Female Hypoactive Desire Disorder and Female Arousal Dysfunction were merged into a single syndrome termed *Female Sexual Interest / Arousal Disorder*. The diagnosis requires that a woman experience the lack of / or significantly reduced sexual interest / arousal and experience an absence or reduction of at least three of the following:

- interest in sexual activity,
- sexual fantasies or erotic thoughts,
- initiation of sexual activity and receptiveness to partner’s initiation,
- sexual excitement or pleasure during sexual activity (at least 75-100% of the time),
- sexual interest / arousal in response to any internal or external sexual cues,
and
- genital and non-genital sensations during sexual activity in almost all or all sexual encounters (75-100% of the time).

Also, the diagnosis also necessitates that the disorder not be explained by a nonsexual mental disorder or be a consequence of severe relationship distress or any other significant life stressors, and symptoms must be present for six months or more causing significant distress on the individual (2013).

Not all women who experience low sexual desire and low sexual interest will meet the diagnosis criteria for the sexual desire related dysfunction currently classified as Female Sexual Interest / Arousal Disorder. Some women experience symptoms of low sexual desire / interest but have no symptoms of distress while others who experience low sexual desire / interest will experience distress and find it impactful to their partner relationship. Still other women will experience no sexual desire / interest and experience little to no distress regarding the absence of their sexual desire. McCarthy, B. states that

When sex goes well, it is a positive integral part of the relationship, but not a major component [in contributing to marital vitality and satisfaction], adding only 15 - 20% improvement. However, when sexuality is dysfunctional or nonexistent, it assumes an inordinately powerful role [in contributing to marital vitality and satisfaction], 50 – 70%, robbing the marriage of intimacy and vitality. The most disruptive sexual problem is inhibited desire. If this degenerates into a no-sex or low-sex marriage, it puts tremendous pressure on the couple, especially if affection and sensuality also ceases. Desire is core of sexuality. No-sex and low-sex marriages become devitalized, especially when this occurs in the first 3 years of marriage. Unless something is done to reverse this process, divorce is a likely outcome (2003).

Female Sexual Distress

According to the New Oxford English Dictionary (2010), *distress* is defined as “extreme anxiety, sorrow or pain.” Hence, *sexual distress* would be defined as personal distress that causes “extreme anxiety, sorrow or pain” related to sexual concerns.

As indicated in the previous section, low-levels of sexual desire / interest are not always indicators of sexual distress. In fact, research shows that as women age, their sexual desire and

sexual interest often decline and that many of these women also indicate that they do not feel distress due to their decline in sexual desire and sexual interest. A number of large studies show an increase in the prevalence of desire concerns as women age. Basson, R. discusses the studies of varying sizes, inventorying the impact age has on sexual functioning and distress showing that “low desire increases with age but distress about that low desire decreases” (2007).

Prevalence of Female Sexual Desire and Sexual Interest Concerns

There is a large body of research affirming a high percentage of women who experience sexual dysfunctions including sexual desire and sexual interest concerns. Although percentages fluctuate among these studies, based on the focus of the studys’ populations and factors, such as age, health factors, relationship status, and duration of sexual concerns, the overall average of the data indicates a high prevalence of sexual desire and sexual interest concerns in women.

One extensive study by Laumann, et al. (2005) studied 9000 sexually active women and found that 26 - 43% of the women reported lack of sexual interest lasting for a period of two months or more. Another study by Mercer, et al. (2003) indicates that 40.6% of women report experiencing difficulty with sexual interest for at least one month within the last year, and 10.2% report lack of sexual interest that lasted for six months in the past year. Also, West et. al (2008), in their study of women ranging in age from 30 – 70, with the average age of 50, reported that the “overall prevalence of low desire for women was 36.2%, but for Hypoactive Sexual Desire Disorder (HSDD), characterized by distress about low sexual desire, the prevalence of low desire was 8.3%.”

The general estimation of the studies is that the percentage of women reporting low desire is approximately 30%. However, when the complaint of sexual distress is included as part

of the criteria of evaluation, the average percentage for women reporting sexual concerns dropped to less than half. In addition, although age often contributed to a decrease in sexual desire, it did not always indicate distress.

In his book *Your Brain on Sex*, Stanley Siegel states that “studies show that erotic urgency ebbs and flows over the life span. Around 30% of young and middle-aged men and women go through extended periods of feeling little to no desire for sex” (2011). However, distress regarding low sexual desire / interest seems to surface when the duration and frequency of low desire / interest is frequent, continues for extended periods of time, or impacts the quality of the partner relationship.

Influences for Female Sexual Desire and Sexual Interest Concerns

Although each woman’s sexuality is unique, physical and emotional and contextual circumstances influence sexual desire / interest and also the degree to which a woman experiences sexual distress. The “assessment and treatment of cases involving the complaint of low sexual interest are complex and involve attention to the woman's mental health, physical health and medication use, and emotional intimacy, and most important, the current sexual context” (Basson (2007).

In her book *Sex Matters for Women*, Sallie Foley states “that there are many powerful social and physical factors that influence sexual desire: emotions, circumstances, upbringing, expectation, attitude, and general health [including, and in particular hormones, the brain, muscles, the vascular system, and the breathing system]” (2002).

Other factors that influence sexual desire include conflicts within interpersonal relationships; physical or emotional stressors; disconnection to one’s senses, emotions, and body;

difficulty with receiving and giving pleasure; feelings of fatigue and overwhelm; lack of time dedicated to self-care; lack of appreciation or emotional support; lack of knowledge regarding sexual functioning and pleasure and anatomy; lack of attraction to partner; infidelity; sexual boredom; partner's own sexual dysfunctions that may be influencing sexual activity; lack of fantasy content; media influence on the concept of sexual performance and sexual pleasure; and sexual abuse or past negative sexual experiences. Medical concerns including menopause, fertility, and fear of STI's, pregnancy, or sexual pain can also influence sexual desire and sexual interest. Any one of these, or a combination of several, can influence a woman's level of sexual interest and sexual satisfaction. Yet, the most commonly presented influences for female low-level sexual desire / interest (presented in this researcher's counseling practice), are relationship dissatisfaction; high-levels of worry, stress, anxiety, and depression; disconnection to one's body; lack of personal permission for sexual exploration (through physical touch and through imagination); and the receptiveness to pleasure.

Impact of Female Sexual Desire and Sexual Interest Concerns

Women's sexuality is complex and multidimensional, and many factors, such as perceived low-level sexual desire / interest and sexual distress, can contribute to sexual concerns. The impact of these concerns can be subtle, temporary, and noninvasive or intense and all-consuming and are different for each woman. Not all women who experience low-level sexual desire / interest will meet the diagnosis criteria for the sexual desire related dysfunction currently classified as *Female Sexual Interest / Arousal Disorder*. Some women experience symptoms of low-level sexual desire / interest but have no symptoms of distress while others who experience low sexual desire and low sexual interest will experience distress and find it

impactful to their partner relationship. And still other women will experience no sexual desire / interest and little to no distress regarding the absence of their sexual desire.

Low sexual desire / interest can create emotional concerns that involve feelings of fear, anxiety, and depression which may cause avoidance of sexual involvement. Sexual concerns may also cause a disconnect between one's own body and perceptions of the sensations of touch and pleasure and can also create interpersonal relationship distress. These types of concerns can additionally negatively impact a woman's sense of self-esteem, self-worth, and her overall quality of life. A UK-based study conducted an inventory of heterosexual women experiencing low sexual desire and low sexual interest. The analysis highlights that the loss of sexual desire often challenges the participants' perception of themselves as women and causes feelings of "isolation and otherness" and feelings of not being a proper wife to their partners and creates concerns for maintaining a sense of attractiveness in the absence of sexual desire (Himchiff, et al., 2009). Additionally, a qualitative study of Norwegian married or cohabiting couples was conducted in 2008, inventorying the causes of low-level sexual desire and also how distressing low sexual desire was for the individuals. The causes for low sexual desire ranged from medical contributors to relationship factors, and the participants described themselves as having feelings of "social and sexual incompetence" and inadequacy (Traeen, B.).

Current Treatment for Female Sexual Desire and Sexual Interest Concerns

As discussed earlier, this literature review will focus and emphasize the aspects of and the treatment for the individual female experiencing sexual desire and sexual interest concerns. Although sexual desire and sexual interest concerns affect the couple and can also be addressed in couple's therapy and sex therapy, the focus of this research is on an alternative resource,

guided imagery, to be used as an effective, supplemental intervention resource for the individual female. Therefore, this literature review and presented research will refer to the current individual treatment interventions for women. With low-level sexual desire being one of the most common sexual complaints for which women seek help, existing interventions that address sexual desire and sexual interest are therapeutic interventions, alternative interventions, and medical (or pharmacotherapy) interventions.

Therapeutic Interventions

Individual Counseling

It is important for those seeking counseling for sexual concerns to find a therapist or counselor who specializes in sexual and relationship concerns. The direction of counseling interventions may be focused on sexual education and exploration, reducing or resolving emotional and psychological concerns, resolving past negative experiences and trauma, developing and improving self-confidence, learning effective communication skills, and assessing physical health and lifestyle. All of these factors may impact sexual health.

Sexual education in a therapeutic setting involves receiving and discussing information on sexual functioning and anatomy in an environment that provides an opportunity for women to ask questions about sex. Counselor-recommended reading material, based on a woman's concerns and interests, can be a helpful resource for expanding her knowledge base. Counseling may also involve discussions on self-exploration such as home exercise for exploring the body and / or fantasy exploration and self-pleasuring exploration. To help in expanding a woman's fantasy inventory and exploration, the therapist may also recommend a variety of erotic reading material as a helpful tool for expanding the woman's sexual knowledge and for expanding her

fantasy resources. These exploration exercises may then help her to learn and understand what she likes and does not like and to appreciate her own body. Another helpful tool may be for the woman to keep a personal, daily journal to inventory her sexual interests, sexual images, and fantasies; this becomes helpful in identifying these preferences and learning to appreciate and understand them. Other techniques counselors may use to facilitate sexual desire include:

- creating positive anticipation for sexual experiences,
- developing personal permission for sexual pleasure,
- creating time and space for self-exploration and self-pleasuring,
- self-confidence building,
- body acceptance and appreciation,
- using fantasy and imagination, and
- communication of sexual preferences.

Other methods that may be used to address these issues in counseling include an emotional awareness inventory which can help ease the struggle with these sexual concerns and involves the individual learning to name unwanted or disturbing feelings that may be underlying their sexual concerns. Taking inventory and creating awareness can start by exploring what may be influencing or triggering how one is feeling, inventorying one's perceptions, and when necessary, problem solving to develop strategies to reduce or resolve the issues causing the emotional disturbances. Emotional and psychological concerns that may underlie and impact sexual desire / interest concerns include:

- fear and anxiety,
- depression,
- negative self-talk,

- poor body image,
- negative feelings towards sex due to past sexual traumas,
- self-image confidence and self-esteem, and
- areas of life stress that are impacting sex, such as work concerns, parenting, and partner relationship.

These are all concerns that can be appropriately and effectively addressed in therapy.

Counseling and therapy for sexual concerns may also address communication skills training which involves learning to openly, clearly, and effectively communicate one's likes, dislikes, wants, and needs to others. This clear and open communication then provides the platform for potential resolution of miscommunication, assumptions, and the clarification of needs and wants that may be contributing to relational and sexual distress.

Having a history of sexual trauma can have negative implications to a woman's sexual health, impacting her ability to experience optimal sexual health and may also cause sexual distress such as difficulty accepting touch and struggles with feelings of safety and trust within their partner relationship. Therapeutic work related to sexual trauma involves understanding the impact of past traumatic events and healing from the trauma through a variety of interventions in order to resolve the sexual distress caused by the trauma.

Poor or low self-image and self-esteem may also cause a woman to feel unconfident about her body, uncomfortable pursuing and expressing sexual pleasure, and therefore, potentially causing an avoidance to sexual experiences and a reduction or suppression of sexual desire and sexual interest. These aspects of sexual dysfunction can also be addressed in counseling.

Applying physical and lifestyle inventories, which involves assessing the many aspects of one's overall health, is often helpful to the counseling process in addressing sexual concerns. Physical and lifestyle choices often impact a woman's sexual health and functioning because of the influence they have on important areas of life and physical well-being such as responsiveness to sensations, sexual pain or discomfort, energy levels, and emotional well-being. These physical and lifestyle issues may include:

- health concerns,
- medical concerns,
- medications,
- drug and alcohol use and smoking,
- physical exercise and fitness,
- nutrition, and
- levels of stress and stress management.

Cognitive Behavioral Therapy (CBT)

Cognitive behavior therapy (CBT) is known to be a helpful treatment for emotional and psychological concerns such as anxiety, fear, avoidance behaviors, and depression symptoms that may impact female sexual wellbeing. CBT focuses on cognitive restructuring: learning to identify and evaluate thoughts (cognitions) as rational or irrational and to modify the thoughts into rational awareness, then retraining behaviors using techniques such as muscle relaxation exercises and creating awareness to sensation and pleasure. This type of therapy can also significantly alter and restructure one's perception of sexual distress.

Another helpful approach for sexual desire concerns is the body-centered Gestalt approach. Gestalt therapy is an experiential form of therapy that emphasizes the individual's personal responsibility for his or her own life. The emphasis is on present-moment experiences by creating a connection to the body through breath work and making connections between past hurts and present concerns, developing a sense of creativity for change, and utilizing self-regulation to improve one's life. Resnick, S. states

A body-based Gestalt approach offers a progressive somatic-experiential model for working with sexual concerns. We can move along a continuum from a problem perspective to a growth process, to an enrichment exercise, honoring the distinct value of each phase. In fact, we can work in all three areas simultaneously. Not only do we address deeper personal and interpersonal issues, but we can offer the client practical body-opening tools for shifting the focus in a sexual encounter from a successful performance to a pleasurable experience, and perhaps even to something truly transformative (2004).

Alternative Interventions

Alternative approaches may also be helpful for concerns related to sexual desire and sexual interest. Because no two women or their experiences are alike, interventions may work very differently for one woman than for another. Preferences for alternative methods vs. traditional methods, or a combination of both, vary from woman to woman and may be based on belief systems or the desire to have a variety of intervention resources to thoroughly address their concerns. These alternative interventions may include mindfulness, meditation, acupuncture, yoga, and homeopathic options.

Mindfulness

Mindfulness is a type of meditation based on the premise of staying in the present-moment experience with awareness and acceptance of what is being experienced in the moment, observing present-moment thoughts and emotions, and then letting them go without judgment. There have been numerous studies that have validated the effectiveness of mindfulness and other forms of meditative practices for the improvement of anxiety and depression symptoms as well as female sexual dysfunctions.

Meditation

Meditation is a practice that involves intentional focus on one specific subject, thought, action, or mantra. The focus is simply to non-judgmentally observe the thought or sensation when it arises in the mind. Meditation provides a space for relaxation and improved emotional and physical wellbeing and is often focused on the “spiritual and psychological, designed to help a person adopt a generally flexible, courageous and gracious attitude towards life, a way of addressing each day with strength and equanimity” (Naparstek, B., 1994).

Mindfulness Meditation

One study by Silverstein, et al., conducted in 2011, investigated the impact of both mindfulness and meditation training as an intervention for the improvement of psychological barriers to body awareness and as a method to promote healthy female sexual functioning. The study involved 44 college-aged women who received mindfulness meditation training. The results indicate a significant reduction in symptoms of anxiety, an improvement in reaction time to body awareness from sexual stimuli, and a reduction of self-judgement (all known barriers to healthy sexual functioning).

Acupuncture

Acupuncture is a therapy involving the insertion of thin needles into the skin at strategic points on the body which corresponds with meridians that provide pathways for vital energy flow along the body. Acupuncture is thought to cause a better flow of energy within the body and allow for positive effects such as relaxation and hormonal and emotional balance.

Yoga

Yoga involves a series of various postures and controlled breathing exercises to promote flexibility and relaxation. The practice of yoga has been associated with the improvement of psychological well-being and overall health. Both acupuncture and yoga work on energetic and physical levels, creating positive energy and physical health.

Homeopathic Treatments

Homeopathic treatment involves the usage of herbal and nutritional supplements that, while not scientifically proven, claim to enhance / improve sexual responses in women. These treatments may include supplements or different forms of lubrication.

Pharmacotherapy Interventions

In addition to counseling and alternative treatments, there has been an increase in pharmaceutical treatment for sexual concerns for women. Laumann, et al., states that the increase in interest in sexual dysfunctions is due to developments in the “understanding of the neurovascular mechanisms of sexual response in men and women and several new classes of drugs that have been identified, that offer significant therapeutic potential for the treatment of

male erectile disorder... these advances have also increased the number of patients seeking professional help for these problems” (1999). Medical treatments may include FDA approved prescriptions such as Flibanserin (Addyi) which is currently being used for sexual desire concerns and “off label” prescriptions (medications typically prescribed for other purposes) used to treat female sexual concerns such as Sildenafil (a form of Viagra), which was originally prescribed for erectile concerns in men and is now being prescribed for women in smaller dosages as a treatment for their sexual desire concerns (Nurnberg, H. 1999). Another medication currently being studied for female sexual desire and is showing promise is Bupropion, which is often used to treat depression symptoms (Segraves, R. 2001). Hormone therapy treatments often use testosterone and androgen hormones, which are primarily male hormones but are found in both men and women, and may help adjust hormonal imbalances in women who are deficient in these hormones. This treatment, whether orally or in the form of a cream or a patch, or pellets, may contribute to higher sexual functioning which includes increasing sexual desire. Although there is conflicting information and research on the efficacy of these medical treatments, this information is still worthy of noting and under debate.

Despite the fairly recent influx of medical attention to female sexual functioning, the importance and relevance of sexual therapy emphasizing attention to emotional and relational wellbeing and to modalities focused on the mind-body connection, are pertinent to consider. Therefore, it is important to draw attention and focus toward these aspects of sexual health for the support and treatment of female sexual concerns. Guided imagery is one such treatment.

Guided Imagery

A popular modality that uses the mind-body connection is guided imagery. Like meditation and mindfulness, guided imagery is also a helpful resource for emotional, physical, and sexual concerns. Guided imagery is the “process of deliberately using your imagination to help your mind and body heal, stay well, or perform well. It’s a kind of directed, deliberate daydream, a purposeful creation of positive sensory images – sights, sounds, smells, taste, and feel- in your imagination” (Naparstek, B., 1994). It emphasizes the use of relaxation, imagination, fantasy, and sensations to promote health and wellbeing creating a mind-body connection.

This might mean conjuring up images of a tumor shrinking or blood pressure slowing down; it might be images of the emotions growing calm and steady in a safe and protected setting; or it could involve ‘rehearsal’ images of successful performance outcome, such as, in the case of a stroke survivor, having a right side that moves more than the way you want it to do (Naparstek, B., 1994).

Guided imagery allows the individual an opportunity to feel a sense of personal control over what is happening to them, thereby, creating a sense of empowerment and increasing self-esteem. The process of guided imagery is in using the imagination, the mind’s ability to be creative, and relaxation as resources for change and healing. As mentioned earlier, relaxation is fundamental when using guided imagery effectively. Relaxation helps clear the mind, relax the body, and allow for openness and exploration to promote awareness and connection to one’s self so that the process of guided imagery can work to promote change, to provide clarity and healing, and to reduce stress. While in a relaxed state, guided imagery provides a platform for the mind and body connection, using real or imagined senses, emotions, and physical sensations. Martin Rossman refers to this platform as the “interface between what we call body and what we call mind” (2000).

Mind-Body Connection: Psychoneuroimmunology (PNI)

Psychoneuroimmunology (PNI) is the scientific field that studies the relationship and connection between the mind and body. PNI promotes the basic premise that thoughts and imagery influence the mind, the body, and the immune system and emphasizes that what we feel and think about can significantly affect the physiology of the body and vice versa.

PNI demonstrates that images and thoughts with their accompanying mood states are actually accompanied by alterations in the biochemistry of the body. Images appear to activate the nervous system, sending neurohormones (chemical messengers) through the bloodstream to specific cells, where they trigger healing activity (Naparstek, 1994).

“Images are real events to the body. The body does not discriminate between sensory images in the mind and what we call reality” (Naparstek, B., 1994). Under the right conditions one’s mind and body will believe what is imagined as a real sensory experience and respond as such. The optimal conditions recommended for using guided imagery include regular (even daily) practice for at least 5 to 15 minutes, in a quiet environment, absent from distractions and interruptions. Before starting the guided imagery, or as a component of the guided imagery, relaxation exercises, such as breathing exercises or progressive relaxation, should be implemented to create a comfortable and deepened experience of relaxation.

Music and Guided Imagery

There is substantial evidence that indicates that guided imagery, accompanied by music played at particular beats per minute (bpm), can have a calming or energizing effect on one’s mood. The combination of the imagery and music can increase the effectiveness of the guided imagery healing process. The idea is that sensory information,

such as images, emotions, and music, are received by the right brain which is the part of the brain that engages in the altered state and promotes relaxation and healing.

Types of Guided Imagery

There are various modalities of imagery used to support healing.

- *Energetic imagery* is taken from Chinese medicine (Ayurvedic) and quantum physics. It uses the imagery of healing energy imagined as sound or feelings of motion moving through the body unblocking energy pathways and creating good health.
- *Physiological imagery* which involves imagery that focuses on physical healing happening at a cellular level within the person. This form of imagery requires that the individual accurately know and imagine how the healthy human body functions.
- *Metamorphic imagery* is a form of imagery that can be used as an “all-purpose” imagery. This imagery uses the concept of symbols instead of realistic images to gather and process information for positive change.
- *Psychological imagery* is a kind of imagery that relates to internal feelings, emotions, and perceptions related to one’s self and in relation to others.
- *Spiritual imagery* imagery focuses on connection and healing through a sense of a higher power, religious symbols or God, and senses felt beyond one’s present reality.
- *End-state imagery*, or *Peak Performance State imagery* focuses on concepts of a desired end goals or outcomes in a realistic way. It entails imagining that the desired condition or outcome has already arrived.

- *Feeling state imagery* involves the imagery of a scene or location that is perceived as a “safe place” or “favorite place” with the purpose of supporting a change in mood to one of positivity and comfort.

History of Guided Imagery

Guided imagery has been used for centuries as a healing resource. Martin Rossman, a leader in guided imagery studies, states that “all healing rituals involve expectations about healing, and thus they involve imagery in one form or another. Imagery, then, is the oldest and most ubiquitous form of medicine” (2000).

As early as ancient Greek times, Paracelsus, an eclectic physician of the 15th century and known as the father of holistic medicine, asserted, "the spirit is the master; imagination the tool, and the body the plastic material... The power of the imagination is a great factor in medicine. It may produce diseases in man and in animals, and it may cure them... Ills of the body may be cured by physical remedies or by the power of the spirit acting through the soul.”

Other cultures have also applied imagery methods, customs, and belief systems as resources for healing. Traditional Chinese medicine has used imagery and visualization through practices emulating the movements of animals and birds to create energy movement throughout the body for healing and wellbeing. In ancient India, the Hindu believe that the gods would send messages to their followers through images. Tibetan cultures believe that images and colors could be used to identify health conditions. Egyptian medicine also have used processes of prayer and imagery and dream interpretations for information gathering. Native American Indian culture would use images to reveal illness and then would illustrate these images with the use of colored

sand. Other religious and ritual practices, such as Judaism, Hinduism, Christian, and Shamanic belief systems, also use imagery in the practice of healing.

In the 1920's, imagery was used therapeutically in *Psychoanalysis*, a treatment which is based on the idea that "people are frequently motivated by unrecognized wishes and desires that originate in one's unconscious" and emphasizes the processing of these unconscious concepts through stories, fantasies, and dreams" (APsaA, 2018). Also in the 1920's, an Italian psychiatrist created a form of treatment called *Psychosynthesis*, which also uses methods of guided imagery as well as "gestalt techniques, self-identification, creativity, meditation, symbolic art work, journal keeping, ideal models and development of intuition" for healing (Synthesiscenter, 2007).

In the 1940's, Jacob Morena developed the therapeutic technique of psychodrama which addressed a person's concerns through imagery. Later Hans Leuner developed an approach called *Guided Affective Imagery* which involved the practitioner encouraging the patient to "daydream on specific theme. [This imagery] then evokes intense latent feelings that are relevant to the patient's problems. The guiding and transformation of imagery by the therapist would then lead to desirable changes toward life situations [for the patient]" (1969).

In the 1960's, Joseph Wolpe introduced *Behavioral Therapy* which utilized several imagery-related techniques: *systematic desensitization, aversive-imagery methods, symbolic modeling techniques, and implosive therapy*. The 60's also had Carl Jung using imagery in a therapeutic format called *active imagination* where the client shared images related to his / her presenting concerns as a way processing the client's unconscious concerns.

The use of therapeutic imagery gained even more recognition in the 1970's with the work of Carl and Stephanie Simonton. The Simonton's wrote a bestselling book called *Getting Well*

Again (1979) in which they describe their successful use of imagery and relaxation to help treat emotional and physical concerns of patients with cancer.

In the 1980's, Dr.'s David Bressler and Martin Rossman continued to study the use guided imagery for healing medical conditions. In 1989, they founded the training program called the Academy of Guided Imagery (AGI). They created AGI as platform for providing health care professional with clinical training in the applications of guided imagery approaches to help treat physical and emotional concerns.

Other practitioners followed through the years, expanding the practice and research of the use of guided imagery as a tool for medical and emotional healing. Some such practitioners are Ulrich Schoettle, Helen Bonn, and Leslie Davenport who wrote the book *Healing and Transformation Through Self-Guided Imagery* which discusses the idea of using imagery as a means of receiving messages from gods as a resource for healing; Jeanne Achterberg who wrote *Imagery in Healing* in which she discusses the positive impact guided imagery has on helping individuals cope with the difficulties of illness; and Belleruth Naparstek who wrote *Staying Well with Guided Imagery* and also created numerous guided imagery recordings called *Health Journeys* which are aimed at helping individuals who are struggling with medical issues. All of these professionals carved the path for making guided imagery an established approach in complementary and alternative medicine by professionals around the world for the treatment for physical and emotional healing.

Guided Imagery Research

Guided imagery has been researched and validated as an effective and complimentary resource to traditional therapy and as a viable resource in rehabilitative medicine, health care,

and sports and performance training programs. The following research indicates the scientific validation and efficacy of guided imagery in healthcare, rehabilitation, sports training, and in counseling.

Guided imagery has been found to be helpful in the medical field for individuals with cancer. One study compared two groups of women during their chemotherapy treatment. One group of women received relaxation training, and the other group received relaxation training and guided imagery emphasizing peaceful imagery. The women who received relaxation training and guided imagery indicated feeling "more relaxed and easy going, and had fewer psychological symptoms and self-rated as having a higher level of quality of life during chemotherapy" (Walker, L. et al., 2008).

Ephraim Trakhtenberg conducted a study of the effects guided imagery focused on cellular imagery had on the immune system. The imagery focused on the processes of cellular change and white blood count change. The study shows that while using specifically-focused guided imagery along with relaxation, patients' white blood cell counts decrease (2008).

A study in 2002 looked at the effectiveness of customized and recorded guided imagery, used daily throughout treatment, to increase comfort and reduce anxiety in women with early-stage breast cancer. The findings indicate that guided imagery is an effective intervention for enhancing the emotional comfort of women while undergoing radiation therapy for early-stage breast cancer (Heinschel, J.).

Guided imagery has shown impressive results in the area of cardiovascular and stroke recovery. One clinical research demonstrated that an implemented guided imagery training program, focused on relaxation, could reduce preoperative anxiety and postoperative pain among patients undergoing surgical procedures. The research involved the comparison of two groups of

patients undergoing cardiovascular surgeries. One group was provided guided imagery, and the other group was not. Comparison of outcomes based on post-surgery questionnaire assessments between the two groups of patients indicated that patients who received guided imagery showed reduction of pain, lower anxiety, and shortened length of recovery as compared to those who did not receive the guided imagery (Halpin, L., et. al. (2002).

Guided imagery has also been shown to be a helpful resource in preparing for surgical procedures. In 1997, a randomized trial study of patients undergoing their first elective colorectal surgery were randomly assigned into one of two groups. One group was given a guided imagery recording to listen to before, during, and after the surgical procedure, and the other group was not provided the guide imagery. All participants rated their levels of pain and anxiety daily. The results indicated that the group that was provided the guided imagery experienced significantly less anxiety and pain after surgery than the group that did not listen to the guided imagery (Tusek, D.).

Guided imagery has been used for improving athletic endurance and performance. A study in 2003 implemented goal setting, relaxation, imagery, and self-talk training for competitive triathletes. The post-treatment results indicate that the training was an effective tool for enhancing competitive endurance performance (Thelwell, R., et al.).

One study conducted in a nursing facility in Sydney, Australia, used relaxation and guided imagery training to help patients with advanced cancer to reduce symptoms of anxiety, depression, and to improve overall quality of life. The results indicated that “there was no significant improvement for anxiety; however, significant positive changes occurred for depression and quality of life” (Sloman, R., 2002).

Guided Imagery was also utilized in a study to support women with interstitial cystitis (IC), a painful pelvic condition. Two groups of women were studied, both indicating interstitial cystitis and pelvic pain. One group was given a guided imagery recording to listen to twice a day for 8-weeks while the other group was not given the guided imagery. The results of the study indicated that more than “45% of the treatment group were responders to guided imagery therapy, noting a moderate or marked improvement on the global response assessment (GRA). Pain scores and episodes of urgency significantly decreased in the treatment group... Guided imagery may be a useful tool to offer women with IC for pain and IC symptom management” (Carrico, D., et al., 2008).

A randomized study explored the use of cognitive behavioral therapy (CBT) along with relaxation training, guided imagery, and sensate focus exercises for the treatment of the symptoms of fear of sexual penetration and for lifelong vaginismus symptoms. 18% of the participants who received the CBT with relaxation training and guided imagery attempted vaginal penetration while 0% of the participants in the control group attempt vaginal penetration (ter Kuile 2007).

As illustrated, guided imagery has been studied and used extensively and effectively in the medical and therapeutic settings. However, there is little research that has been conducted that specifically investigates the effects of guided imagery as a treatment tool for sexual dysfunctions. In fact, when sexual dysfunctions are addressed, the focus is usually on treating the underlying causes that may be contributing to the sexual dysfunctions that hinder healthy sexual functioning such as medical concerns, anxiety, fear, depression, grief, self-esteem, and stress management. And when guided imagery is used, it is often used in conjunction with other

techniques such as medical interventions, cognitive behavioral therapy, hypnotherapy, mindfulness, or relaxation training.

Summary

This literature review provides evidence of research that guided imagery is a supportive and effective resource for emotional, physical, and contextual concerns such as those found in the areas of healthcare, rehabilitation, sports performance, and counseling. The research also indicates the use of guided imagery for underlying issues such as emotional and physical concerns that impact sexual dysfunctions such as sexual desire, sexual interest, and sexual distress.

The current literature is lacking and provides a minimal amount of research for the use of guided imagery in treatment of sexual concerns in women. What existing research has found relating to sexual concerns for women is instead focused on the potential underlying issues that may be contributing to sexual concerns. There is a definite need for additional research on the use of guided imagery for treatment of sexual concerns. Women need access to a variety of resources, allowing them to access their own internal sexual resources and internal wisdom and to access their connection with their senses, their imagination, and their own personal preferences for sexual pleasure and enjoyment.

It is known that sexual desire is one of the most common concerns experienced by individuals and one of the most difficult sexual concerns to treat. Current treatments in traditional and alternative therapies and medical interventions for sexual desire concerns and sexual distress in women do not address the multifaceted needs related to women's sexual concerns. As demonstrated in the research, treatment of these concerns needs to integrate a

variety of approaches to be able to address the many aspects relating to female sexual experiences and sexual functioning by integrating the concepts of the physical, emotional, and spiritual aspects of women.

The provided review of the existing literature shows the beneficial use of guided imagery for physical and emotional concerns and illustrates the absence of research for the use of guided imagery for female low-level sexual desire / interest and sexual distress concerns. The purpose of the current research is to fill the gap in the current knowledge for effective treatment resources for perceived low sexual desire / interest and for improving sexual distress in women and to identify an effective treatment intervention that addresses the multifaceted characteristics of these concerns.

Chapter 3

METHODOLOGY

Purpose of the Study

The purpose of this quantitative research was to evaluate the effectiveness of relaxation and sensory-focused guided imagery for treating perceived low-level sexual desire / interest and sexual distress in women. The research tool was a pre-recorded, guided imagery recording used daily over a 6 - week / 42 - day timeframe, emphasizing relaxation, present-moment sensory awareness, and non-judgmental positive affirmations as well the concepts of pleasure, body awareness, and sexual permission. The purpose of the study was to improve the individual participant's state of relaxation and awareness of pleasure and potentially allowing for the receptiveness for sexual pleasure and the improvement of sexual desire, sexual interest, and sexual satisfaction. The results from the current research extend the existing research literature on treating perceived low-level sexual desire / interest and sexual distress in women.

Procedures of Study

Data Collection Procedures

Institutional review board approval for the administration of the current research study was obtained from the American Academy of Clinical Sexology.

Thirty-two women participated in the 6-week study. Twenty-seven participants completed the study their ages ranging from 24 - 64 years of age with an average age of 40 years.

Participants identified as:

- female,

- sexual orientation as heterosexual, bisexual or homosexual,
- relationship status as married or in a committed relationship for one or more years,
- medical and psychological concerns absent to moderate in degree,
- current medications as prescribed for two or more months,
- level of life stress concerns as absent to moderate in degree, and
- absent / past and resolved history of sexual abuse.

Participants also presented with a personal perception of low-level sexual desire / interest and possible sexual distress caused by the perceived low-level of sexual desire / interest. The participants did not have to qualify for a diagnosis of *Female Sexual Interest / Arousal Disorder* to participate.

Recruited individuals attended a scheduled, 45 - minute pre-treatment interview session either at the researcher's private practice office or by phone. During the interview, the researcher administered a pre-treatment baseline sexual interest and desire assessment, the *Sexual Interest and Desire Inventory- Female* (SIDI-F), to each participant (see Appendix B for the *SIDI-F Questionnaire*) as well as a set of interview questions (see Appendix C for the *Interview Questions*). Also during the pre-treatment interview, background information regarding the study was explained and participants' questions were answered so that the researcher and participant could assess whether or not participation in the study was compatible. Individuals who qualified and agreed to participate were provided more detailed information regarding the process of the study as well as a more detailed explanation of the research study (see Appendix E for *Study Explanation and Instructions*). The informed consent document was reviewed in detail, including the researcher's and committee members' contact information, and confidentially measures

ensuring participant privacy were discussed. Participants were assured of their freedom to withdraw from participation in the study at any time. All questions were addressed, and the consent form was then signed by the participant and researcher (see Appendix A for *Consent Form*). The participant was then provided with:

- the pre-recorded guided imagery recording in the form of an mp3 / USB device containing the downloadable recording (see Appendix F for *Guided Imagery Script*) and
- the three daily, scale-style feedback journal questions in the form of a printed journal (see Appendix D for *Daily Feedback Journal Questions*).

Additionally, each participant was given notice that the researcher would contact her on the third day of the study to answer any questions that the participant may have and again during the third week of the study to answer questions and schedule the participant's post-treatment interview. For the duration of the 6-week study, the participants were instructed to independently listen to the provided, pre-recorded guided imagery recording on a daily basis and to answer the three, scale-style feedback questions in the form a journal provided by the researcher.

At the conclusion of the 6-week study, participants attended a scheduled, 30 - minute post-treatment interview session either at the researcher's private practice office or by phone. During the post-treatment interview, the SIDI-F questionnaire was administered, and participants returned their completed daily feedback journals with responses (see Table 5, *Participant Daily Feedback Journal Responses*, located in the Results Chapter). Also during the post-treatment interviews, participants were given an opportunity to share their personal verbal feedback regarding the study (see Table 6, *Participant Verbal Feedback*, located in the Results Chapter). Participant verbal feedback statements were reviewed with each participant individually and

final written permission to include verbal feedback in the research results was requested and received from each participant.

Data Analysis Procedures

The question proposed by this current research study is: What is the effectiveness of the usage of daily guided imagery emphasizing relaxation and sensory awareness over a 6-week timeframe for the treatment of perceived low-levels of sexual desire, sexual interest, and sexual distress in women? The researcher hypothesized that daily use of guided imagery emphasizing relaxation and sensory awareness over a 6-week timeframe will increase perceived levels of sexual desire / interest and decrease sexual distress in women.

The pre-treatment and post-treatment data will be collected and analyzed to examine the effectiveness of the implemented intervention. Overall results comparison of the pre-treatment and post-treatment assessment instrument (SIDI-F) will be determined.

Prior to conducting the primary analyses, preliminary and exploratory analyses will be conducted to assess the nature of the obtained data. Preliminary analyses will be conducted to assess for significant violations of normality in outcome variables and to analyze the reliability range for pre / post-treatment. Examination between the available potential covariates, including days in treatment, life stress, and emotional concern, will also be evaluated. The analysis will focus on the primary pre / post-treatment changes, rather than complex interaction effects, controlling for covariates. Changes in outcome scores will be assessed using paired sample *t*-tests. All analyses will be conducted in SPSS v. 24. Ideally seeing results with significance levels less than .05.

In addition to the primary analyses and the preliminary and exploratory analyses, the participants will answer three, daily scale-style feedback questions for the duration of the 6-week study. At the conclusion of the study, participants will return their daily feedback journals and will be given an opportunity to verbally share their feedback regarding the study.

Ethical Guidelines for Treatment of Participants

This research was conducted in accordance with the APA Ethical Guidelines for Research with Human Subjects, as summarized in the *Research Methods Textbook*, 8th edition, which states:

The researcher assumes responsibility to conduct research with concern and sensitivity for the welfare and dignity of all human participants and conform to all professional standards and all state and federal regulations regarding research with human participants. This general principle is clarified in the following ten principles. In planning research, it is the researcher's responsibility to evaluate and ensure its ethical acceptability (and provide an accurate research proposal to institutional review boards (IRB) and received IRB approval) and to obtain ethical advice when needed, and to apply careful safeguards to protect participants' rights. A primary concern of the investigator is to determine whether the procedures will place the participant at risk. It is the investigator's responsibility to ensure ethical practice, including that of all collaborators, assistants. Informed consent must be obtained from all participants prior to the research. If deception is necessary, full disclosure must be made as soon as possible after completion of the research. Participants' freedom to decline or to withdraw at any time must be

fully respected by the investigator. Participants must be protected from physical and mental harm. The investigator must provide participants with ways to contact the investigator at any time after completion of the research, should questions arise. After data collection, full disclosure, explanation, and answers to any questions raised by participants must be provided. It is the researcher's responsibility to detect and to remove any negative effects of the research, including long-term consequences. All information obtained must be held in confidentiality.

Participants

Participants were recruited through the researcher's private practice client base, from local therapist and counselor referrals, and through a web-based advertisement. Flyers were distributed to local medical and counseling offices and were provided at the researcher's private counseling office. Participants were selected based on their responses to the initial interview questions and their responses on the pre-treatment SIDI-F questionnaire.

The proposed sample size for the study was 30 female participants. Criteria for participation in the study was identified as:

- female,
- sexual orientation as heterosexual, bisexual, or homosexual,
- currently married or in a committed relationship for one or more years,
- current medical and psychological concerns are absent to moderate in degree,
- current medications prescribed for two or more months,
- current level of life stress concerns are absent to moderate in degree, and

- absent or past resolved history of sexual abuse.

Participants also presented with a personal perception of low-level sexual desire / interest and sexual distress. The participants did not have to qualify for a diagnosis of Female Sexual Interest / Arousal Disorder to participate.

Thirty- three women interviewed to participate in the research study. Following the pre-treatment interview session and assessment, one interviewee did not qualify to participate due to relationship status. Of the 32 interviewees that qualified for the study, five participants discontinued the study due to personal or family conflicts unrelated to the study and two participants completed less than the required 28 - days / 4 - weeks of participation making their data incomplete and not suitable to be included in the results.

The final sample consisted of 27 participants who successfully completed the treatment. The women reported that they were married or in a committed relationship for one or more years, and the cross section of sexual orientations consisted of 23 heterosexual women, two homosexual women, and two bisexual women. All of the women reported having some emotional concerns and life stress at the start of the study. The qualifying participants ranged in age from 24 - 64 years with an average age of 40.

A summary of the qualifying study participants' demographics and characteristics, such as age, relationship, and sexual orientation, current emotional states, and life concerns, are presented in Table 1.

Table 1: Summary of participants characteristics

Participant	Age	Relationship status	Years in relationship	Sexual Orientation	Working with a Physician and/or Counselor	Medical Condition, Medications and Vitamins	Psychological characteristics, Feelings & current life stress concerns	HX of Sexual Abuse
1	53	Married	22	Heterosexual	Yes/No	HX Breast cancer (2015); Hysterectomy, low thyroid levels, high blood pressure/ Valtrex, Cleviprex, Levothyroxine, Tamoxifen/No vitamins	Family relationship concerns	No
2	38	Married	19	Heterosexual	Yes/No	Frequent bladder and Yeast infections, Hysterectomy (2016)/ Daily allergy medication/ Magnesium, Vitamin: C, D	Depressed feelings, Anxiety, Panic attacks in past, feelings of guilt, shame and resentment/ Recent change in job, upcoming move, financial & relationship concerns	No
3	32	Married	4	Heterosexual	Yes/Yes	None/ Daily Allergy medication, Flonase nasal spray/ Multivitamin, Vitamin D, Probiotic, Omega, Zinc, Herbs	Anxiety, anger, feelings of guilt & resentment	Yes (past)
4	33	Committed Relationship	1	Heterosexual	Yes/Yes	None/ Trintellix, Valtrex, Vyvanse, Betablocker, Clonaphen	Feelings of sadness, anxiety, guilt, anger, shame and resentment/ financial concerns	Yes (past)
5	44	Committed Relationship	1	Heterosexual	Yes/Yes	Hypertension, chronic back pain/ Baclofen, Lortab, hormone replacement, Lidocaine patches/ Multivitamin	Feelings of sadness, anxiety, anger, resentment, guilt and shame/ recent change in job, financial and relationship concerns	No

Participant	Age	Relationship status	Years in relationship	Sexual Orientation	Working with a Physician and/or Counselor	Medical Condition, Medications and Vitamins	Psychological characteristics, Feelings & current life stress concerns	HX of Sexual Abuse
6	32	Married	3	Heterosexual	No/Yes	No/No/Multivitamin & iron	Feelings of sadness, anxiety, guilt, shame, anger and resentment	Yes (past)
7	36	Married	11	Heterosexual	No/Yes	Zoloft, Acid reflex medication,	Feelings of anxiety	No
8	42	Committed Relationship	1	Homosexual	Yes/No	HX Breast cancer & bilateral mastectomy/ Iron supplement & herbs	Feelings of shame, guilt, anger & resentment/ recent change in job, moving, financial & relationship concerns, recent death of loved one	Yes (past)
9	36	Married	10	Bisexual	Yes/Yes	Antidepressant medicine/ Probiotics, Vitamin A, Calcium, Multivitamin	Job Stress	Yes (past)
10	41	Married	15	Heterosexual	No/Yes	HX Breast cancer, thyroid concerns, Fibroids/ Synthroid/ Multivitamin	Feelings of sadness, anxiety, anger, guilt, shame & resentment/ change in job, financial and relationship concerns	No

Participant	Age	Relationship status	Years in relationship	Sexual Orientation	Working with a Physician and/or Counselor	Medical Condition, Medications and Vitamins	Psychological characteristics, Feelings & current life stress concerns	HX of Sexual Abuse
11	31	Married	8	Heterosexual	Yes/No	Chronic pain/ Anxiety medication	Feelings of anxiety and phobias/ Change in job, Moving, financial concerns	No
12	44	Married	13	Bisexual	No/Yes	Wellbutrin, Klonopin, Thyroid medication	Feelings of anxiety, anger, shame, guilt & resentment/ change job, financial concerns recent death of a loved one	No
13	41	Married	5	Heterosexual	No/Yes	Hyoscyamine (IBS medication)	Feelings of sadness, anxiety, shame & guilt/ Relationship concerns	No
14	55	Married	9	Heterosexual	Yes/Yes	HX Breast cancer (2012), Tremors/ Nadolol, Colospan, Primidone/ Omega, Vitamin D	Feelings of Anxiety/ Parent health concerns,	No
15	38	Married	6	Heterosexual	No/No	Allergy medication & Flonase nasal spray	Feelings of Anxiety, shame, guilt, anger & resentment/ Changes regarding children	No

Participant	Age	Relationship status	Years in relationship	Sexual Orientation	Working with a Physician and/or Counselor	Medical Condition, Medications and Vitamins	Psychological characteristics, Feelings & current life stress concerns	HX of Sexual Abuse
16	37	Married	7	Heterosexual	No/No	Multivitamin, Vitamin D, Probiotic	Feelings of Anxiety/ Financial concerns	Yes (past)
17	31	Married	7	Heterosexual	No/No	Multivitamin, Vitamin D, Probiotic	Feelings of Anxiety/ Financial concerns	No
18	45	Married	20	Heterosexual	No/No	Menopause changes/ High blood pressure medication, allergy medication/ Multivitamin, Probiotic	None/ body changes, changes in children school	Yes (past)
19	35	Married	7	Heterosexual	No/No	Experiencing Post-partum symptoms/ Zoloft	Feelings of sadness & anxiety/ Recent move, financial concerns	No
20	35	Married	1	Heterosexual	No/No	Birth control	None	No

Participant	Age	Relationship status	Years in relationship	Sexual Orientation	Working with a Physician and/or Counselor	Medical Condition, Medications and Vitamins	Psychological characteristics, Feelings & current life stress concerns	HX of Sexual Abuse
21	40	Married	10	Homosexual	Yes/No	Hormone replacement/ Multivitamin, Vitamin B, Omega	Feelings of sadness & anxiety/ Change in job	No
22	47	Married	18	Heterosexual	No/No	Biotin, Multivitamin	Financial concerns	No
23	64	Married	40	Heterosexual	Yes/Yes	Restless legs syndrome/ Lithium, Clonazepam, Pramipexole, Allergy medication	Feelings of sadness & anxiety/ relationship concerns	No
24	44	Married	5	Heterosexual	Yes/No	Multivitamin	Feelings of anxiety, anger & resentment/ young children care, planning upcoming move	No
25	33	Married	2	Heterosexual	No/Yes	None	Feelings of sadness & anxiety/ Relationship concerns	Yes (past)

Participant	Age	Relationship status	Years in relationship	Sexual Orientation	Working with a Physician and/or Counselor	Medical Condition, Medications and Vitamins	Psychological characteristics, Feelings & current life stress concerns	HX of Sexual Abuse
26	47	Married	17	Heterosexual	Yes/Yes	High blood pressure/ High blood pressure medication, Lexapro/ Vitamin D	Feelings of anxiety	No
27	35	Married	7	Heterosexual	No/Yes	None	Feelings of sadness, anxiety, anger/ Young children care	No

Discontinued Participants								
Participant	Age	Relationship status	Years in relationship	Sexual Orientation	Working with a Physician and/or Counselor	Medical Condition, Medications and Vitamins	Psychological characteristics, Feelings & current life stress concerns	HX of Sexual Abuse
28	35	Married	11	Heterosexual	Yes/Yes	None/ Zoloft, Omega, Vitamin D & Probiotics	Feelings of sadness, anger, & guilt, anxiety/ Relationship	No
29	31	Married	2	Heterosexual	No/ No	None/ Omega, Adrenal support, Primrose, Natural herbs	Recent change in job and financial concerns	Yes
30	34	Committed	12	Heterosexual	Yes/ No	Spinal injury: Paraplegic, diabetes/ Human growth therapy, Glucose, Insulin	Feelings of anxiety/ Financial concerns & partner change in job	No
31	24	Committed	2.5	Heterosexual	No/ Yes	None/ Lexapro, Reflex Antacids, Migraine medication	Feelings of anxiety and sadness/ Recent college graduation, job search, financial concerns, relationship concerns	Yes
32	53	Married	13	Heterosexual	Yes/ Yes	Sexual Pain	Feelings of sadness/ Relationship concerns	No

Research Design

A quantitative research approach was used in the study to collect, analyze, and calculate the numerical data of the participants' level of change in their perceived sexual desire and sexual interest and sexual distress by creating a comparison of data collected from participants through pre-treatment and post-treatment interviews. A pre-test / post-test design was utilized. The pre-treatment evaluation instrument was used to gain initial demographic information, and the participants' perceived low-level sexual desire / interest and sexual distress levels were measured by scaled scores on the *Sexual Interest and Desire Inventory for Female* (SIDI-F). The post-treatment evaluation utilized the re-administration of the (SIDI-F) to assess for changes in perceived sexual desire / interest and sexual distress that occurred for the participants during the 6-week intervention and to provide evidence of the effectiveness of the designed intervention tool.

One of the possible contributors to low-level sexual interest and desire is difficulty making time for oneself and accessing sexual thoughts and activities with another person or with oneself. Taking these factors into account, the 6-week study made allowance for a minimum of 14 - days to be missed during the total 6-week study to complete a total of least 28 - days of daily listening to the intervention tool. The required minimum 28-days also correlates with the 4-week timeframe appropriate for the SIDI-F evaluative instrument.

As supplemental resource information, the daily feedback journal responses for each participant were collected, analyzed, and calculated as numerical data as presented in Table 5, located in the Results Chapter. Additionally, the participants' verbal feedback obtained during the post-treatment interview are presented as supplemental information in Table 6, located in the Results Chapter.

Study Variables

The dependent variables for this study are the participants' scores indicating sexual desire, sexual interest, and sexual distress levels as measured by the participants' pre-treatment and post-treatment SIDI-F questionnaires. Results of the participants' SIDI-F scores were expected to change following the guided imagery intervention with higher post-test scores as compared to pre-test scores for sexual desire / interest and lower post-test scores compared to pre-test scores for sexual distress. The independent variable in the study is the daily listening of a guided imagery recording over the 6-week period.

Instrumentation

Treatment Intervention Tool

The intervention tool was a guided imagery recording emphasizing relaxation, present-moment sensory awareness, and non-judgmental positive affirmations as well as concepts of pleasure, body awareness, and sexual permission. Because there was not an existing guided imagery recording with particular emphasis found in the commercial market, the researcher created a guided imagery script specifically for women which was accompanied with music and recorded in a recording studio, specifically for the purpose of this research study (See Appendix F for the *Guided Imagery Script*). The style of guided imagery used in this recording is *feeling state imagery*, which involves imagery of scenes or locations that are perceived as a "safe place" or "favorite place." The purpose of the intervention was aimed at supporting a change in mood from one of negativity and disinterest to one of positivity, comfort and interest. The expected potential of the intervention was the enhancing of the receptiveness for sexual pleasure and the improvement of sexual desire, sexual interest, and sexual satisfaction for the participants.

Excerpt from Guided Imagery Treatment Intervention:

Everything has become quiet and still and so now take a few moments, just to enjoy, enjoy the deep, relaxed state of body and mind. Your mind is capable of imagining, creating and enhancing whatever it desires, whatever it directs attention to and interest to... the mind is the most creative, sensual part of each of us and all of your body responds to what the mind thinks, envisions and to choses believe... Continue to relax in this way for a few more moments, allowing yourself to have this worry-free space, allowing your body to heal and naturally rejuvenate, as it instinctively knows how to do.

Assessment Instrument

The present study utilized the data collected from pre-treatment and post-treatment participant responses to the research assessment instrument *The Sexual Interest and Desire Inventory- Female* (SIDI-F) questionnaire to assess the effectiveness of the daily use of a guided imagery recording emphasizing relaxation and sensory awareness for the treatment of perceived low-levels of sexual desire / interest and sexual distress in women.

Sexual Interest and Desire Inventory- Female (SIDI-F)

The SIDI-F questionnaire is a clinician-administered questionnaire consisting of 13 scorable items and five non-scorable items. The SIDI-F assesses adult women's sexual desire, sexual interest, relationship quality, sexual distress, and sexual functioning on a scale format, with scale options ranging from 1 - 5, and then generates a cumulative score based on a 4-week period of time (See Appendix B for the *SIDI-F Instrument*).

The scorable items total to a maximum score of 0 - 51. Scores of 33 or less indicate criteria for diagnosis of *Hyperactive Sexual Desire Disorder* (HSDD), now referred to as *Female Sexual Interest / Arousal Disorder* as indicated in the APA Diagnostic and Statistical Manual for Mental Disorders- Fifth Edition (DSM-5). These scorable questions were used to quantitatively

assess each participant's sexual wellbeing over a 4-week period. The questions assess the participant's:

- overall satisfaction with their partner relationship,
- their level of sexual interest / enthusiasm and pleasure when they thought generally about sexual matters or when they thought about engaging in sex,
- their level of acceptance and enthusiasm when their partner approached them for sex,
- the frequency of encouragement for sex from their partner,
- the frequency and strength of their desire to engage in some form of sexual activity with or without their partner,
- their frequency and intensity of wanting to engage in some kind of non-sexual physical affection / activity,
- the level of satisfaction with their own level of sexual desire and sexual interest,
- the level of distress that they experienced regarding their level of sexual interest and sexual desire,
- the frequency of thoughts that they had about sex,
- their overall level of their sexual desire and interest in having sex and the level of intensity they had for wanting to have sex,
- their reaction to sexually suggestive material,
- their frequency to want to continue to participate in sex once they became aroused,

- the level of ease at which they became aroused in response to sexual stimulation,
- the level of desire for more sexual stimulation once they become sexually aroused, and
- the frequency and ease of achieving orgasms.

The SIDI-F also includes several non-scorable questions that are intended for obtaining background information. These questions assess a participant's:

- frequency of engaging in sexual activity alone or with a partner,
- their level of satisfaction with their partner relationship,
- their negative feelings about sex when they were approached for sex or when they thought about sex,
- their level of pain during genital sex, and
- the participant's overall general well-being and mood and their level of fatigue.

Anita Clayton and colleagues (2006) investigated the reliability and validity of the SIDI-F. The investigation involved two multi-centered, non-treatment studies conducted in both America and Europe. They discussed their findings in an article for the *Journal of Sex Marital Therapy* in 2006. Anita Clayton and her colleagues state that:

This investigation assessed the SIDI-F as a measure of Hyperactive Sexual Desire Disorder (HSDD) severity. The results showed that the SIDI-F exhibits excellent internal consistency, with Cronbach's alpha of 0.9. The validity of the SIDI-F, as a measure of HSDD severity was confirmed by a number of observations. The data indicated that women with a clinical diagnosis (diagnosis criteria based on the Diagnostic and Statistical Manual of Mental Disorders [DSM-IV-TR]) of HSDD had significantly lower SIDI-F scores than women who did not meet the diagnostic criteria for any subtype of female sexual dysfunction and women diagnosed with female orgasmic disorder. There was a high correlation between scores on the SIDI-F and scores on the *Female Sexual Function Index* (FSFI);

Rosen et al., 2000) and on the interactive voice response version of the *Changes in Sexual Functioning Questionnaire* (CSFQ; Clayton, McGarvey, & Clavet, 1997; Clayton, McGarvey, Clavet, & Piazza, 1997), two validated measures that assess general female sexual dysfunction. In contrast, there was a poor correlation between SIDI-F scores and scores on a slightly modified *Marital Adjustment Scale* (Locke, Wallace, 1959; MAS), an assessment of general (nonsexual) relationship satisfaction. Taken together, the results of the investigation indicated that the SIDI-F is a reliable and valid measure of HSDD severity, independent of relationship issues (Clayton, A. et al., 2006).

For the current research study, the SIDI-F scores will be utilized to assess the effectiveness of the research intervention for the improvement of perceived low-level sexual desire / interest and sexual distress in women. Additionally, because the focus of this study is the improvement of perceived low-level sexual desire / interest and sexual distress in women, the diagnosis criteria and classification for *Female Sexual Interest / Arousal Disorder* accessible through the SIDI-F scores, will not be taken into consideration as data criteria.

Supplemental Assessments

One of the supplemental resources was a daily feedback journal with three, scale-style feedback questions provided by the researcher within a journal format. Journals were provided to each participant before beginning the study and then collected, analyzed, and calculated at the completion of the treatment. The daily feedback journal questions were intended to evaluate each participant's level of difficulty in creating time to listen to the provided guided imagery recording (self-care inventory), their level of relaxation within their body (sensory and body awareness / inventory), and their level of sexual interest and desire (interest inventory) (See Table 5, *Feedback Question Responses*, located in the Results Chapter). The second supplemental assessment resource was the participant's verbal feedback provided at the

completion of the treatment interview (See Table 6, *Participant's Verbal Feedback Responses*, located in the Results Chapter).

Summary

This chapter described the methods and procedures used to evaluate the effectiveness of a treatment intervention for perceived low-level sexual desire / interest and sexual distress in women. The chapter discussed the purpose of the study, the process and procedures, and information about the study participants. Additionally, the chapter discussed the instruments used to collect the study data and the procedures used for analyzing the collected data.

CHAPTER IV

RESULTS

The purpose of this dissertation was to evaluate the effectiveness of relaxation and sensory-focused guided imagery for the treatment of perceived low-level sexual desire / interest and sexual distress in women. The treatment intervention was a guided imagery recording, used daily over 6-weeks, emphasizing relaxation, present-moment sensory awareness, and non-judgmental positive affirmations as well as the concepts of pleasure, body awareness, and sexual permission. The researcher hypothesized that the treatment intervention would improve the participants' state of relaxation and awareness of pleasure, thereby allowing for the receptiveness for sexual pleasure and the improvement of sexual desire, sexual interest, and sexual satisfaction.

The results from the current research extend the current basis of literature for treating perceived low-level sexual desire / interest and sexual distress in women. This chapter addresses the findings of the study and the efficacy of the guided imagery recording as a successful treatment intervention for perceived low-level sexual desire / interest and sexual distress in women.

Data Preparation and Analysis

Prior to conducting the primary analyses, preliminary and exploratory analyses were conducted to assess the nature of the obtained data. Preliminary analyses yielded no significant violations of normality in outcome variables, and reliability was in the acceptable range (.790 [pre], .870 [post]). Examination between available potential covariate, including days in treatment, life stress, and emotional concern, found some differences in outcome by stress and

emotional concern; however, due to limitations in sample size, analysis of covariance could not be conducted without compromising power. As such, analysis focused on the primary pre / post changes rather than complex interaction effects controlling for covariates.

Changes in outcome scores were assessed using paired sample *t*-tests. No violations of parametric analyses were found. All analyses were conducted in SPSS v. 24, and significance was determined at the .05 level.

In addition to the primary analyses and the preliminary and exploratory analyses, the participants answered three daily, scale-style feedback questions for the duration of the 6-week study. At conclusion of the study, participants returned their daily feedback question responses (Table 5) and were given an opportunity to verbally share their feedback regarding the study and their experience participating in the study (Table 6).

Sample Descriptives

Thirty- three women interviewed to participate in the research study. Following the pre-study interview session and assessment, one interviewee did not qualify to participate due to relationship status. Of the 32 interviewees that qualified for the study, five participants discontinued the study due to personal or family conflicts which were not related to the study, and two participants completed less than the required 28 - days / 4 - weeks of participation, and therefore, their data was incomplete and was not included in the results.

The final sample consisted of 27 participants who successfully completed the treatment. The majority of these 27 women reported that they were married (85.7%) and were heterosexual (85.7%). Additionally, the majority of the sample reported having emotional concerns (78.6%) and life stress (82.1%) at the start of the study. Participants' averaging age was 40.33 years (*SD*

= 7.98). Participants have been in their current relationship between 1 and 40 years ($M = 9.96$, $SD = 8.67$). Additional descriptives are found in Tables 2 and 3.

Results

Primary evaluative assessment (SIDI-F) pre / post-test comparison results indicated a significant pre / post-test difference following the guided imagery intervention, $t(26) = -7.24$, $p < .001$. Individuals had significantly higher post-test scores ($M = 30.41$, $SD = 9.79$) compared to pretest scores ($M = 20.67$, $SD = 7.82$). (See Table 4, *Means and Standard Deviations of SIDI-F Scores*)

Based on the supplemental evaluative assessment (daily feedback journal responses), participant responses indicated that most participants experienced *slight difficulty* in making time to listen to the guided imagery daily, a *high level* of sense of relaxation within their bodies after listening to the guided imagery, and a *moderate level* of sexual interest while listening or after listening to the guided imagery recording. (See Table 5, *Daily Feedback Journal Participant Responses*)

Summary

In summary, the 27 participants who completed the guided imagery research study had a significant improvement in their levels of perceived sexual desire / interest and lower sexual distress following treatment. Participants also self-reported significant reduction in their distressed symptoms, such as fewer symptoms of anxiety and depression and an increase in feelings of happiness and relaxation, following completion of the treatment. The efficacy of the treatment intervention was validated.

Table 2.

Frequencies and Percentages of Categorical Demographics

	<i>n</i>	%
Relationship Status		
Committed Relationship	3	10.7
Married	24	85.7
Sexual Orientation		
Bisexual / Lesbian	3	10.7
Heterosexual	24	85.7
Emotional Concern		
No	5	17.9
Yes	22	78.6
Life Stress		
No	4	14.3
Yes	23	82.1

Table 3.

Means and Standard Deviations of Continuous Demographics

	<i>n</i>	<i>M</i>	<i>SD</i>	Min	Max
Age	27	40.33	7.98	31	64
Length of Relationship	27	9.96	8.67	1	40
Days in Treatment	25	36.88	6.51	12	42

Table 4.

Means and Standard Deviations of SIDI-F Scores

Pre		Post		<i>t</i>	<i>p</i>
<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
20.67	7.82	30.41	9.79	-7.23	< .001

Table 5.
Daily Feedback Journal Participant Responses

Overall Average of participant responses to Journal Question # 1:
How difficult was it for you to make time to listen to the guided imagery recording?

	NOT DIFFICULT	SLIGHTLY DIFFICULT	DIFFICULT	VERY DIFFICULT	EXTREMELY DIFFICULT
	10.6296296	13.259259	8.11111111	3.814815	1.592593

Overall Average of participant responses to Journal Question # 2:
What is your level of relaxation and comfort within your body after listening to the guided imagery recording?

VERY HIGH	HIGH	MODERATE	LOW	VERY LOW	NONE AT ALL
7.96296296	11.62963	10.8148148	4.111111	1.62963	1.074074

Overall Average of participant responses to Journal Question # 3:
What is your level of sexual interest (feelings that include interest and / or wanting to have sexual experience, feeling receptive to a partner's sexual initiation, interest in self-masturbation, and / or thinking or fantasizing about having sex) after listening to the guided imagery recording?

VERY HIGH	HIGH	MODERATE	LOW	VERY LOW	NONE AT ALL
1.55555556	4.2962963	11.9259259	7.777778	4.777778	6.777778

Table 6.

Post-Study Participant Self-Reported Feedback

Participant's verbal feedback statements were reviewed with each participant and written permission was received from each participant, before feedback statements were included in the research results.

Participant 1

I feel that both the relaxation and the guided imagery portion helped with my sexual interest. It was difficult to make time to listen to the recording on busy days, so it came down to planning. The guided imagery helped me to feel motivated and to find solutions. While listening, I often felt very relaxed and centered. The process of listening to the guided imagery recording reminded me that I'm not a lamp that can be turned on or off. I need to honor myself, make my changes and provide the time and space to be a sexual being. My suggestions for future recordings would be for more sexually suggestive material.

Participant 2

After using the guided imagery recording I felt that my sexual interest increased; on a scale from 1 to 10, to a 10, when it was two at the beginning. I felt that the guided imagery portion [safe place, sensory images, and affirmations section] of the recording was the part of the recording that contributed the most to my increase in sexual interest. While listening to the guided imagery, I typically felt relaxed. After listening to the guided imagery, I wanted to masturbate- every time. The guided imagery helped me to be focused on sex and my sex life. It got me going and noticing, and I was more willing to be sexual. My recommendation for the guided imagery recording would be that on the section where it asks you to breathe, hold, and

release, I would have let that take a little bit longer... it seemed too fast. I need to do my own breathing pace.

Participant 3

I thought that the guided imagery recording helped to increase my sexual interest on a scale from 1 to 10...I would be at a five. On a scale from 1 to 10; I felt that I was a five on the difficulty it took to make time to listen to the recording. I bounced between difficult and not difficult, depending on the day [on making time to listen]. I often listened to the recording on my lunch break and if I didn't get a lunch break, then I would have to find another time to listen which made it more difficult. While listening to the guided imagery recording, I was trying not to think about other things. It's hard for me to find a happy place. My mind wanders because of my ADD. After listening to the guided imagery recording, I felt more relaxed, less stressed, and happier. I felt that the guided imagery was very helpful for me and very relaxing. I had no mood issues for the month of listening to the guided imagery recording. My recommendations for future guided imagery recordings would be to take out the part that states to let go of negative feelings... I found that I would be relaxed by that point and the message made me think of negative feelings, and then I was scrambling to get rid of the negative feelings. Other than that, I liked at all.

Participant 4

I feel that the relaxation and guided imagery portions of the recording both contributed to the increase of my sexual interest. It depended on each day and my stress level. I noticed overall that I would start the guided imagery nervous about the time that it would take, but once I got going, I was able to get into it. When I listened to the guided imagery recording, I felt

sensations in my left arm and my hand; like a tingling feeling and feelings of happiness. After I listen to the guided imagery recording, I felt calm, more relaxed, heavy, and in a calm state. I have done other guided imagery. I didn't feel like this guided imagery took a lot of time. My recommendations for future guided imagery recordings, would be that some of the parts made me laugh, such as the part that said that I have lovely toes, I was distracted by it... what if people didn't like their feet. And I always thought, when are you [the speaker / guide] going to come back. It distracted me and took me out of my feeling calm. I like that there was a lot of guidance [in the recording] and that it kept you focused. I appreciated that it was directive and helped me to stay focus.

Participant 5

I felt that the guided imagery portion of the recording was very beneficial and helped me go to those [suggested] places. I would just relax. My mind would go all over the place, but I would notice things. I noticed that I deserve to feel good about being sexual and to be with someone. It's OK. I now know that makes me feel comfortable. While listening to the guided imagery recording, sometimes I would feel some sadness because it helped me realize a lot of things. It's OK for me to want certain things and to be with someone. I really enjoyed the dialogue of the recording and I feel like you gave me results and some realizations about things. After listening to the guided imagery recording it helped me to want to talk and have conversations with my partner about what I want. Which is a big step for me. I did feel that I could never find the best time of the day to listen to the guided imagery. It was extremely difficult to listen during the week due to my workload, but on the weekends, it wasn't difficult at all.

Participant 6

I didn't feel any sexual interest after listening to the guided imagery. I enjoyed the relaxation and the sensory part of the guided imagery. I couldn't imagine a place. I often fell asleep while listening to the recording. After listening to the guided imagery recording, I felt like I noticed things about sex more often, and I noticed that I thought about it more often. I would reference other times that I had had sex that I had enjoyed and felt like [thinking about it] heightened my interest in being sexual. I liked the calming affect that the guided imagery created. It was relaxing. I focused on the words. I liked the awareness that the words created. I felt that was very difficult in the beginning, to make time to listen to the guided imagery recording, but it got easier. I listened at the same time each day. Setting a time and a routine helped me to do the recording. If I was going to change anything [about the guided imagery recording], I would make it a slower recording. A lot of things on a guided imagery, such as the breathing, were a bit too fast. I liked the relaxation part, a lot. I noticed that my muscles could relax, and I was able to notice my muscles more. I like the descriptive parts about the recording. I really liked the music and the time that it allowed me for mental focus. Time for me to relax.

Participant 7

Both the guided imagery and relaxation portions of the recording helped to increase my sexual interest. I noticed that listening to the guided imagery gave me space for me, time for myself, every day. I always felt relaxed. I felt less nervous and felt like everything smoothed out. I like the part about the lovely toes. My sexual interest increased. My frequency of sex increased, and I felt more receptive to the act of being sexual, of being loved, and feeling it's OK. While listening to the guided imagery recording, I felt very relaxed. After listening to the guided

imagery recording, I would feel positive emotionally, like I had just had a power nap, very relaxed. Sundays are harder than other days to listen to the guided imagery recording. I missed a few days depending on my work load. I tried to do it during the day and if not, then in bed. I can recite the first part of the recording word for word. But sometimes I would listen to the recording and hear parts I never thought I had heard before. My recommendation for future guided imagery recordings would be to change the section about breathing. It is not long enough.

Participant 8

During the listening of the guided imagery recording, I felt like I did want to have sex. I know it helped because I had more lubrication during sexual activities after listening to the guided imagery recording that day. Also, I noticed that I had more energy. And I wouldn't want to have sex if I don't have energy. I found both the relaxation and guided imagery portion of the recording to be helpful. The first part [of the recording] helped with my ability to be receptive to the guided imagery part. It helped to remove any distractions and helped me to feel relaxed. While listening to the guided imagery recording, I noticed and paid attention to my body. I could notice any stress I was holding and where I was holding it in my body. I could then tell it to go away. I became more aware of my body. I noticed that my stomach would make noises while listening to the guided imagery as I became more relaxed. I think I hold stress in my stomach. After listening to the guided imagery recording, I always felt more relaxed. I thought initially that it was easy to make time to listen to the guided imagery recording, but then after a while, it wasn't always on my mind. I missed a total of about a week when I didn't get to listen. My recommendation for future guided imagery recordings would be to remove the part about femininity because not everybody feels feminine. I have listened to guided imagery for years such

as Rossman and Belleruth. I feel that your guided imagery recording is the same caliber. I would recommend putting it on iTunes, and I think it would be highly well received.

Participant 9

I really enjoy the guided imagery. I learned a lot about myself through the visualization. I found it difficult to make time to listen to the guided imagery when I was on vacation and when I was at a [work] conference. Making the same time as a routine helped make it OK and more able to do. I often listened to it at night. The guided imagery recording section, with the guided imagery visualization, is what I enjoy the most. Finding a safe place location helped me to relax. Most of the sexual erotic ideas came to me during the [imagery] portion, and it was the most helpful. I didn't notice any negative emotions while listening to the recording. My relaxation feelings came quickly. The music and your voice helped me to quickly become relaxed. After listening to the guided imagery recording, I often just wanted to go to sleep. My suggestions for future guided imagery recordings would be that I feel the six weeks seemed a bit long when having to listen every day. A shorter recording would've been helpful as well, making it easier. I would suggest making a variety of different recordings.

Participant 10

I did not find it difficult to make time to listen to the guided imagery recording. The relaxation portion helped me the most, but it did not increase my sexual interest. I scheduled it at the end of each day. I would sometimes pray before I listened to the guided meditation and this would help, as well. I would often fall asleep at the part where we would go into a safe place. But it helped me with sleeping. After listening to the guided imagery recording I noticed that I could focus on the fact that I felt relaxed and calm, still and a sense of quietness. I felt

emotionally positive and found the reassurance I needed. I didn't have any trouble relaxing. I did what the guided imagery recording told me to. I didn't feel much tension in my body, so I didn't feel that I need to release any tension. I did have a bit of tension in my jaw and the recording would remind me to let that go. I didn't sense the erotic images. I listened to the guided imagery at night when my kids were not around. I felt over the month that the guided imagery recording impacted me by having less stress. The guided imagery did take time, time when I may have been having sex. Suggestions I would make about future guided imagery recordings would be that I would make a series of guided imagery recordings that fit the needs of different people. I would have preferred to receive more specific guidance and suggestions that would allow me to remove the barriers that keep me from imagining erotic images more freely.

Participant 11

I felt that the relaxation portion of the guided imagery recording helped me to feel more relaxed. This made me feel good, and I enjoyed going to the comfortable place. While listening to the guided imagery recording I usually felt sleepy, but it helped me to clear my mind. After listening to the guided imagery recording, I often felt more relaxed and occasionally more intrigued and interested in the idea of sex. It helped me to clear my mind, therefore, making time and space for me to be able to have sexual interest. I found it surprisingly difficult to make time to listen to the guided imagery recording. What made it difficult is that I needed to set aside 20 to 30 minutes a day. It was hard for me to give that time to myself. I had to separate myself from my responsibilities. It was easier on the weekend, and I usually did it at night. I really enjoy the relaxation part and found it to be very beneficial. The deep breathing helped, but it could've been a little bit slower. I liked all the details, like “watching your worries float away.” I really

like how descriptive it was, and it allowed me to listen and just become more relaxed. I like your voice. It was very relaxing, enjoyable, and helpful. I had high hopes for the study.

Participant 12

I enjoyed the relaxation portion of the guided imagery and felt that it helped increase sexual interest. On different days, I experience different things, both physically and emotionally. I had a lot of reactions come up, and I had trouble seeing the imagery for a while. I'm thankful for it all. It really helped. I felt that the guided imagery was lovely, and I felt very relaxed. After listening to the guided imagery recording, I noticed sparks of excitement for sexual experimentation and for a pleasurable experience. I felt feelings during the imagery and felt relaxed. Sometimes I felt frustrated, and sometimes I felt excited. I notice that my automatic "NO" was less in response to the idea of being sexual. I enjoyed the guided imagery and the recording. I did find it difficult to fit in on the weekends because of the kids. My recommendations for future guided imagery recordings, would be to maybe make a shorter version. That would make it easier to make time to listen - maybe something like 15-minutes or less. I found the guided imagery to be very good, beneficial, and on point."

Participant 13

Making time to listen to the guided imagery recording was hard to do especially if I was feeling rejected by my partner. In those times, I would be hurting too much to want to listen to the recording. It was hard to accept within my heart and my mind. I would think to myself, "I don't want to be sexual because I'm mad." While listening to the guided imagery recording, I often felt relaxed. I definitely felt that the guided imagery helped. It helped me to realize that it's

OK to just to let go and that I'm safe and that I can think about being sexual. I also noticed that it helped me be in the moment while being sexual. I often listened to the recording at bedtime.

Participant 14

I felt that the guided imagery process was valuable, helpful, and helped to create a shift. I liked the imagery. I found it hard to make time and to think of things to imagine. If my husband was at home, it made it more difficult to listen. I noticed that I'm conditioned to not relax physically and mentally. It's difficult for me to relax, but I got better and better at it. I missed a couple days, due to travel. I experienced less anxiety while listening to the guided imagery process than I had had before. I realized that if there had been more non-sexual affection [in my relationship], that I would have been more sexually interested. I noticed that I was afraid to touch because I might give a suggestion or invitation. I had a hard time allowing my mind and my body to feel centered and in the moment. I noticed that I didn't feel an aversion to sex like I used to. I used to have an absolute aversion and even felt angry. I came up with an idea of discussing with my partner ways to plan sexual activity. To plan for two times, twice a week, and then the rest the time to be affectionate, not sexual, time. I also noticed that forgiveness of the past helped me to feel more sexually interested my partner. I noticed that my sexual response was affected by past.

Participant 15

I thought that the process was great. It increased my sexual interest. I enjoyed having the meditation to use, and I will continue to use it for extra relaxation. I really enjoyed the recording and the process. I found it very, very relaxing, and it contributed to my feelings of being less anxious, even during the day. Most of the time, I had to listen to the recording at bedtime. It

wasn't conscious, but I noticed I do and did feel more sexual energy present. A couple of times I had sexual dreams, especially in the beginning. My recommendation would be to make the length a little bit shorter. It was hard to stay fully awake during the entire whole thing. I usually fell asleep during the time when we were supposed to be focusing on sexual awareness.

Participant 16

It increased my sexual interest. It reminded me of how I feel during the winter when I'm usually more interested in being sexual. I found it interesting because the same feelings kept coming up each time. I really liked the recording. I enjoyed it. I felt like you did a great job. It was clear and professional and better than most of recordings I've heard on YouTube. I loved the last song on the recording. It was difficult to listen while traveling with friends and, therefore, I had to skip a few days.

Participant 17

After listening to the guided imagery recording, I often felt more playful and conscious of my senses. I was more open, and I felt an awareness and sometimes felt desire, but not always. It certainly rekindled my well-being. I noticed that listening to the guided imagery recording that I would only be able to notice one or two senses at one time. I mostly I felt an overall sense of relaxation. I think that the relaxation portion of the recording was a much-needed thing for me. The guided imagery portion was lovely, and I looked forward to it. I noticed that my body became relaxed. Sometimes I would fall asleep, especially if I would listen at night, and I felt very relaxed.

Participant 18

I liked the guided imagery recording, and I look forward to it. I always felt relaxed and felt good after listening. I didn't always register with sexual desire in the beginning. The feeling of desire is now present all the time. I think about sex all the time, and I have a sense of longing to be sexual. I think this guided imagery process really worked. The result is that I'm open to the idea and more likely to initiate and be playful. My husband's a happy man. I feel different moving through my day now. I loved hearing your voice. I noticed about three weeks into the study this weird feeling that felt unfamiliar. A really cool kind of sense of vibration- something under the surface. I struggled to listen to the meditation at first. But, I noticed what it meant to me. I noticed it was difficult prioritizing time for my self-care. I liked the words that you used. For example, I liked the words "put your worries into a bubble and let them float away" or the statement "I am kissed by perfection." I really enjoyed it. I struggled to find time... although that sounds ridiculous because it's only 20 minutes. But it's about prioritizing time for me. I found it difficult to slow down.

Participant 19

The guided imagery recording helped with sleep as well as desire. While listening to the guided imagery recording, I had no trouble sleeping. I found it really beneficial. Overall, I found the experience to be very enjoyable. You helped me think more about sex and to be more aware of sex. Thinking about it more helped me to want it more. I felt very relaxed after listening, and I would often fall sleep. However, when the recording would end I would become alert and wake up. While listening to the guided imagery recording, it felt as if I was going down an elevator. As I went down the elevator, I was unable to hear the words or your voice. But, when I was coming

up the elevator I became more alert and heard the words more clearly. I was more aware of my wants and desire for affection. It reminded me of a time before we had kids; when I felt more physical affection and enjoyed the physical affection without necessarily having to lead to more sex. I definitely thought about [sex] a lot. Although it was difficult to listen to the recording during the daytime, it helped me to stay awake more often. I definitely felt like the guided imagery helped me with my anxiety. I felt like it was very similar to recordings I listened to while I was preparing for childbirth. I felt very relaxed, and it helped with sleep. Usually, the best time for me to listen, due to my schedule and kids, was after 8 PM. But, I was usually tired at that time.

Participant 20

I felt the guided imagery recording sexually impacted me in such a way that every day it really helped me to feel good and recall images. What I imagined in the recording helped me to want to be with my partner. However, there were other times it didn't help as much. Your voice was calm and soothing, and I enjoyed the words of a guided meditation. I thought it was wonderful - you did a great job on the script and your voice was soothing. In the beginning, I tried to listen at work, to decompress. I listened with headphones for the first few days. Then I realized I couldn't fully relax because I kept thinking of what I had to get done. So, it worked better for me to listen at home. There were a few times where I listened while stretching, and I really enjoyed this; it felt really nice. Towards the end, I began to listen to the recording through speakers in the evening while I was in bed. I like this better than listening with earbuds, and I found it more relaxing to be in the bed than in the chair. Overall, I felt like the experience was really neat and I was glad to be a part of the study. I would recommend removing the bell sound in the music. It was difficult not to focus on the bells, and I anticipated them. After several times

of listening to the recording, I had wished that they weren't there. This is a tiny detail, but it did distract me at times from the meditation and from relaxing within my body.

Participant 21

The guided imagery was great. I felt it was awesome. I felt an immediate sense of relief and my mood changed overall. I felt more at peace. My life has had a noticeable, huge change, even after the first week. After listening for the first week, it became harder to make the time for myself, but I did notice that I felt better. When I forgot to listen to the guided imagery, I noticed the difference. I felt immediate sense of relief after listening. I've been struggling for a while with the issue of sexual interest and desire. I guess I can't get out of my head. It's been a long time that I've been dealing with this. While listening to the guided imagery, I noticed that I'm more chilled out, and it's been a long time since I felt like this. I'm laughing more. I'm having more fun, and I don't feel obligated. Even during the Christmas holidays, when I had more than 50 people at my house, I felt more relief and calm. I feel more affectionate than I used to. The only thing that I changed in my life was including the guided imagery recording. I feel happier, and my mood has improved. The time just flew by. My wife even noticed the difference. She said that I'm such a different person and that I seem to be happier. I'm so happy that I found you and the guided imagery work. I wish I could do it every day although it's difficult. I also noticed while listening to the guided imagery recording, that there were times that I heard different things that I had not heard before. I guess the things that hit a different cord. I plan to continue to use the guided imagery recording because I found it to be helpful. It definitely helped with my intimacy and my sexual interest. We're enjoying each other much more and more happier.

Participant 22

Listening to the guided imagery gave me confidence. It helped me to wake my senses and helped me to open up and created interest in being intimate and sexual. It helped with conversations with my partner. It helped to quiet my mind. I really enjoyed the process. The days that I listened, I had good days. I really made an effort to grasp the words and to listen to the words. It made sense to me and drew my attention to my senses. I really focused on listening to the words. I focused on different sections of the guided imagery. I feel like I still have a long way to go. The guided imagery helped me to create a space for myself. I used the time to adjust the space. I enjoyed listening in a space with low lights and removing all devices and having a clean space. A few times, I listened to it while I was in the bath. The guided imagery helped me to feel empowered and to enjoy pleasure. It helped me to not be so caught up in the everyday- life stuff. I felt more alive, and it raised my senses. I felt the power of being a female. I felt OK to masturbate. I even listened to the guided imagery while masturbating sometimes. I chose not to be embarrassed about masturbating or talking about it.

Participant 23

It definitely helped to create an interest in being sexual. I found myself more relaxed. It felt good to take time for myself. Having that time for myself helped me to feel more sexual. It's been a long time since I felt this- even before kids. I was able to reconnect with myself. I even told my husband that I was feeling these feelings, and he agreed. I react more positively and with a new lens. It was hard to start the guided imagery study at first, with children. I felt a lot of resistance and felt like it was just one more thing I had to do. After you checked in on me and we had an email exchange about my struggles with giving myself "my time" I decided I was going

to do it. So, I set an alarm, 15-minutes early, every morning. It has been easier to listen during the week than on the weekends. Once I got into it, I really enjoyed it. I enjoyed the recording, and I'm going to continue to do the recording at least a few minutes each day. I really looked forward to listening. Listening in the morning helped me to be more centered and feel more relaxed and peaceful. It reduced my stress levels.

Participant 24

I found that listening to the guided imagery helped me in my couple's therapy and sex therapy sessions. I'm trying to figure out my own personal sexual desire. My husband and I are not having sex now, but the recording allowed me to see how I feel and perceive my own desire, on my own. I may not be feeling sexually interested with my partner because of where we are in our therapy process, but that doesn't mean that I don't have sexual desire. I have found the energy and the time to understand myself and to understand how to sexually fulfill myself. I thought the guided imagery recording's length was perfect. I didn't feel that it was time-consuming to answer the questions. I found it to be quick and easy. I got into it. At first, I listened to the guided imagery at bedtime, but I could fall asleep. Then, I tried listening to it in the morning, but I became so relaxed that I often would fall back to sleep. So, I decided to listen to it right after work or midday. I found it very calming and relaxing. The study brought all of this to light. The study and listening to the guided imagery recording increased my desire. I felt safe to listen to the recording and to embrace my own sexual desire. I feel like I am more OK with my own desire and open to it. I was able to just let myself go with it.

Participant 25

I went into the study research with high hopes. It didn't work for creating sexual desire for me, but it was instructive and helped me to understand, and it gave me information. Conversations came up from listening to the guided imagery recording and doing the study that I used for discussions in therapy. I found it hard to go through, though. I'm out of practice on this approach, but I took advantage of the process. I felt as if it was big. It was definitely challenging for me. I felt like the exercise didn't resonate with me. I felt that the imagination part and the words were hard for me to relate to. My brain lives in a pragmatic world. I don't have an active imagination. So, I found it hard to go into my imagination daily. It would have been more successful if a beach vacation scene was described because imagining is an area that I struggle with. So, it made it difficult. The words used made me think, pause, and reflect. It was out of my perspective. I question why it is so hard for me to imagine and to relax. I learned a lot out of it, though. It didn't change my level of desire, but I did learn a lot through the study.

Participant 26

I really enjoy the relaxing of my body and the excuse to check out for a little while. Midway through the study, I felt overcommitted. I have an introverted personality. Once I got over the hump, and then I recommitted. It did not change anything for me [regarding sexual desire], but the relaxation helped. I didn't agree with all the messages, and it didn't resonate for me. I had a difficult time connecting to the idea and to my thoughts. I shared my feedback and a summary of my thoughts with my therapist, too.

Chapter 5

DISCUSSION

There is a large body of research indicating that many women today struggle with low sexual desire and low sexual interest and sexual distress. The prevalence of these sexual issues in women can cause concerns such as low self-esteem, relationship distress, and sexual dissatisfaction. In many research studies, guided imagery focusing on relaxation and body and sensory awareness has shown efficacy in positively impacting an individual's emotional and physical wellbeing, overall relaxation, and helping improve concentration. However, despite the considerable amount of research that exists in the areas of sexual dysfunctions and guided imagery separately, there is little research emphasizing the usage and impact of guided imagery specifically focused on treating the concerns related to low sexual desire, low sexual interest, and sexual distress in women.

The purpose of this quantitative research was to evaluate the efficacy of a guided imagery treatment intervention developed specifically to focus on the concerns of perceived low sexual desire, low sexual interest, and sexual distress in women. The intervention was a researcher-created guided imagery recording emphasizing relaxation; present-moment body and sensory awareness; and non-judgmental, positive affirmations along with the concepts of pleasure and sexual permission for women with concerns surrounding sexual desire, sexual interest, and sexual distress. The guided imagery recording was intended to improve the participants' state of relaxation and awareness of pleasure and allow for the receptiveness for sexual pleasure and the improvement of sexual desire, sexual interest, and sexual satisfaction.

The effectiveness of the treatment intervention was evaluated using *Sexual Interest and Desire Inventory- Female* (SIDI-F) as the pre / post-treatment assessment along with two supplemental assessments. The first supplemental assessment resource was a three - scale style, daily feedback journal with questions inventorying participants' ease of making time to listen to the guided imagery (self-care inventory), their perception of relaxation within their body (sensory and body awareness inventory) during and after listening to the guided imagery recording, and their level of sexual interest (sexual desire / interest inventory) during and after listening to the guided imagery recording. The second supplemental assessment resource was verbal participant feedback provided by the participants at the completion of the treatment via researcher interviews with each participant.

The representative sample consisted of 27 female participants with an average age of 40. Most of the participants reported that they were married, heterosexual, and in a relationship for one year or more.

The results indicated that the 27 participants who completed the guided imagery research study showed a significant improvement in their levels of perceived sexual desire / interest and lower sexual distress following treatment indicated by significantly higher post-test SIDI-F scores ($M = 30.41, SD = 9.79$) compared to pre-test SIDI-F scores ($M = 20.67, SD = 7.82$). Participants' daily feedback journal responses indicated scale levels of *slight to moderate* positive improvements, level of *slight difficulty* in making time for listening to the guided imagery (self-care inventory), and *high* level of relaxation within their body during or after listening to the guided imagery recording (sensory and body awareness inventory), and *moderate levels* of sexual interest during or after listening to the guided imagery recording (sexual desire / interest inventory). Participants also self-reported, through verbal feedback following the

completion of the treatment, a significant reduction in distress symptoms, a general improvement in their levels of relaxation, and improvement in emotional wellbeing and sexual interest.

The results indicate and validate the efficacy of the treatment intervention as an effective instrument for the treatment of perceived low-level sexual desire, low-level sexual interest, and sexual distress in women.

Limitations of the Study

This study explored a resource intervention for the treatment of perceived low sexual desire, low sexual interest, and sexual distress in women. As described in the Introduction Chapter, there were several limitations to the research. One limitation was that the guided imagery script and recording were developed by the researcher as a resource tool. The guided imagery script utilized the research and prior knowledge of various kinds of guided imagery and an understanding of:

- how the human mind and body receives, processes, and utilizes information,
- female sexual functioning,
- the processes and benefits of relaxation, and
- the use of sensory awareness and imagery for the potential to heal, expand resources, and utilize the individual's own inner resources.

The guided imagery was created as a sample guided imagery. Keeping that in mind, it is important to note the limitation that not all material and dialogue used in the script and recording format would resonate with, or appeal to, all participants.

Also, the factors that may influence a woman's sexual desire / interest and sexual distress can be, and often are, multidimensional. These influences may include:

- high-levels of stress related to work, finances or parenting concerns,
- partner-relationship conflicts,
- lack of time for self-care,
- disconnection to one's body and receptiveness of pleasure,
- attraction to partner,
- history of sexual trauma,
- emotional or physical health concerns, and
- low self-esteem.

This study is limited in its ability to research guided imagery as a tool to help resolve all possible influencing factors that can cause low sexual desire, low sexual interest, and sexual distress in a woman. Therefore, the study focused on a select set of factors that may influence a woman's sexual desire and sexual interest. These factors included:

- self-care: creating daily time allocated for taking care of oneself,
- relaxation: guidance for the practice of relaxation of the body and mind,
- mind-body connection: supporting the woman's connection to her body, her senses and sensations, and her receptiveness to pleasure using imagery,
- imagination: supporting the woman's ability to explore and utilize her own imagination, erotic images, and thoughts for sexual exploration, and
- affirmations: reinforcing concepts positive exploration, positive self-image, and sexual permission through affirmations.

Finally, with a small sample of only 27 female participants, this study did not inventory a randomized sample of the population. Instead, the sample was representative of the researcher's typical client and referral population -- heterosexual, married, and similar levels of emotional

and life stress levels. Of the 27 participants, the majority of the women reported that they were married (85.7%) and were heterosexual (85.7%). The majority of the sample (78.6%) reported having emotional concerns and life stress (82.1%) at the start of the study, had an average age of 40.33 years, and the average length of the participant's current relationship was 9.96 years.

Recommendations

Clinicians

Based on the findings from this study, it is recommended that clinicians consider the various multidimensional factors that may influence a woman when she is seeking treatment for perceived low sexual desire / interest and / or sexual distress. As varied as the factors and available options for treatment can be, as clinicians, it is vital to assess the individual client's presenting symptoms as well as all the contributing factors that may be influencing sexual concerns in order to provide effective and personalized treatment for each client. Based on the results from this study, it is evident that many female clients struggling with perceived low sexual desire / interest and sexual distress would benefit from treatment that incorporates guided imagery, focusing on relaxation and sensory and body awareness, as either the primary treatment or as a supplemental resource intervention.

Future Research

It is recommended that future research examine the use of relaxation and sensory-focused guided imagery for other populations and influences such as:

- different sexual orientations;

- individuals with physical disabilities that impact sexual functioning;
- other sexual dysfunctions such as sexual pain including vaginismus, dyspareunia, and persistent genital arousal disorder;
- sexual functioning influenced by pregnancy, postpartum, or infertility;
- sexual confidence, permission, and exploration;
- releasing negative thoughts and unrealistic expectations; and
- resolving sexual fears, anxiety and worries.

Conclusions

This study explored an intervention resource for the treatment of perceived low sexual desire, low sexual interest, and sexual distress in women and furthered the body of knowledge about treating sexual dysfunctions in women. In summary, these findings are consistent with previously validated research that uses guided imagery as a helpful intervention for medical concerns, rehabilitation, performance outcomes, and general wellbeing. Similarly, this study shows that guided imagery is a valid and effective intervention for the treatment and improvement of sexual desire, sexual interest, and sexual distress in women. Relaxation and sensory-focused guided imagery should be considered in the treatment of women's sexual dysfunction.

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APPEDENIX A: INFORMED CONSENT

Title of Research: The Efficacy (Impact) of Sensory-Focused Guided Imagery for Female Sexual Desire and Interest

Name of Principal Investigator / Primary Researcher: Tiffany Stanley, MA, NCC, LPC-S, CST

Phone Number of Principal Investigator / Primary Researcher: 512-585-4098

Name of Committee Members: Dr. William Granzig, Dr. Sarah Kyle, Dr. Michelle Fynan

A. PURPOSE AND BACKGROUND

Under the supervision of Dr. William Granzig, Professor of Clinical Sexology at the American Academy of Clinical Sexologists (AACS), Tiffany Stanley, a Ph.D. student at AACS, is conducting research on influences of Sensory-Focused Guided Imagery for Female Sexual Desire and Interest. The purpose of this research is to help further the body of knowledge about treating low sexual desire, sexual interest and sexual distress in women.

B. PROCEDURES

If I agree to participate in this research study, the following will occur:

1. I will be asked to participate in the practice of utilizing, 1x daily, a pre-recorded guided imagery, for 6-weeks and complete three brief questions daily.
2. I will be asked to discuss my experiences regarding sexual desire, interest and sexual satisfaction (pre- and post- study).
3. I will be asked to complete a demographic questionnaire (questions such as my age, relationship status, gender, race, sexual orientation, medications and life style) and complete a sexual desire and sexual functioning questionnaire (pre- and post-study).

C. RISKS

If I agree to participate in this research study, I understand the following are potential associated risks:

1. I will be asked to talk about issues of a personal nature and I might feel uncomfortable talking about some things. I am free to decline to answer any questions that I don't wish to answer.
2. As with any therapeutic setting, if you reveal any type of child or elder abuse (physical, emotional, or sexual), or if you express intent to harm yourself or another person, the researcher is required by law to notify the appropriate authorities.
3. Regarding confidentiality of data, records from this study will be kept as confidential as possible. No individual identities will be used in any reports or publications resulting from the study. All pretest and posttest surveys and questionnaires will be given codes and stored separately from any names or other direct identification of participants. Only the researcher will have access to the demographic information for each participant, and no other indication of identity will be necessary for this study. After the study is completed and all data has been analyzed, the list linking names of participants with their pretests and posttests will be held for one year and then destroyed.

4. If at any time the researcher deems my participation is no longer in my best interest, said participation may be terminated by the investigator without regard to my consent.

D. DIRECT BENEFITS

The anticipated benefit of participating in this study is a better understanding of the impact of guided imagery as a resource tool for improving sexual desire and sexual satisfaction. It is reasonably expected that my level of sexual desire and sexual satisfaction will improve by participating.

E. ALTERNATIVES

I am free to choose not to participate in this research study at any time.

F. COSTS

There will be no costs to me to take part in this research study.

G. COMPENSATION

There will be no monetary compensation for participating in this study. However, I will receive the recorded guided imagery to keep, at no cost, as a part of my participation.

H. RECORDING RIGHTS

I understand that the guided imagery recordings used in this study are the sole property of Tiffany Stanley and protected by copyright. I understand that I cannot reproduce or distribute these recordings without prior written permission from Tiffany Stanley.

I. QUESTIONS

I have spoken with Tiffany Stanley, MA, NCC, CST, LPC-S about this study and have had my questions answered. If I have any further questions about the study, I can contact Dr. William Granzig by calling (407) 645-1641, or Tiffany Stanley by calling (512) 585-4098 or write to them at 2720 Bee Caves Rd., Suite 207, Austin, Texas 78746 or to the American Academy of Clinical Sexologists, 3202 Lawton Road, Suite 170; Orlando, FL 32803.

J. CONSENT

I have been given a copy of this consent form to keep.

PARTICIPATION IN THIS RESEARCH STUDY IS VOLUNTARY. I am free to decline to participate in this research study, or I may withdraw my participation at any point without penalty. If I choose to withdraw, I will give written or verbal notice to the investigator at least 24 hours before discontinuation of the recording listening process.

Research Participants Signature _____

Date _____

Interviewer Signature _____

Date _____

**APPENDIX B:
SEXUAL INTEREST AND DESIRE INVENTORY-FEMALE (SIDI-F)
QUESTIONNAIRE AND SCORING**

The Sexual Interest and Desire Inventory-Female (SIDI-F) is a 13-item scale developed as a clinician-administered assessment tool to quantify the severity of symptoms in women diagnosed with hypoactive sexual desire disorder (HSDD). SIDI-F questionnaire is available at <http://www.isswsh.org/pdf/SIDIF%20final%20May%202004.pdf>

Scoring: There are 13-items (scorable), with a total score of 51. There are an additional 5-Items (non-scorable)

Questionnaire administration duration: 10-20 minutes to complete.

For the purpose of this dissertation research, the use of the SIDI-F questions and answers will be used for evaluating the levels of change (from pre- study and post- study), rather than diagnostic tool for HSDD.

INTRODUCTION:

The following questions are used to assess your feelings of sexual interest or desire as well as some other aspects of your sex life. By sexual desire, I mean your interest in having a sexual experience whether alone or with a partner. Sexual interest involves thoughts, feelings, and / or a willingness to become involved in some sort of sexual activity.

Please remember that there are no right or wrong answers to the questions I will be asking. I am most interested in what you feel – not what you think you should feel or what you think others feel. If you do not understand any of the questions, please let me know.

NON-SCORED ITEM

SEXUAL ACTIVITY

Over the past month, approximately how many times did you engage in sexual activity either alone or with your partner? By sexual activity, I am referring to sexual caressing, genital stimulation (including masturbation) or intercourse.

Never

1 - 2 times a month

3 - 4 times a month

More than once a week

SCORED ITEMS

I will now be asking you more specific questions about your sexual experiences. The following questions investigate your interest / enthusiasm and pleasure you may (or may not) experience when you think generally about sexual matters or when you think about engaging in sex.

The following question asks you about your relationship with your partner / spouse.

ITEM 1: RELATIONSHIP- SEXUAL

How satisfied are you with the sexual aspect of your relationship with your partner?

Dissatisfied 0

Somewhat dissatisfied 1

Neutral 2

Somewhat satisfied 3

Satisfied 4

ITEM 2: RECEPTIVITY

Over the last month, did your partner approach you for sex, how often did you accept? When you accepted, what was your level of enthusiasm?

Partner never approached for sex 0

No enthusiasm or did not participate 0

Infrequent (less than half the time) & participated solely / primarily out of obligation 0

Infrequent (less than half the time) & participated with some interest, but with little sexual enthusiasm 1

Infrequent (less than half the time) & receptive to partners approach, interested sexually 2

Infrequent (less than half the time) & sexually enthusiasm and encouraging 3

Often (half the time or more, but not always) & participated solely/ primarily out of obligation 1

Often (half the time or more, but not always) & participated with some interest, but with little sexual enthusiasm 2

Often (half the time or more, but not always) & receptive to partners approach, interested sexually 3

Often (half the time or more, but not always) & sexually enthusiasm and encouraging 4

Always & participated solely/ primarily out of obligation 1

Always & participated with some interest, but with little sexual enthusiasm 3

Always & receptive to partners approach, interested sexually 4

Always & sexually enthusiasm and encouraging 5

ITEM 3: INITIATION

Over the past month, how frequently did you do anything to encourage sex with your partner?

Did not encourage/initiate 0

1-2 times/month 1

3-4 times/month 2

More than once a week 3

The next questions are about your overall level of desire

ITEM 4: DESIRE- FREQUENCY

Over the past month, how frequently have you wanted to engage in some kind of sexual activity, either with or without a partner? How strong was your desire to engage in sex?

Please answer this question even if you did not actually engage in any sexual activity but were aware of wanting to be sexual in some way.

Never wanted to have sex 0

1 - 2 times / month & Not intense at all (fleeting) 0

1 - 2 times / month & Mildly intense 1

1 - 2 times / month & Moderately intense 2

1 - 2 times / month & Extremely intense 3

3 - 4 times / month & Not intense at all (fleeting) 1
3 - 4 times / month & Mildly intense 2
3 - 4 times / month & Moderately intense 3
3 - 4 times / month & Extremely intense 4
More than once a week & Not intense at all (fleeting) 1
More than once a week & Mildly intense 3
More than once a week & Moderately intense 4
More than once a week & Extremely intense 5

Item 5: AFFECTION

Over the past month, how often have you wanted to have physical affection (other than sex, e.g., touching, holding, kissing)? How intense would you say was your desire for physical affection?

Never wanted to have physical affection 0
Less than once a week and Mildly intense 1
Less than once a week and Moderately intense 2
Less than once a week and Extremely intense 3
More than once a week but not every day and Mildly intense 2
More than once a week but not every day and Moderately intense 3
More than once a week but not every day and Extremely intense 4
Daily and Mildly intense 3
Daily and Moderately intense 4
Daily and Extremely intense 5

Item 6: DESIRE- SATISFACTION

Over the past month, how satisfied were you with your overall level of sexual desire/ interest?

Dissatisfied 0
Somewhat dissatisfied 1
Neutral 2
Somewhat satisfied 3
Satisfied 4

Item 7: DESIRE- DISTRESS

Over the past month, when you thought about or were approached for sex, how distressed (worried, concerned, guilty) were you about your level of desire?

Never distressed 4

Mildly distressed 3

Moderately distressed 2

Markedly distressed 1

Extremely / severely distressed 0

Item 8: THOUGHTS- POSITIVE

How often have you had thoughts about sex over the past month? When you thought about sex, what was your level of interest/ strength of desire in having sex?

Never thought about sex 0

1 - 2 times / month and Never associated with desire 0

1 - 2 times / month and Mild desire 1

1 - 2 times / month and Moderate desire 2

1 - 2 times / month and Intense desire 3

3 - 4 times / month and Never associated with desire 1

3 - 4 times / month and Mild desire 2

3 - 4 times / month and Moderate desire 3

3 - 4 times / month and Intense desire 4

More than once a week and Never associated with desire 1

More than once a week and Mild desire 3

More than once a week and Moderate desire 4

More than once a week and Intense desire 5

Item 9: EROTICA

Over the past month, how did you react to sexually suggestive material (such as love scenes in a movie or on television, erotic pictures, stories in magazines and books)?

Not interested 0

Mildly interested 1

Moderately interested 2

Highly interested 3

Item 10: AROUSAL- FREQUENCY

Over the past month, when you had sex, how easily did you become aroused (sexually excited, lubricated, etc.) in response to sexual stimulation?

No sexual activity 0

Never became aroused 0

Infrequent (less than half the time) 1

Often (half the time or more, but not always) 2

Always 3

Item 11: AROUSAL- EASE

Over the past month, when you had sex, how easily did you become aroused (sexually excited, lubricated, etc.) in response to sexual stimulation?

No sexual activity 0

Not at all aroused 0

Aroused with difficulty 1

Aroused somewhat easily 2

Easily aroused 3

Item 12: AROUSAL- CONTINUATION

Over the past month, once you started to become sexually aroused, did you want more stimulation? If yes, how strong was your desire to be further/more stimulated?

No sexual activity 0

No desire/Never aroused 0

Little desire 1

Moderate desire 2

Strong desire 3

Item 13: ORGASM

Over the past month, when you had sex, how often did you have an orgasm? How easy was it for you to have an orgasm?

No sexual activity 0

Not able to achieve orgasm 0

Infrequent (less than half the time) and Achieved majority of orgasms with some difficulty 1

Infrequent (less than half the time) and Achieved majority of orgasms without difficulty 2

Often (half the time or more, but not always) and Achieved majority of orgasms with some difficulty 2

Often (half the time or more, but not always) and Achieved majority of orgasms without difficulty 3

Always and Achieved majority of orgasms with some difficulty 3

Always and Achieved majority of orgasms without difficulty 4

(POSSIBLE SCORE: 0-51)

NON-SCORE QUESTIONS

For background and informational purposes only

Item 1: RELATIONSHIP- GENERAL

How satisfied are you with your relationship as a whole?

Dissatisfied 0

Somewhat dissatisfied 1

Neutral 2

Somewhat satisfied 3

Satisfied 4

Item 2: THOUGHTS- NEGATIVE

Over the past month, when you thought about sex, or were approached for sex, did you feel any of the following negative feelings: turned off, anxious, repulsed, sick (negative feelings)?

Never turned off / felt negative 2

Somewhat turned off / felt somewhat negative 1

Definitely turned off / Strong negative feelings 0

Item 3: PAIN

Over the past month, did you experience genital pain during sex?

Yes, and it made me stop 0

Yes, but continued through the pain 1

Yes, but pain was transient 2

No pain 3

No sexual activity 4

The next questions ask you about your general well-being over the past month.

Item 4: MOOD

Over the past month, how has your mood been? Have you experienced any feelings of: sadness, hopelessness, helplessness, worthlessness? How often did you have such feelings?

Absent or clinically insignificant 5

Infrequent (less than half your waking hours) and Mild (Feelings of sadness, discouragement, low self-esteem, pessimism) 5

Infrequent (less than half your waking hours) and Moderate (Clear nonverbal signs of sadness, feelings of hopelessness, helplessness, or worthlessness about some aspects of life) 4

Infrequent (less than half your waking hours) and Severe (Intense sadness, hopelessness about most aspects of life, feelings of complete helplessness or worthlessness) 3

Infrequent (less than half your waking hours) and Very severe (Extreme sadness; intractable hopelessness or helplessness) 2

Often (half your waking hours or more, but not always) and Mild (Feelings of sadness, discouragement, low self-esteem, pessimism) 4

Often (half your waking hours or more, but not always) and Moderate (Clear nonverbal signs of sadness, feelings of hopelessness, helplessness, or worthlessness about some aspects of life) 3

Often (half your waking hours or more, but not always) and Severe (Intense sadness, hopelessness about most aspects of life, feelings of complete helplessness or worthlessness) 2

Often (half your waking hours or more, but not always) and Very severe (Extreme sadness; intractable hopelessness or helplessness) 1

Always and Mild (Feelings of sadness, discouragement, low self-esteem, pessimism) 3

Always and Moderate (Clear nonverbal signs of sadness, feelings of hopelessness, helplessness, or worthlessness about some aspects of life) 2

Always and Severe (Intense sadness, hopelessness about most aspects of life, feelings of complete helplessness or worthlessness) 1

Always and Very severe (Extreme sadness; intractable hopelessness or helplessness) 0

Item 5: FATIGUE

Over the past month, did you experience fatigue, tiredness, loss of energy? How often did you experience fatigue, tiredness, or loss of energy?

Absent or clinically insignificant 4

Infrequent (less than half your waking hours) and *Mild* (mild tiredness, loss of energy, fatigue, feelings of heaviness in limbs or being weighted down) 3

Infrequent (less than half your waking hours) and Moderate to Marked (prominent tiredness, loss of energy, fatigue, feelings of heaviness in limbs or being weighted down) 2

Often (half your waking hours or more, but not always) and Mild (mild tiredness, loss of energy, fatigue, feelings of heaviness in limbs or being weighted down) 2

Often (half your waking hours or more, but not always) and Moderate to Marked (prominent tiredness, loss of energy, fatigue, feelings of heaviness in limbs or being weighted down) 1

Always and Mild (mild tiredness, loss of energy, fatigue, feelings of heaviness in limbs or being weighted down) 1

Always and Moderate to Marked (prominent tiredness, loss of energy, fatigue, feelings of heaviness in limbs or being weighted down) 0

**APPENDIX C:
INTERVIEW/ SCREENING (PRE/POST)**

Date: _____

Time: _____ AM/ PM

Participant Name: _____

Participant Age: _____

Relationship Status: _____

Relationship Duration: _____

How would you describe your gender?

How would you describe your sexual orientation? Heterosexual Homosexual Bisexual

Are you currently under the care of a physician and / or counselor?

Do you have a medical condition that affects your quality of life, including your sexual health?

Are you using any of the following medications?

Antidepressants (e.g. SSRIs, Serotonin-Norepinephrine Reuptake Inhibitors [SNRAs], tricyclic antidepressants, monoamine oxidase inhibitors [MAOIs])

Antipsychotic Medications

Benzodiazepines

Mood Stabilizers

Antihypertensives Beta-blockers Alpha-blockers Diuretics

Cardiovascular Agents: Lipid-lowering agents Digoxin Histamine H₂-receptor blockers

Hormones: Estrogens Progestins Antiandrogens, GnRH agonists Narcotics Amphetamines

Anticonvulsants Steroids

Do you have psychological or emotional concerns that affect your quality of life, including your sexual health?

Depression, Sadness, Anxiety, Phobias / fears, Panic Attacks

Feelings of Shame, Guilt, Anger, Resentment

Hallucinations, Bipolar, Schizophrenia, Obsessive Compulsive issues, Impulsivity, Memory Impairments, Mood Swings, Addictions

Are you experiencing any of the following stressors?

Change in job, moving, financial concerns, birth of a child, death of a loved one, relationship distress, spiritual or cultural concerns

Do you have a history of sexual trauma or abuse (current or past)?

Have you used guided meditation or other forms of mediation before? If so, when and are you currently using?

**APPENDIX D:
DAILY JOURNAL FEEDBACK QUESTIONS**

Guided Imagery Feedback

Date: _____

Time: _____ AM / PM

Please circle the best answer.

How difficult was it for you *to make time to listen* to the guided imagery today?

Not difficult Slightly difficult Difficult Very difficult Extremely
difficult

What is your level of *relaxation and comfort, within your body* after listening to the guided imagery recording?

Very High High Moderate Low Very Low None at all

What is your level of *sexual interest* (feelings that include interest and / or wanting to have a sexual experience, feeling receptive to a partner's sexual initiation, interest in self masturbation, and / or thinking or fantasizing about having sex) after listening to the guided imagery recording?

Very High High Moderate Low Very Low None at all

Feedback: thoughts, feelings / emotions and / or images that came up for you while listening to the recorded guided imagery:

APPENDIX E:
EXPLANATION OF GUIDED IMAGERY AND STUDY PROCESS FOR
PARTICIPANTS

How and why it works:

Belleruth Naparstek, a leader in the study of guided imagery writes in her book, *Staying Well with Guided Imagery*, “guided imagery is a form of directed day dreaming, a way of using your imagination very specifically to help the mind and body heal, stay strong and perform as needed.”

Guided imagery uses a person’s senses, which allows a person to access deeper parts of their inner wisdom and to view their feelings and ideas in a profound way. This influences the mind and body connection and one’s internal wisdom. These physiological and psychological processes can then enhance healing and change.

Research has shown that guided imagery focused on relaxation, has the potential to positively impact an individual’s emotional well-being, sense of calmness, and overall relaxation and improve concentration.

As you practice relaxation you will find yourself relax more easily and more quickly each time. Relaxation is something that you can learn, just like learning to play the piano or to play a new game and you'll get better and better the more you do it. As you become more familiar with how it feels to be relaxed, you will notice the numerous benefits that relaxation can provide for you, such as becoming more relaxed in general, being better able to cope with the stresses of everyday life, reduce feelings of anxiety and worry and even relax the parts of your body that may be experiencing discomfort. Guided imagery also has the potential to create a better attunement to one’s desires and enhance the ability to give and receive pleasure.

Guided Imagery for Sexual Concerns:

1 in 3 women report having sexual concerns, including inhibited or low sexual desire and sexual dissatisfaction. *Sexual desire and satisfaction are core to sexuality.*

A woman’s sexual interest and desire can be impacted by factors such as: physical changes, life stressors, psychological and emotional concerns, quality of relationships or attitudes regarding sex.

Research indicates that imagination and fantasy can positively impact sexual attitudes and sexual interest levels.

Belleruth Naparstek states that “Sensory images are the true language of the body, the only language the body understands immediately and without question. The body does not discriminate between sensory images in the mind and those that we call reality. Although images do not have to be intense impacts on the body, as with the real events, they do enlist the same essential quality of experience in the body.”

Sexual arousal (and sensually focused awareness, desire / interest) often operate in the same way. The body is just as enthusiastic about sexual fantasy, as reality, and sometimes more so. Here again, the body is responding as if the images are actual events.

Research Purpose:

Currently, there is little research regarding the collocation and impact of relaxation and sensually focused guided imagery for sexual desire / interest and sexual satisfaction in women.

The purpose of this research study is to determine if the combination of relaxation and sensually focused guided imagery can and will improve levels of sexual desire / interest and satisfaction in women.

APPENDIX F:
GUIDED IMAGERY SCRIPT (INTERVENTION TOOL)

Relaxation and Sensory and Body Focused Guided Imagery

Music: *Ambient Meditation Music, without soundscapes*, by A.G. & *Peacefulness*, by Silver Hoof

Script written by: Tiffany Stanley

Guided Imagery Focus: *relaxation, body awareness, and breathing, mind and body connection, sensations, and releasing held thoughts*

Begin by sitting in a chair or on your bed, in such a way that you can become totally relaxed and comfortable. Shifting your body so that you feel completely and fully supported, with your neck, head and spine aligned.

There is pleasure and comfort in enjoying the feeling of letting go and relaxing

For just a few moments, allow for a free and clear space, a place of stillness just for you. This is a time for you to refresh, to let go

So now...

Allowing yourself to settle into your space, gently closing your eyes and just thinking of yourself becoming more and more relaxed

You may want to place a hand on your heart and one hand on your abdomen, if this is comfortable to you.

Gently concentrate on your breathing; inhaling through your nose and exhaling through your mouth. Breathing deeply down into your body.

So now breathing in slowly, holding and releasing very slowly. And again, breathing in slowly, holding and releasing very slowly.

Allow your breathing to now return to a natural rhythm and perhaps set your hands in your lap
Notice any sensations in your body and let go of all the tension and stress, blowing out with each
breath

With each beautiful breath gather up all the unneeded tension and concerns, and breath it out of
your body with each exhale. Just watching and noticing your breath with friendly, loving
awareness.

If any unwelcomed thoughts come into your mind, simply notice the thoughts and send them out,
away with the breath. Perhaps place them in a bubble and just allow them to float away, out of
your mind, out of your body, out of your consciousness, floating away with the breeze, into the
distance...watch them disappear over the horizon.

Imagining allows for all that you want to feel and be, to come to you...what you imagine will
eventually become reality... for your intuitive mind believes what you imagine, it is malleable
and awaits your every word...so just gradually turn your attention inward, inward towards
yourself and focus on what it is that you want to feel...whatever it is that you desire.

Notice what it is that you're physically and emotionally feeling within you. As you breathe in
you are replacing any tension and discomfort with clean, fresh air and energy. Naturally and with
ease.

There's no need to force it, just imagine

See your body becoming very calm and at rest, allowing yourself to sink further into the surface
that your body rests upon.

(time est. 3.42.72 min.)

Guided Imagery Focus: *progressive body relaxation*

Now take a mental exploration through your body, so that you now can connect to the amazing aesthetics... that is all yours. Focus on each part of your body and invite the release and relaxation to come in, in its own way.

Resign to the process of letting go and letting your hardworking body rest...

Give yourself permission to explore...allow your natural interest in yourself to grow. You are safe and this is an experience of comfort. Remember you are always in control...

Now perhaps turning your attention to the subtle sensations of warmth moving all the way through you...through every vein, every muscle, cleansing you and giving you life.

Feet:

Begin with your feet and think of them getting very heavy, relaxing

Invite your feet to relax and let go of any tension that they may be holding on to, releasing, allowing your feet to become heavy, sinking down. And then become aware of your toes, each of your lovely toes. Simply imagine all the tension flowing out of your feet and becoming very loose and smooth.

Legs:

As you allow the relaxation of your feet and toes to deepen, bring your attention to the muscles of your legs, muscles that do so much work for you every day. Unknot, lengthen, warm, and let the tension leave legs

Hips:

Now invite your hips to join in...Focus on your hips, letting go of any tension... notice the relaxing sensations, and allow for comfort.

Back:

Let's check in with your back muscles and imagine all the muscles relaxing. Imagine each vertebra being warmed and relaxing deeply, lengthening and decompressing any pressure, loosening.

Pelvic area / Sexual areas:

Notice the tension that you may be holding in your pelvic area and the sexual areas of your lower body...allowing that area of your body to release and joyfully, just be. Allowing your body to go deeper and becoming more comfortable in the relaxation, this part of body becoming more relaxed and at ease.

Abdomen:

Many of us also hold stress and tightness in our pelvic area and abdomen, often without realizing. So now is a time to allow that tightness held within, to dissipate and be free
This is a time for you to be comfortable within your body and within your mind

Chest and organs:

And then releasing and relaxing the muscles of your chest, allowing your heart to expand, to feel nurtured and the organs and tissue within your chest and rib cage to release easily, deeply, comfortably, sinking down a little bit more.

Shoulders:

Go to your shoulders, between your shoulder blades and all the way down your arms.... Letting go and unwinding, dropping slightly, letting go of any held worries and the weight of the day.

Relax the muscles of your shoulders and arms

Wrist and Hands / Fingers:

Relaxing your wrists, your hands, your fingers. Is there any tension in these small delicate muscles...allow the tension to release

Neck:

Notice any tension that you may be holding in the muscles of your neck, the muscles that hold up your head all day. Mentally trace around your neck and as you do, imagine the muscles responding to the ease of relaxation and smoothing away all efforts.

Jaw / Head / Scalp / Face:

Relaxing any tension that you may be feeling in your jaw, your face, all the way up to your scalp...loosening the muscles, allowing your cheeks and your jaw to relax.

All the muscles around your eyes, allowing them to let go and imagining a pleasant sense of softening, warming and flowing down through your face. Like the gentlest, loving caress.

Overall Body:

Move down your body now, from the top of your head, down your neck, down your shoulders, all the way down your body.

Guided imagery Focus: appreciation for internal strength, relaxation, positive affirmations, sensuality, mind and body connection

Appreciating the power and vitality of your beauty... grateful for your capacity for healing and renewal... strong and steady and resilient. Identify any remaining traces of tension and let it go, let it flow out.

Allow yourself to have this...this comfort and peace. When you feel relaxed, your body begins to heal itself and become energized for the activities you want to pursue. There is a very pleasant and comfortable deep sense of relaxation now

Your body is kissed by perfection and enjoys being alive, filled with gratitude for just being.

Everything has become quiet and still and so now take a few moments, just to enjoy, enjoy the deep, relaxed state of body and mind. Your mind is capable of imagining, creating and enhancing whatever it desires, whatever it directs attention to and interest to... the mind is the most creative, sensual part of each of us and all of your body responds to what the mind thinks, envisions and to choses believe...

Continue to relax in this way for a few more moments, allowing yourself to have this worry-free space, allowing your body to heal and naturally rejuvenate, as it instinctively knows how to do.

(time: est. 7:21 min.)

Guided Imagery Focus: Safe & Sensual Place: *relaxation, mind and body connection, sensations, emotional awareness, senses*

Now, imagine a place where you feel safe and at peace, a sanctuary just for you. This can be a place that you have been to before, a place you have always wanted to go or a created, imagined place. Perhaps a place where you have experienced pleasure and enjoyment.

Maybe a secluded spot on an exotic island beach or the mountains. Perhaps floating through the air, light and free. This is a place where you can be free, fully alive, comfortable and healthy.

Wherever you want to go, that calls to you and provides for a deep sense of peace...

This beautiful, enchanted, serene place is where your mind can be calm, and slow down, where the mind and body can connect. Protected and free from feelings of anxiety, worry or guilt.

Everything is taken care of and the business of the world is shut out for a while.

Any anger or resentment is just washed away, cleared away. There is nothing that you must do, just be at peace.

In this place, you are surrounded by an abundance of light, flowing into you and filling you with energy. Enter this place as if walking through a door way, into your special realm.... gently closing the door behind you as you enter... and leaving the world behind for just a little while. Release yourself to this moment, to this place. Allow yourself to notice these sensations. This is a place where no shame or hurt exists. Maybe you are holding onto some unwanted thoughts or feelings of guilt or perhaps feelings of unworthiness in receiving love and pleasure. Many people do, but now is a time to let go of those thoughts and feelings...to float away... they are not necessary and are only beliefs, beliefs that you unintentionally picked up along your life, but they do not serve you...so send them away... release them, it's ok to let them go

This is a place where you can always come to, a place to reflect, to let yourself use the powers of your imagination, for exploration, for quiet, for healing and learning

Notice your sensations and notice a pleasant, energizing feeling filling the space around you. These feelings contain excitement and a sense of optimism.

A sense that something wonderful is about to happen. It is good and right for you to be here. There is magic in this place... it settles around you...notice the glow in the air...

There is light here that illuminates everything it touches, with exquisite brightness... vibrant color... all the love and sweetness that has ever been, every good wish is in this place and surrounding you.

Sound / hear:

Listen to the sounds, what do you hear? are there sounds of water, birds, is the wind blowing through the trees? Or the sound of stillness... Just enjoy...it's all here for you.

Sight / See:

See this place, in your mind's eye...look all around. What do you see? Taking it all in as it develops and evolves... enjoy the qualities of this space... all the details. Look to your right, look to your left, look up to the sky now and towards your feet, where do your feet rest? Notice yourself as you move through this space

You can feel the air...Dancing with energy... with a sense of gentle wonder

Guided Imagery Focus: Safe & Sensual Place: *relaxation, mind and body connection, sensations, emotional awareness, senses, positive affirmations; focus switched to sensual / sexual emphasis*

Look at yourself ... see how beautiful you are. You are made to be loved, to be sexual and to be appreciated just as you are. Your body is naturally created for loving and pleasure. Your creative mind is overflowing with an abundance of erotic and enjoyable ideas for sexual touch and pleasure. Allow for the space to expand, to make room for your ideas...

There is warmth, softness in your heart... Waves of nurturing, of love ... Soothing away any torn or tender places...You are magnetic, attractive and loving, you are a magnificent lover and can be satisfied. Allow for the waves of pleasure to wash over you

Breathing in fully and deeply, sensing your strength and steadiness, noticing how resilient and relaxed you are.

You are in tune with your body, your vibrant, healthy and energized body. Send that excellent energy all the way to the base of your spine, then traveling slowly all the way up your spine to the top of your head, awaking your creative, confident energy.

And now breathing deeply, filling your whole body with this generous, healing energy...
releasing any remaining doubts, insecurities or fears... melted away, to unveil your erotic,
sensual self

You feel the warmth of this awareness begin to collect and radiate through your entire body...
Sending compassion and reassurance to every corner of your being... As you breathe, breathing
into the opening spaces of your heart and expanding...

Smell / fragrances:

Are there fragrances in the air... Notice them, notice the caress of the subtle fragrances and
aromas? Enjoy the perfect harmony

Touch / feel / textures:

Feel the textures of this space... What is the temperature of the air...feel it on your skin...
Allow your body to move in the ways it wishes to, feeling carefree. Imagine taking the time to
gently touch and feel your skin, sliding your hands along your arms, your face, touching and
noticing how the caress feels. Perhaps running your fingers through your hair and concentrating
on the response of your touch. Allow your body to stretch and expand in this most relaxing way.
Know that you are naturally sensual, sexual, and feminine. Believing in your intentional and
thoughtful sexual expression and sexual drive, for your own pleasure and your erotic enrichment.
Give yourself permission to explore, imagining your erotic and enjoyable images... receive
sensual pleasures.... your body was meant to receive and enjoy...all of you was made for
this...this beauty, these sensations... enjoy how they feel, to enjoy the envisioning the erotic
images...to hear, to see and to feel in this moment

(Pause for imagination to develop)

Just enjoy and immerse yourself in the erotic energy flowing through you, through your entire body. Allow all the good feeling sensations of this place expand within in.

Trust in yourself and your true desires and your willingness to receive pleasure and generously love

Giving yourself permission to explore...Being open to and honoring what appeals to you, whatever it is, it is good and right for you.

And now, knowing that you can always come to this place, a place of empowerment, of sensuality, you can always return by simply allowing yourself to recall this place and all the good it provides for you.

(est. 12:13 time min.)

Closing

When you are ready you will begin to slowly move towards your awake state. Allow yourself to return by breathing deeply and exhaling deeply...And feeling grateful for your ability to relax, to imagine

Knowing that you have an increased understanding of yourself in a very tangible way.... You have an open heart and mind, feeling love and peace, perhaps forgiveness where needed...feeling so good to be you. Feeling surrounded by an abundance of unconditional love and peace.

Taking a deep, full, energetic breath...

You might feel that something powerful has happened... a shift has occurred... And will continue to occur... With or without you consciously working on it... this is a new chapter in your life, of timeless acceptance and freedom to enjoy

You know with your whole heart... With your whole being... That all the love that you have ever felt, at any time, is alive and well... Rich and nourishing and boundless... Always available to sustain you...

You are connected to your life and your body in a new way now... perhaps inspired. Any discomforts have been softened... this has become a part of the depth and richness and texture of your life...

And so, knowing that you can return to this place whenever you wish... and whenever you ready, very gently and with soft eyes...coming back into the room. Breathing in and out, slowly open your eyes and return to your awake state. And once more taking a beautiful breath of life
(est. 2:51 time min.)