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The effects of SSRIs on sexual function in college students

Adriana Ivette Sanchez
University of Texas-Pan American

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THE EFFECTS OF SSRIS ON SEXUAL FUNCTION
IN COLLEGE STUDENTS

A Thesis

by

ADRIANA IVETTE SANCHEZ

Submitted to the Graduate School of the
University of Texas- Pan American
In partial fulfillment of the requirements for the degree of

MASTER OF ARTS

August 2010

Major Subject: Experimental Psychology

THE EFFECTS OF SSRIS ON SEXUAL FUNCTION
IN COLLEGE STUDENTS

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ADRIANA IVETTE SANCHEZ

COMMITTEE MEMBERS

Dr. Frederick Ernst
Chair of Committee

Dr. Cheryl Fielding
Committee Member

Dr. Russell Eisenman
Committee Member

August 2010

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ABSTRACT

Sanchez, Adriana Ivette, The Effects of SSRIs on Sexual Function in College Students. Master of Arts (MA), August, 2010, 50 pp., 6 tables, 6 figures, 43 references, 2 appendices.

The present study will investigate the effects of Selective Serotonin Reuptake Inhibitors (SSRIs) on sexual function in college students. Depression is the most prevalent disorder individuals' encounter. Depression could occur at any age but is most prevalent at 25-years to 44-years of age. The most common treatment is antidepressant specifically SSRIs, but it's most common side effect is sexual dysfunction. The study includes 328 participants. The average age of the participants is 23.9 years old and had a standard deviation of 6.8. The participants answered a questionnaire asking about their sexual function. This study resulted with a very low sample size of depressed participants. Therefore, a descriptive analysis was conducted to examine how college students responded to sexual function/ dysfunction questions.

DEDICATION

The completion of my thesis would not be possible without the love and support of God, my family, and friends. My mother, Maria M. Sanchez, my father, Ricardo A. Sanchez, my sister, San Juanita Sanchez, and my little brother, Ricardo A. Sanchez Jr. I love you all with all my heart and am truly grateful to be blessed with an amazing family like ours. Thank you for always being there for me and encouraging me to reach my goals. I love you!! To my friends: Miriam, Claudia, Celeste, Violeta, Mariana, and LaMont, who encouraged me and motivated me to complete this process and for always being there for me when I need them. I love you guys and you will always have a special place in my heart

ACKNOWLEDGEMENTS

I am thankful and grateful for the unconditional support of Dr. Frederick Ernst, my committee chair. Without you, I would not have been able to complete the thesis. Thank you for being so patient with me and guiding me through the whole process. Having you as a mentor and a professor has helped me reached my goals. I will never be able to thank you enough for everything you have done for me. Thanks Dr. E!!!

My committee members Dr. Russell Eisenman and Dr. Cheryl Fielding thank you for your support and guidance in completing my thesis.

Dr. Cheryl Fielding, having you as a colleague and friend as well as a mentor, has helped me along this path and I am eternally grateful for your time and wise words. I will always remember “Pero soy una mujer!!!!.”

A very special thank you to all the undergraduate students who dedicated their time and effort in completing this process.

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CHAPTER 1

REVIEW OF LITERATURE

Depression

Depression is the most prevalent disorder of all psychiatric disorders that many experience. Depression affects more females than males across diverse cultures and geographical locations. According to the National Institute of Mental Health, 9.5 of the population or about 18.8 million American adults suffer from a depressive illness. Depression not only affects the person who is suffering from this disorder but also those who care about them. Depression affects the normal functioning of the person's life. Therefore, the disorder interferes with their daily activities and interpersonal relationships. Divorce rates are higher among depressed individuals and their children are at elevated risk for psychopathology. According to Gotlib and Hammen (2002), in epidemiological studies, depression has been found to be associated with poor physical health, in particular, high rates of cardiac problems and higher rates of smoking. Even though depression is the most prevalent disorder, it is also the most treatable disorder.

Depression is classified as a mood disorder according to the DSM-IV TM (2005). Depression is categorized into different types depending on their severity. The depressive disorders consist of Major Depressive Disorder, Dysthymic Disorder, and Depressive Disorder

Not Otherwise Specified. Within these types of depression, there are some specifiers to describe the disorder.

Major Depressive Disorder.

Major Depressive Disorder is one type of the depressive disorders. According to the DSM-IV-TM (2005) the essential feature of Major Depressive Disorder is a clinical course that is characterized by one or more Major Depressive Episodes without a history of Manic, Mixed or Hypomanic Episodes. Major Depressive Disorders are identified by a diagnostic code that indicates if it was a single episode or recurrent and the current state of the disturbance. Major Depressive Disorders have specifiers to describe the current Major Depressive Episode. The specifiers to identify the severity of the episode if criteria are met are Mild, Moderate, Severe Without Psychotic Features, and Severe With Psychotic Features. The specifiers, In Partial Remission and In Full Remission, are used if the criteria are not met. There are two different diagnoses under the Major Depressive Disorder. The first diagnosis is Major Depressive Disorder, Single Episode. Under this diagnosis, the individual only has a single Major Depressive Episode. The other diagnosis is Major Depressive Disorder, Recurrent. Under this diagnosis, the individual has two or more Major Depressive Episodes. According to the DSM-IV-TM (2005) Major Depressive Disorders are associated with high mortality resulting in up to 15% of individuals with severe Major Depressive Disorder die by suicide. Major Depressive Disorders are more common in adolescents and adult females but the rates in men and women are the highest in the 25-to 44-year-old group. The average onset age is in the mid-20s, but could occur at any age. Individuals who have first-degree biological relatives with Major Depressive Disorder are 1.5-3 times more likely to have the disorder as well. Some individuals have only a single episode of Major Depressive Disorder, but approximately 50%-60% of those individual

can be expected to have a second episode. As the individuals experience more episodes, they are more likely to continue to have episodes. According to the DSM-IV-TM (2005), follow-up naturalistic studies suggested that 1 year after the diagnosis of a Major Depressive Episode, 40% of individuals still have symptoms that are sufficiently severe to meet criteria for a full Major Depressive Episode, roughly 20% continue to have some symptoms that no longer meet full criteria, and 40% have no Mood Disorder.

Dysthymic Disorder.

Dysthymic Disorder is a chronically depressed mood that occurs for most of the day more days than not for at least 2 years. Dysthymic Disorder also has specifiers to describe the age at onset and the characteristic pattern of symptoms in Dysthymic Disorder according to the DSM-IV-TM (2005). If the individual experiences symptoms of Dysthymic Disorder before the age of 21, the specifier is Early Onset. These individuals are more likely to develop Major Depressive Episodes. If the symptoms occur after the age of 21, the specifier is Late Onset. Individuals who experience Dysthymic Disorder describe their mood as being sad or down. In order to be diagnosed as having Dysthymic Disorder at least two of the following symptoms need to be present while feeling depressed: poor appetite or overeating, insomnia or hypersomnia, low energy or fatigue, low self-esteem, poor concentration or difficulty making decisions, and feelings of hopelessness. Some individuals may perceive themselves as being uninteresting or incapable. According to the DSM-IV-TM (2005), the most commonly encountered symptom in Dysthymic Disorder may be feelings of inadequacy, generalized loss of interest or pleasure, social withdrawal, feelings of guilt or brooding about the past, subjective feelings of irritability or excessive anger, and decreased activity, effectiveness, or productivity. Since these individuals frequently have these symptoms, they do not recognize they are suffering from Dysthymic

Disorder. Therefore, this disorder does not get diagnosed often. According to the DSM-IV-TM (2005), these symptoms must cause clinically significant distress or impairment in social, occupational, academic, or other important areas of functioning in order to be considered a disorder. In addition, the individual needs to have any symptom-free intervals that last no longer than 2 months during the 2-year period and not experiencing symptoms of Major Depressive Disorder in the initial 2 years. After the first 2 years, individuals could experience symptoms and be diagnosed with Major Depressive Disorder. It is important to note that these individuals could not experience to have any Manic, Mixed, or Hypomanic Episodes. Individuals who experience these symptoms because of the direct physiological effects of a substance or a general medical condition are not diagnosed with Dysthymic Disorder. According to the DSM-IV-TM (2005), Dysthymic Disorder may be associated with Borderline, Histrionic, Narcissistic, Avoidant, and Dependent Personality Disorders, and in children, it may be associated with Attention-Deficit/Hyperactivity Disorder, Conduct Disorder, Anxiety Disorders, Learning Disorders, and Mental Retardation. Unlike the Major Depressive Disorder, Dysthymic Disorder occurs equally in both sexes, but in adulthood women are two to three times more likely to develop Dysthymic Disorder than men. Individuals who have Dysthymic Disorder often have problems with school performance and social interaction. According to the DSM-IV-TM (2005), Dysthymic Disorder is more common among first-degree biological relatives of people with Major Depressive Disorder than among the general population.

Depressive Disorder Not Otherwise Specified.

Depressive Disorder Not Otherwise Specified includes disorders that do not meet the full criteria. According to the DSM-IV-TM (2005), examples of Depressive Disorder Not Otherwise Specified include a premenstrual dysphoric disorder where the individual experiences depressed

moods that interfere with their daily activities during their menstrual and post menstrual. It also includes minor depressive disorder where the episodes last at least 2 weeks but does not meet the criteria for Major Depressive Disorder. In addition, it includes recurrent brief depressive disorder where the individual experiences depressive episodes that last from 2 days up to 2 weeks and that occurs once a month not due to menstrual cycles. Also, it includes postpsychotic depressive disorder of Schizophrenia where the individual experiences a Major Depressive Episode during the residual phase of Schizophrenia. Moreover, Depressive Disorder Not Otherwise Specified is used for circumstances where the clinician has evaluated and concluded that the individual has a depressive disorder but is unable to determine whether it is due to a general medical condition or if it is induced by a substance.

Depressive Disorders are a predominant disorder. Many individuals experience some type of depressive symptoms but it is not considered a disorder unless it is affecting your daily life. There are three different types of Depressive Disorders. Even though Depressive Disorders are a predominant disorder, it can be treated. Depressive Disorders can be treated with interpersonal psychotherapy, cognitive-behavioral therapy, and antidepressants. Individuals with a mild type of depression would probably benefit from psychotherapy, but for individuals with moderate to severe type of depression would benefit from antidepressants.

Antidepressants

Antidepressants are used to treat depression. According to Breggin (2001), antidepressants are psychoactive drugs that have been approved by the FDA for use in treating clinical depression or major depression, as defined by the official diagnostic manual. There are

different types of antidepressants. The new antidepressants are called Selective Serotonin Reuptake Inhibitor (SSRI) and are the most used for treatment of depression in the United States of America. Serotonin is a neurotransmitter that is released by a neuron to make another neuron fire. The serotonin is released into the synapse. The SSRI antidepressant blocks the reabsorption of the serotonin causing an excess amount of serotonin to accumulate in the synapse. Serotonin is found in the anterior pituitary gland which controls the synthesis and the release of hormones such as testosterone and estrogen. Testosterone and estrogen are the hormones that are the central role in sexuality. Moreover, SSRIs disrupt dopamine nerves in the brain which also affects the sexual function of the individual. Antidepressants generally require 4-6 weeks to have a full response.

Using SSRIs can have some side effects. SSRIs, with the chemical name in parentheses, include Prozac and Sarafem (fluoxetine), Zoloft (sertraline), Paxil (paroxetine), and Celexa (citalopram). According to Breggin (2001), Prozac has insomnia, sleep disorder, abnormal dreams, somnolence, nervousness, agitation, anxiety, tremor, hypomania and mania, emotional liability (instability) confusion, dizziness, amnesia, libido decreased. Individuals may react to the antidepressants differently. Prozac, specifically, has many side effects. It affects the nervous system, digestive system, cardiovascular system, sensory system, respiratory system, urinary and genital system, the body as a whole, and the skin and appendages. Some individuals get overstimulated while others experience the opposite. Since the SSRIs cross the placenta, there are higher rates of birth defects during the first trimester and have premature babies. According to Breggin (2001), three different kinds of effects are particularly harmful: mania, psychosis, and other extreme mental and behavioral reactions; sexual dysfunction; and withdrawal problems when trying to stop the SSRIs.

Other relatively new antidepressants, with their chemical names in parentheses, in comparison with the SSRIs, are Effexor (venlafaxine), Serzone (nefazodone), Wellbutrin or Zyban (bupropion) and Remeron (mirtazapine). Bupropion has the common side effects of insomnia, anxiety, tremor/seizures, headache, and few sexual side effects. According to Gitlin (2002) safety concerns and the need for multiple doses within a day are the major drawbacks for bupropion. Venlafaxine is an SSRI with strong selective effects on serotonin. With higher doses, it is reported that Venlafaxine shows a greater efficacy than SSRI, but the side effects are still the same as the SSRIs. Nefazodone is used with patients who experience anxiety, agitation, and insomnia since nefazodone can be highly sedating. Given that nefazodone is highly sedating, the individual may experience difficulty in achieving high doses which is demonstrated to have a full antidepressant efficacy. Nefazodone has an advantage because it does not have sexual side effects and lack of weight gain. Mirtazapine is the least medication used to treat depression. Mirtazapine has the side effects of sedation and weight gain which makes it preferably to be prescribed to individuals with anorexia, agitation, and insomnia.

SSRIs cause hormonal dysfunctions that directly impair the ability to experience or enjoy sex. "Sexual dysfunction is a frequent SSRI effect" (Breggins, 2001). Decreased desire is very common in both sexes when taking SSRIs, but difficulties ejaculating for men and difficulties reaching an orgasm are frequent too. According to Breggins (2001), in subsequent published studies, reported rates for Prozac-induced sexual dysfunction in men range from 8 to 75 percent and the 75 percent came from one doctor's systematic queries of sixty consecutive patients. Individuals taking Paxil have reported to have sexual problems. The label of Paxil noted that 12.9 percent of men had problems ejaculating and 10 percent of men had sexual difficulties

including impotence. Zoloft also reported that 15.5 percent of men and 1.7 percent reported to have sexual difficulties. SSRIs also cause a loss of interest in sex.

SSRIs have shown to treat depression. When a patient is considering SSRIs as a treatment for their depression, the individual needs to take into consideration the medication's side effects, ease of administration, history of past response, and safety and medical issues. The individual also needs to be aware of any withdrawal problems.

Sexual Dysfunctions

According to the DSM-IV-TM (2005), the sexual dysfunctions are characterized by disturbance in sexual desire and in the psychophysiological changes that characterize the sexual response cycle and cause marked distress and interpersonal difficulty. The sexual dysfunctions include hypoactive sexual desire disorder, sexual aversion disorder, female sexual arousal disorder, male erectile disorder, female orgasmic disorder, male orgasmic disorder, premature ejaculation, dyspareunia, and vaginismus. Sexual dysfunctions are divided into four groups: Sexual Desire Disorders, Sexual Arousal Disorders, Orgasmic Disorders, and Sexual Pain Disorders. Since sexual dysfunctions are characterized by the sexual response cycle, it is divided into four different phases. The first phase is desire which consist of fantasies about sexual activity and the desire to have sexual activity. The second phase is excitement which consists of subjective sense of sexual pleasure and accompanying physiological changes. According to the DSM-IV-TM (2005), the physiological changes in males consist of penile tumescence and erection, and the physiological changes in females consist of vasocongestion in the pelvis, vaginal lubrication and expansion, and swelling of the external genitalia. The third phase is

orgasm which consists of a peaking of sexual pleasure, with release of sexual tension and rhythmic contraction of the perineal muscles and reproductive organs. The fourth phase is resolution which consists of a sense of muscular relaxation and general well-being. Sexual dysfunctions may occur at one or more of these phases. According to the DSM-IV-TM (2005), sexual dysfunctions have subtypes to indicate the onset, context, and etiological factors associated with the Sexual Dysfunctions. The subtypes to indicate the nature of the onset of Sexual Dysfunction are Lifelong Type, present since the onset of sexual functioning, and Acquired Type, developed only after a period of normal functioning. The subtypes to indicate the context in which the Sexual Dysfunction occurs are Generalized Type which applies if the sexual dysfunction is not limited to certain types of stimulation, situations, or partners, and Situational Type which applies if the sexual dysfunction is limited to certain types of stimulation, situations, or partners. The subtypes to indicate etiological factors are Due to Psychological Factors and Due to Combined Factors. According to DSM-IV-TM (2005), Due to Psychological Factors applies when psychological factors are judged to have the major role in the onset, severity, exacerbation, or maintenance of the Sexual Dysfunction, and general medical conditions and substances play no role in the etiology of the Sexual Dysfunction. Due to Combined Factors applies when psychological factors are judged to have a role in the onset, severity, exacerbation, or maintenance of Sexual Dysfunction, and a general medical condition or substance use is also judged to be contributory but is not sufficient to account for Sexual Dysfunction.

Sexual Desire Disorders.

Sexual Desire Disorders consist of Hypoactive Sexual Desire Disorder and Sexual Aversion Disorder. Sexual Desire Disorders are the most challenging sexual problems for clinicians to diagnose, assess, and treat according to Wincze and Carey (2001). According to DSM-IV-TM

(2005), Hypoactive Sexual Desire Disorder's essential feature is a deficiency or absence of sexual fantasies and desire for sexual activity and the disturbance must cause distress or interpersonal difficulty. The individual who is experiencing the disorder usually does not initiate sexual activity due to lack of interest in sex or may only be engaged when it is initiated by the partner. Hypoactive Sexual Desire Disorder may be consistent or episodic, and therefore, can recur at any time during remission. Hypoactive Sexual Desire Disorder is associated with sexual arousal and orgasmic difficulties. However, some individuals preserve the ability to experience sexual excitement and orgasms. Hypoactive Sexual Desire Disorder frequently develops during adulthood after a period of adequate sexual interest, but individuals who have a Lifelong Type disorder usually start during puberty.

Sexual Aversion Disorder avoids sexual activity. According to the DSM-IV-TM (2005), the essential feature of Sexual Aversion Disorder is the aversion to and active avoidance of genital sexual contact with a sexual partner. Individuals who suffer from Sexual Aversion Disorder report to experience anxiety, fear, or disgust when confronted by a sexual opportunity. Some individuals are repulsed with any sexual stimuli such as kissing and touching. Individuals who experience severe Sexual Aversion disorder when confronted with a sexual opportunity might experience Panic Attacks. Individuals with Sexual Aversion Disorder may avoid sexual situations by over involving themselves in different activities that will not encounter any sexual situations.

Sexual Arousal Disorders.

Sexual Arousal Disorders consist of Female Sexual Arousal Disorder and Male Erectile Disorder. Female Sexual Arousal Disorder is the inability to attain or maintain adequate lubrication in response to sexual excitement until the completion of sexual activity. According to

DSM-IV-TM (2005), the arousal response consists of vasocongestion in the pelvis, vaginal lubrication and expansion, and swelling of the external genitalia. Therefore, sexual intercourse can be painful causing the individual to avoid sexual encounters.

Male Erectile Disorder is the inability to attain, or to maintain an adequate erection until the completion of sexual activity. According to DSM-IV-TM (2005), there are different patterns of erectile dysfunction. Some males might not obtain any erection before sexual activity; while others might obtain an erection but lost the tumescence when attempting to penetrate. Other individuals might obtain an erection but lose tumescence before or during thrusting. Some males might only obtain an erection when masturbating or on awakening. Male Erectile Disorder is also referred to as “impotence” (Hatzimouratidis & Hatzichristou, 2007). Male Erectile Disorder is associated with sexual anxiety, fear of failure, concerns about sexual performance, and a decreased subjective sense of sexual excitement and pleasure. (American Psychiatric Association, 2005).

Orgasmic Disorders.

Orgasmics disorders consist of Female Orgasmic Disorder, Male Orgasmic Disorder, and Premature Ejaculation. Female Orgasmic Disorder is the persistent or recurrent delay in, or absence of, orgasm following a normal sexual excitement phase. Younger women are more prevalent to have Female Orgasmic Disorder since orgasmic capacities increase with age. Most Female Orgasmic Disorders are Lifelong Type. According to Hatzimouratidis & Hatzichristou (2007), some research suggest that females’ failure to achieve orgasm is related to intimacy issues, feelings of fear and anxiety, and a sense of not being safe within the intimate relationship or relationships in general. Female Orgasmic Disorders may affect the self-esteem, body image,

or relationship satisfaction. Many females increase the ability to orgasm when they experience a wider variety of stimulation and obtain knowledge about their own bodies.

Male Orgasmic Disorder is a persistent or recurrent delay in, or absence of, orgasm following a normal sexual excitement phase. The most common form of Male Orgasmic Disorder is when a male cannot reach orgasm during intercourse, but could ejaculate from oral stimulation, partner's manual, or masturbation. According to Hatzimouratidis & Hatzichristou (2007), Male Orgasmic Disorders is often thought of as beginning of adolescence or early adulthood because sexual intimacy becomes related with a negative life event or aspect.

Premature Ejaculation is the persistent or recurrent onset of orgasm and ejaculation with minimal sexual stimulation before, on, or shortly after penetration and before the person wishes it. According to Hatzimouratidis & Hatzichristou (2007), relationship stress, novelty of a relationship, anxiety, and issues related to control and intimacy can all play a role in Premature Ejaculation. Most males during self-masturbation can delay orgasms than during coitus. Premature Ejaculation may cause the individual to hesitate to begin dating out of fear or embarrassment from the disorder. Young males might learn to delay orgasm with sexual experience and aging. Some males do not encounter an ejaculation problems with their long-term relationship, but when they have a new sexual partner Premature Ejaculation might recur.

Sexual Pain Disorders.

Sexual Pain Disorders consist of Dyspareunia and Vaginismus. Dyspareunia is the genital pain that is associated with sexual intercourse occurring in both sexes. Dyspareunia is most commonly experienced during coitus, but it can occur before or after intercourse. According to DSM-IV-TM (2005), the pain experienced by females may be described as superficial during intromission or as deep during penile thrusting. The intensity of the pain may be from mild to

discomfort to sharp pain. Even though Dyspareunia is rarely complained about, it tends to be chronic and may result in sexual avoidance. According to Hatzimouratidis & Hatzichristou (2007), there is relationship between victims of rape and sexual abuse with Dyspareunia.

Vaginismus is the recurrent or persistent involuntary contraction of the perineal muscles surrounding the outer third of the vagina when vaginal penetration with penis, finger, tampon, or speculum is attempted. The involuntary spasms may interfere with sexual intercourse. The spasms may range from mild to severe. The anticipation of vaginal insertion may result in vaginal spasms. When the contraction is severe, it could cause pain. Vaginismus occurs more in younger females, females with negative attitudes toward sex, and females who are victims of rape and sexual abuse.

Sexual Dysfunctions are divided into four groups: Sexual Desire Disorders, Sexual Arousal Disorders, Orgasmic Disorders, and Sexual Pain Disorders. In a study by Kadri, Alami, and Tahiri (2002), they wanted to study the prevalence of sexual dysfunction in women in Casablanca, Morocco. They had 491 subjects and 26 percent had some type of sexual dysfunction. Their results showed that 18.3 percent had Hypoactive Sexual Desire Disorder, 15 percent had Sexual Aversion Disorder, 12 percent had Female Orgasmic Disorder, 8.3 percent had Sexual Arousal Disorder, 7.5 percent had Dyspareunia, and 6.2 percent had Vaginismus. Sexual Dysfunctions affect both sexes and the diagnosis must rely on the clinician judgement based on the individual's characteristics, interpersonal determinants, life context, and cultural setting.

SSRIs Affect Sexual Function

Individuals diagnosed with depression are usually prescribed antidepressants. The antidepressants most commonly used are Selective Serotonin Reuptake Inhibitors (SSRI) to help with the symptoms of depression. As stated before, SSRIs have side effects and the most frequent side effect is sexual dysfunction.

A study by Werneke, Northey, and Bhugra (2006) investigated the prevalence of psychosexual dysfunction associated with antidepressants. They also reviewed treatment options which are specific to the affected component of sexual functioning and antidepressants. They conducted a comprehensive literature review using Medline and Cochrane databases for depression and sexual dysfunction. Werneke et al. found up to 70 percent of patients with depression may have sexual dysfunction. The antidepressants most used were Tricyclic antidepressants, selective-serotonin reuptake inhibitors and venlafaxine. In addition, they found the non-serotonergic antidepressants and duloxetine were least likely to produce sexual dysfunction. The pharmacological treatment options included using antidepressants that were less likely associated with sexual dysfunction or antidotes to reverse sexual dysfunction. They concluded that sexual dysfunction may be a preventable or treatable side effect of antidepressants. Antidepressant-induced sexual dysfunction is highly complex because many factors may play a role. Recognizing the appropriate management for anti-depressant sexual dysfunction is important to those patients who value sexual function highly and their depression is maintained through the failure to restore sexual function.

A study conducted by Csoka, Bahrnick, and Mehtonen (2008) described three cases where the patients continued to experience sexual dysfunction after their discontinuation of selective

serotonin reuptake inhibitors. Their first case was a 29-year old male who was prescribed fluoxetine at the age of 18. Within three to four days of taking the antidepressant, he developed an Erectile Disorder. He was on the medication for only four months. The second case was a 44-year old male with persistent loss of libido, genital anesthesia, and ejaculatory anhedonia. He was prescribed citalopram in 2002 and after six weeks he experienced a resolution of the depressive symptoms and continued with citalopram for another four weeks. He was experiencing a decrease in libido, slight difficulty achieving an erection, and a mildly reduced intensity of orgasm. He stopped taking citalopram in 2004. Since he has stopped taking citalopram, he still continues to have declines in libido, genital sensitivity, and ability to achieve an erection and is experiencing genital anesthesia. The third case is 28-year-old married male with persistent loss of libido, genital anesthesia, and ejaculatory anhedonia. He was prescribed a variety of antidepressants during a 2-year period. He was prescribed paroxetine, sertraline, venlafaxine, and milnacipran in 2003. When he was taking the first three medications, his sexual interest remained high, but was experiencing a weak erection, a continuous, slow leakage of seminal fluid during sexual activity. He also experienced a decrease in genital sensitivity and anorgasmia prior to ejaculation. While he was taking milnacipran, his libido was decreasing and would no longer respond to sexual stimuli. In December 2004, he discontinued with the medications. His erectile dysfunction did reverse after the discontinuation but is still currently unable to respond to sexual stimuli, experience sexual pleasure, has no libido, little to no genital sensitivity, and ejaculation anhedonia. All of the cases, the individuals would undergo physical examinations and a variety of medical exams to explain their sexual dysfunction, but all medical examinations would return normal. Csoka et al. suggested that more studies should focus on sexual dysfunction after the discontinuation of SSRIs. SSRIs can cause long term side effects in

sexual response and the patients need to be informed about the high probability of sexual side effects caused by SSRIs.

A study conducted by Meston (2004) studied the placebo-controlled examination of a peripherally acting vasoactive drug on sexual response in women with selective serotonin reuptake inhibitor- induced sexual dysfunction. Meston also examined whether ephedrine will counteract the adverse sexual side effects associated with antidepressants. Nineteen sexual dysfunction females participated in this study. The participants filled out Brief Index of Sexual Functioning for Women (BISF-W) questionnaire to obtain information about their sexual desire, arousal, orgasm, and satisfaction during the prior 1-week period. Between 1 and 2 weeks later, the participants returned to fill out another questionnaire and were randomly assigned to a double-blind treatment for 3 weeks. One group would receive 21 capsules of ephedrine and the other 21 capsules of a placebo. They were instructed to self-administer one capsule orally at the same time daily. The time the participants would take their capsule would be approximately one hour prior to sexual activity. The participants would also fill out the BISF-W questionnaire weekly. Telephone interviews with the participants were conducted weekly to assess any potential side effects and as a reminder to fill out the questionnaire. After the 3 weeks, the participants returned and were given 21 capsules of ephedrine and 21 capsules of a placebo using a double-blind cross-over protocol. The participants were instructed to follow the same instructions from the previous 3 weeks. After the second 3-week period, the participants were asked to fill out a brief questionnaire that asked them to guess during which period they received ephedrine. Meston discovered that taking ephedrine one hour prior to sexual activity was associated with significant improvements in sexual desire and orgasm intensity/pleasure.

Improvements in sexual arousal and orgasmic ability were also significant in both ephedrine and the placebo.

In a study by Labbate, Grimes, Hines, Oleshansky, and Arana (1998), they investigated the effects of SRIs on sexual function in patients with major depressive disorder or anxiety disorders. They were determined to discover what aspects of sexual function were affected during a 2- or 3- month period focusing on orgasm. Sixty-one outpatients in a psychiatric clinic were assessed on five elements of sexual function. The elements measured were libido, erection/lubrication, orgasm quality, orgasm delay, and sexual frequency. The SRIs they were interested in were fluoxetine, sertraline, and paroxetine. The measures were taken before they started their treatment with SRIs and at monthly follow-up visits. Labbate et al. used Visual Analog Scales (VAS) to measure the five elements of sexual function. Their results showed that men and women with major depression had their orgasm quality lower and their orgasm was delayed during the 3-months compared to baseline. Anorgasmia was reported more in women than males but these results were not statistically significant. In addition, erection scores were lower over time but did not attain statistical significance. In contrast, lubrication, libido, and sexual frequency were not changed over the three months. Labbate et al. concluded that SRIs affects orgasm and perhaps erection. Moreover, their results showed that a significant number of patients reported anorgasmia after the initiation of SRI treatment.

A study conducted by Merino, Gonzales, Muniz, and Bobes (2000), evaluated the incidence of treatment-induced sexual dysfunction in depressed outpatients treated with five different antidepressants. This study included 100 depressed outpatients from two mental health centres in Gijón (Asturias). The patients were assigned to different treatment groups. Each group of individuals would take a different antidepressant based on the clinician's judgment. 20

individuals were assigned to clomipramine, 20 individuals to moclobemide, 20 individuals to nefazodone, 20 individuals to paroxetine, and 20 individuals to venlafaxine. The individual's evaluations were conducted at baseline and at month 1, 2, and 4. The assessments used were the Montgomery-Åsberg Depression Scale, both forms of the Clinical Global Impression and the Improvement Scale, the Sexual Function Questionnaire, SF-36, an ad hoc protocol, and the Eysenck Personality Questionnaire. The Sexual Function Questionnaire measured the treatment emergent changes in desire, arousal, and orgasm. Merino et al. were measuring eight parameters of sexual dysfunction: interest, pleasure, arousal, orgasm, frequency, erection, nocturnal penile tumescence, and ejaculation. Merino et al. found that at baseline 9% of patients had suspended sexual activity, 64% reported a decrease in sexual interest, 39% reported a loss of sexual pleasure, 30% reported inability to achieve adequate arousal, and 27% difficulties in achieving an orgasm. In males, 48.6% reported erectile problems and 8.5% reported ejaculatory problems. In addition, they found there was no statistically significant difference according to the drug type. During the 4-month evaluation, 6% reported no sexual activity, 25% reported a decrease in sexual interest, 28% reported a loss of sexual pleasure, 28% reported an inability to achieve appropriate arousal, and 52% reported difficulties in achieving an orgasm. Moreover, Merino et al. found a statistically significant difference according to the drug type in regards to arousal, orgasm, and ejaculatory absence. A total of 67% of the individuals reported some type of sexual dysfunction at month 4. In addition, the sexual dysfunction was associated with the type of drug administered. It was found that 95% of the paroxetin, 90% of the venlafaxine, 75% of the clomipramine, 55% of the nefazodone, and 20% of the moclobemide groups had sexual dysfunction. At the 4th month evaluation, there were no new cases of loss of interest in the moclobemide and nefazodone group. However, 10% of patients in the clomipramine and

venlafaxine, and 15% in the paroxetine treatment group developed a sexual dysfunction. When Merino et al. were evaluating pleasure, they found 0% of moclobemide, 15% of clomipramine, nefazodone, and paroxetine, and 20% of venlafaxine treatment group developed a dysfunction. 0% of moclobemide, 10% of nefazodone, 15% of clomipramine, 20% of paroxetine, and 25% of venlafaxine treatment group developed an arousal dysfunction. When evaluating an orgasm dysfunction, they found 0% of moclobemide, 10% of nefazodone, 40% of clomipramine, 45% of venlafaxine, and 80% of paroxetine treatment group developed the dysfunction. Merin et al. concluded that antidepressants significantly affect sexual response especially paroxetine, clomipramine, and venlafaxine. Paroxetine showed to have some affect on orgasmic dysfunction, ejaculatory delay, arousal dysfunction, and erectile dysfunction. Clomipramine demonstrated to have some affect on orgasmic dysfunction, arousal dysfunction, the most severe erectile dysfunction, and experienced less sexual pleasure. Venlafaxine presented some affects on orgasmic dysfunction, failure to ejaculate, and experienced less sexual pleasure. On the other hand, moclobemide and nefazodone demonstrated much less sexual dysfunctions. Sexual dysfunctions, according to this study, are associated with clomipramine, paroxetine, and venlafaxine antidepressants. .

Statement of Purpose

Depression is the most prevalent disorder individuals encounter and need treatment to lessen their symptoms. The treatment that is used most often is antidepressants, especially Selective Serotonin Reuptake Inhibitors (SSRIs). Selective Serotonin Reuptake Inhibitors have side effects and one common side effect is sexual dysfunction. Sexual dysfunction could impair

the sexual life of the individual. Past studies have found a correlation between the use of SSRIs and sexual dysfunction. The purpose of this study is to study the effects of SSRIs on sexual functioning in college students. I, therefore, hypothesize that college students, representing a sample of young adults, would reveal substantial prevalence of clinical depression perhaps as high as 10 percent. Second, I expect this clinical depressed sample to reveal more sexual dysfunction than the remainder of the sample. These hypotheses would be tested by the administration of a questionnaire measuring self-reported medication usage and various aspects of sexual function/dysfunction, specifically measures of sexual desire, sexual activity, and orgasmic function.

CHAPTER II

METHODOLOGY AND RESULTS

Participants

The study consisted of 328 participants. There were 294 females and 32 males. Two participants did not provide their gender. The average age of the participants was 23.9 years old and had a standard deviation of 6.8. Three of the participants did not provide their age information. Students were recruited from introductory and advanced undergraduate courses in psychology. The participants received extra credit points for their participation.

Questionnaire

The questions that were used to test the hypotheses of this study were embedded in a larger research project addressing multiple issues related to the experience of childhood sexual abuse. The primary independent variable in this study is whether the student reports having a clinical depression or the absence of a clinical depression which is derived from the response to question #19. The primary dependent variable is whether or not the student reports any sexual dysfunction. The questions for the independent and dependent variables of this study were specifically:

19. Are you currently taking prescriptive medications for depression? (independent variable)
30. How easy or difficult do you find talking about sex to your partner or boyfriend/girlfriend? (dependent variable)
32. During your current or previous romantic relationships, how often have you “cheated” on your partner by having sex with another person? (dependent variable)
42. Which of these terms describes your **typical** ability to achieve orgasm by masturbation? (dependent variable)
43. Which of these terms describes your **typical** ability to achieve orgasm with a partner? (dependent variable)
44. How would you rate the amount of your usual sexual desire? (dependent variable)
46. How would you rate the amount of your usual sexual activity? (dependent variable)

Procedure

The participants were recruited by visiting their classes and reading a generic invitation to participate in a study involving a questionnaire. The students were informed that the questionnaire would be addressing personal and sensitive issues. The students were informed that extra credit would be offered by their professor. The details of extra credit were at the discretion of the professor. The students who were interested were asked to sign on an appointment sheet which revealed the day, time, and room number to which they should report. Female students and male students were divided into different rooms. A total of five classrooms were used to administer the questionnaire. The participants were seated spread out to maximize

per time period in order to minimize the number of students in the room at one time. The participants were informed they could stop participating at any time. The person administering the questionnaire was a research assistant who was not involved in any research derived from the questionnaire.

As subjects showed up for questionnaire completion, they were handed an informed consent handout that they could keep for reference. At no time during the questionnaire was any form collected that had the student's name on it. Informed consent stated UTPA Institutional Review Board for the Protection of Human Subjects (IRB), and contact information was given if the student felt the need to discuss any portion of the questionnaire. The females had a female proctor and the males had a male proctor, so the students would feel more comfortable. Students were asked to take a seat distant from anyone else already seated in the room. They were asked to complete the questionnaire only if they felt the information in the consent form was acceptable. They were reminded to not provide their names anywhere on the questionnaire. During the completion of the questionnaire, the subjects were prompted twice to choose either continuation or termination of participation. Each questionnaire had a number on each page. Completed questionnaires were inserted into a box at the front of the room in which they completed them. The subjects were told to place their name on a sign-up sheet where they would identify their professor in order to receive extra credit.

Results

The primary hypothesis was not supported by the data collected in this study. Only 2.6% (13 of 328) of this sample reported taking prescriptive medication for depression. Ten of the

thirteen depressed students were females, but this proportion does not differ significantly from the proportion of the total sample who were female (Yates Chi-square $\chi^2 = 1.36$, $df = 1$, $p = 0.24$). Also the mean age (\pm s.d.) for those taking medication was 27.5 ± 6.3 compared to 23.8 ± 6.8 in the rest of the sample.

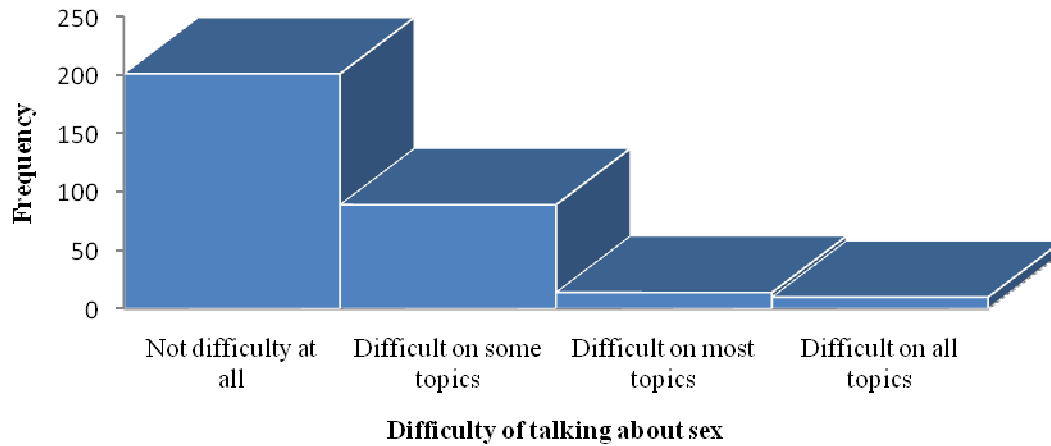
Because the prevalence of treated depression was so low in our sample, reliable comparison of sexual function between depressed students and the remainder of the sample could not be made. Therefore, I chose to examine the total sample responses to questions about sexual function as a simple descriptive study.

The sample of students addressing question # 30 revealed that most students did not report any difficulty in talking about topics dealing with sex. The frequencies and percentages of responses to this question are presented in Table 1. Only 314 students answered the question out of 328 students.

Table 1. Observed frequencies and percentages of student's responses to the question "How easy or difficult do you find talking about sex to your partner or boyfriend/girlfriend?"

	No difficulty at all	Difficult on some topics	Difficult on most topics	Difficult on all topics
Frequency	201	89	14	10
Percentage	64.01%	28.34%	4.45%	3.18%

Figure 1. Observed frequency of student’s response to question “How difficult or easy do you find talking about sex to your partner or boyfriend/girlfriend?”

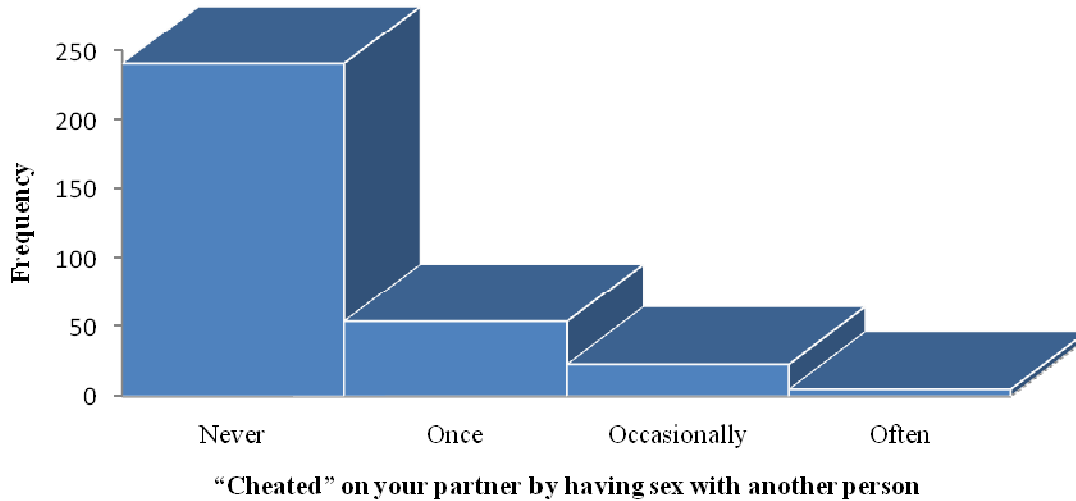


The sample of students addressing question #32, revealed that most students reported to have never cheated on their partner during their current or previous relationship by having sex with another person. The frequencies and percentages of responses to this question are presented in Table 2. Only 323 students answered the question out of 328 students.

Table 2. Observed frequencies and percentages of student’s responses to the question “During your current or previous romantic relationships, how often have you “cheated” on your partner by having sex with another person?”

	NEVER	ONCE	OCCASIONALLY	OFTEN
Frequency	241	54	23	5
Percentage	74.61%	16.71%	7.12%	1.54%

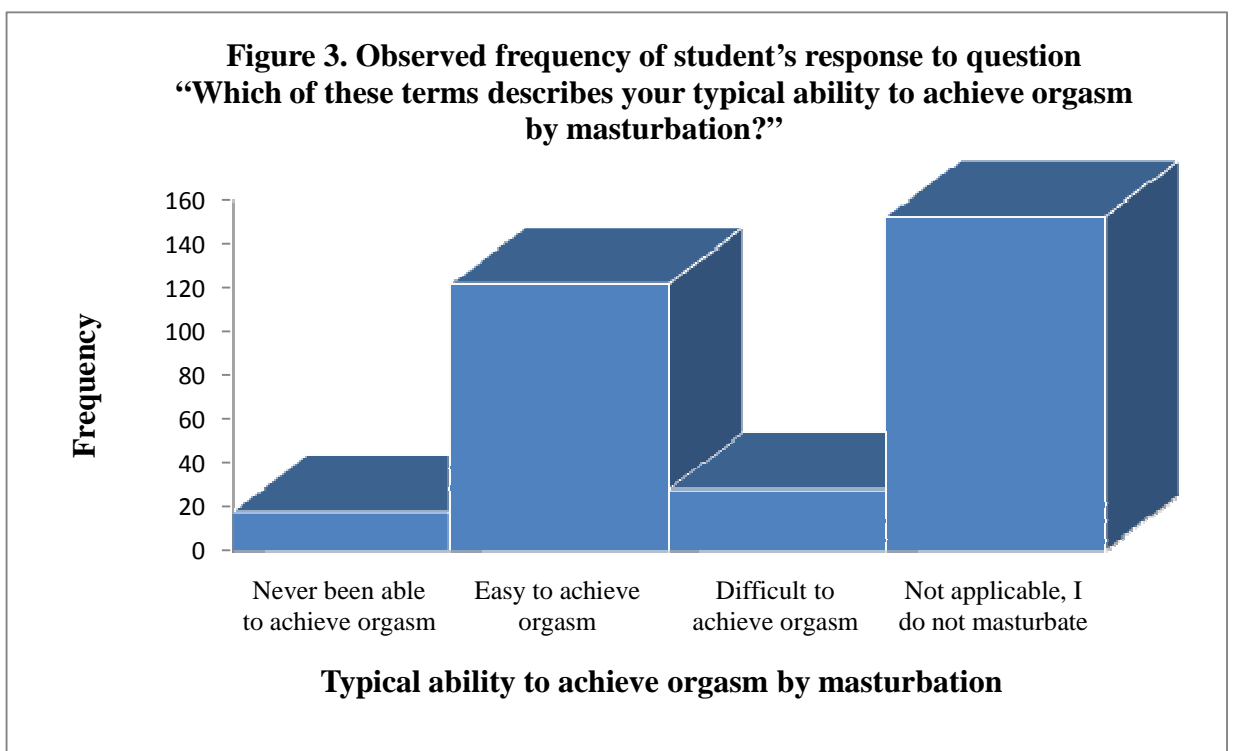
Figure 2. Observed frequency of student’s response to question “During your current or previous romantic relationships, how often have you “cheated” on your partner by having sex with another person?”



The sample of students addressing question #42 revealed that the highest number of the students do not masturbate; therefore they cannot achieve an orgasm by masturbation. However, the second highest response revealed that it is easy for them to achieve an orgasm. The frequencies and percentages are shown in Table 3. Only 321 students out of 328 students answered the question.

Table 3. Observed frequencies and percentages of student’s responses to the question “Which of these terms describes your **typical** ability to achieve orgasm by masturbation?”

	Never been able to achieve orgasm	Easy to achieve orgasm	Difficult to achieve orgasm	Not applicable, I do not masturbate
Frequency	18	122	28	153
Percentage	5.60%	38%	8.72%	47.66%

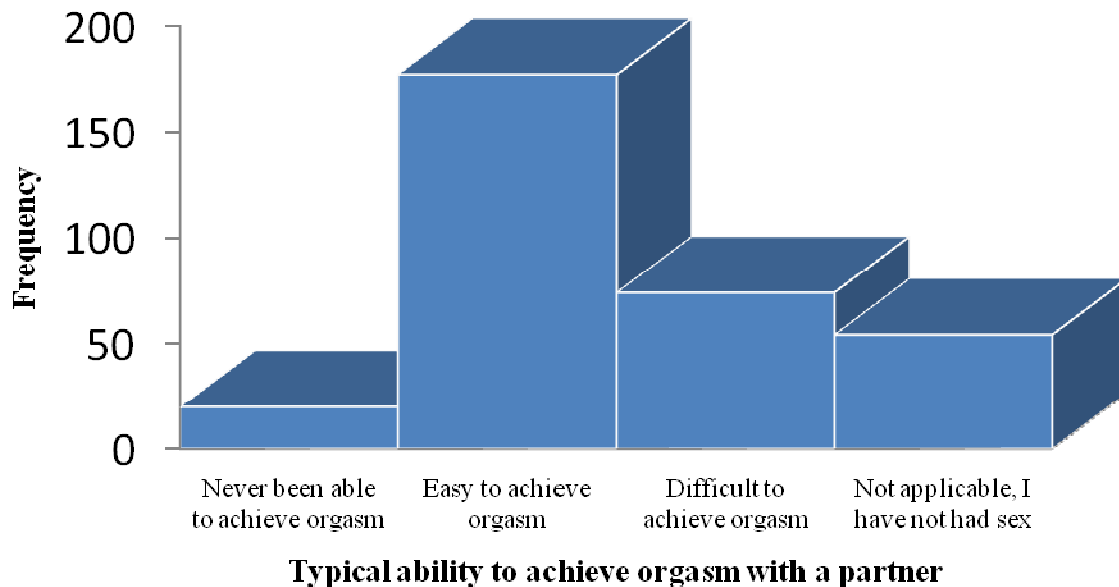


The sample of students addressing the question #43 revealed that most students reported that it was easy for them to achieve orgasm with a partner. The frequencies and percentages of responses to this question are presented in Table 4. Only 325 students out of 328 students answered the question.

Table 4. Observed frequencies and percentages of student’s response to the question, “Which of these terms describes your **typical** ability to achieve orgasm with a partner?”

	Never been able to achieve orgasm	Easy to achieve orgasm	Difficult to achieve orgasm	Not applicable, I have not had sex
Frequency	20	177	74	54
Percentage	6.15%	54.46%	22.77%	16.62%

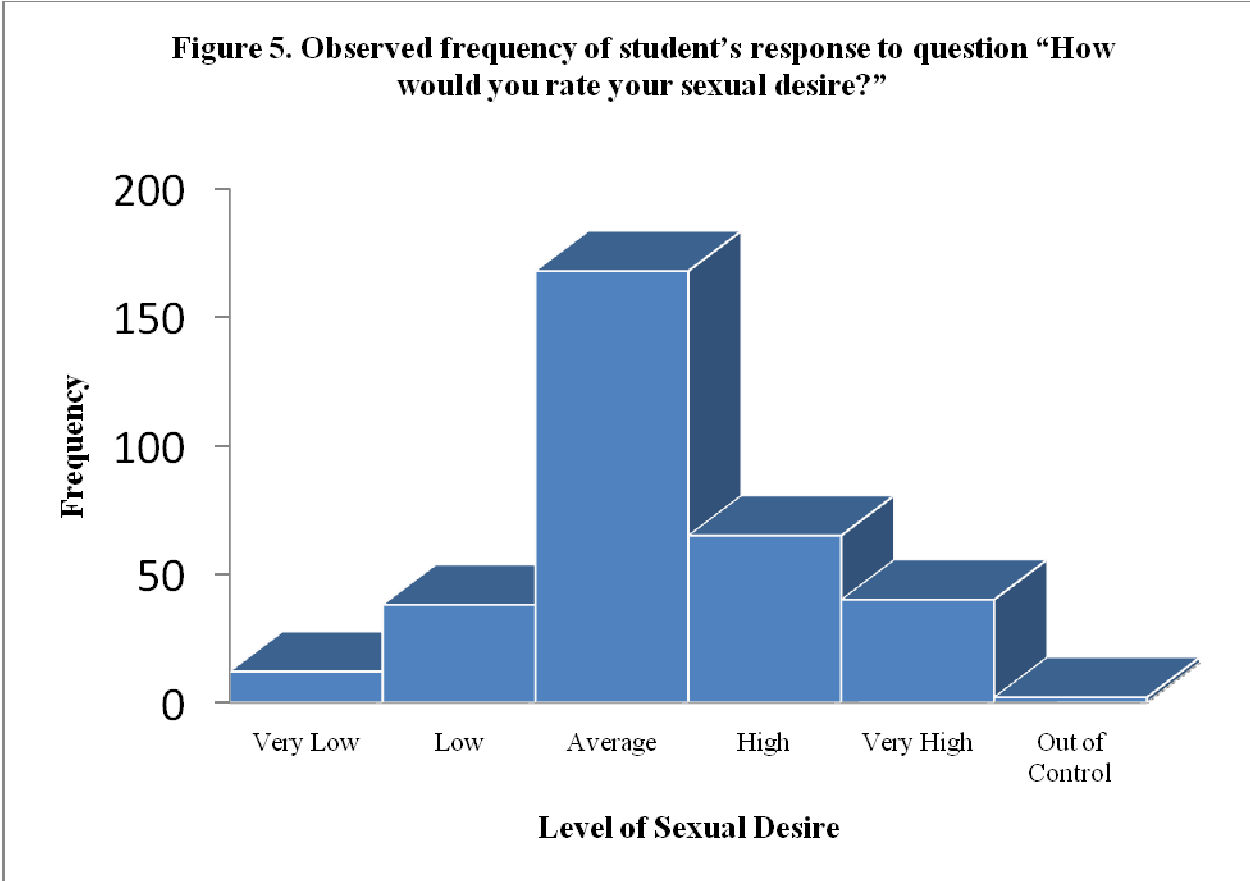
Figure 4. Observed frequency of student's response to question "Which of these terms describes your typical ability to achieve orgasm with a partner?"



The sample of students addressing question #44 revealed that most students rated their sexual desire as average. The frequencies and percentages of responses to this question are presented in Table 5. Only 325 students out of 328 students answered the question.

Table 5. Observed frequencies and percentages of student's response to the question, "How would you rate your sexual desire?"

	Very Low	Low	Average	High	Very High	Out of Control
Frequency	12	38	168	65	40	2
Percentage	3.69%	11.69%	50.77%	20%	12.31%	0.62%

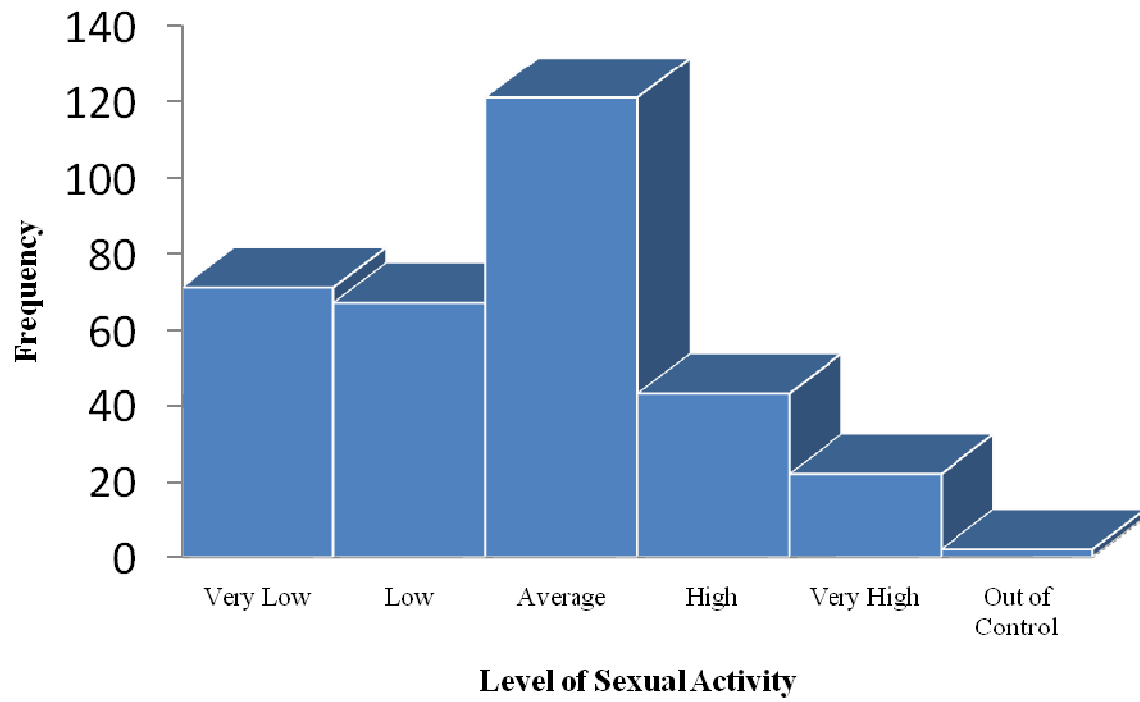


The sample of students addressing the question #46 revealed that the students rated their usual sexual activity as average. The frequencies and percentages of responses to this question are represented in Table 6. Two students did not answer this question.

Table 6. Observed frequencies and percentages of student’s response to the question, “How would you rate the amount of your usual sexual activity?”

	Very Low	Low	Average	High	Very High	Out of Control
Frequency	71	67	121	43	22	2
Percentage	21.78%	20.55%	37.12%	13.19%	6.75%	0.61%

Figure 6. Observed frequency to student's response to question, "How would you rate the amount of your usual sexual activity?"



CHAPTER III

SUMMARY AND CONCLUSION

Discussion

The hypothesis of this study was that the clinical depressed sample would reveal more sexual dysfunction than the remainder of the sample. In addition, college students, representing a sample of young adults, would reveal substantial prevalence of clinical depression perhaps as high as 10 percent. These hypotheses were tested by the administration of a questionnaire measuring self-reported medication usage and various aspects of sexual function/dysfunction, specifically measures of sexual desire, sexual activity, and orgasmic function. Clinical depression in this study was determined by whether they were taking any prescriptive medications as treatment.

The data collected in this study revealed a surprisingly small percentage of college students revealing that they were taking antidepressant medications (2.6%). Because the low prevalence generated a small N (13) of “clinically depressed students” reliable comparisons of this group with the remainder of the sample could not be achieved particularly because the comparisons of sexual function between these two groups would have had to be performed on questionnaire responses requiring chi squared analyses and the chi squared statistic is more reliable with larger comparison groups. However, it is of interest that these 13 students revealed

a statistically significant greater mean age, i.e., were older than the remainder of the sample who did not report usage of antidepressant medication. This is a very difficult finding to interpret. Lifetime prevalence of depression or any disorder is more likely as a person gets older and this could be the simplest of explanations. It might also be that students who are older have returned to the university or begun their educations later because of disappointments in jobs and relationships which might also correlate with the greater likelihood of being on medication as a student. While the data collected in this study do not reveal an unequivocal answer to this question, the reason depressed students are older is worth pursuing in future research in this population.

Despite an unexpected very low prevalence of clinical depression in this sample and a resulting inability to test the primary hypothesis concerning differences in sexual dysfunction between clinically depressed and nondepressed students, the questionnaire revealed interesting findings about sexual function in this population. So, what began as an hypothesis-driven study concluded as an interesting descriptive study addressing sexual function and dysfunction in college students. However, because the sample was disproportionately female (90%) the conclusions that can be drawn are probably more relevant to females specifically.

First, it appears clear that the vast majority of college students (64%) report no difficulty discussing sexual issues with their partners. The 28% who report difficulty on some topics are not likely to be reporting difficulties any more serious than the average married couples although these data do not address that question directly.

Interestingly, as revealed in Table 2 and Figure 2, one in four subjects revealed having cheated on their partner at least once. Because this sample was predominantly female, it might be

argued that the percentage here would have been higher with more males in the sample since it is well-known that males are more likely to report cheating on their partners than females.

Intriguingly, approximately half of the subjects reported that they do not masturbate. This result could be argued to have a strong cultural influence since the vast majority of the sample of this study is Hispanic. However, 38% of the subjects reported that it was easy to achieve orgasm by masturbation. This percentage appears lower than expected and is perhaps also influenced by reluctance to disclose not only influenced by the cultural factor but also because the sample was female and females may be more inhibited with regard to disclosing sexual activity accurately.

In contrast, a clear vast majority of college students (54.46%) reported that it was easy for them to achieve an orgasm with a partner. It was interesting to find that 6.15% have never been able to achieve an orgasm by a partner. This finding could be interpreted as evidence that those students might be experiencing an orgasmic disorder.

As revealed in Table 5 and Figure 5, approximately half of college students (50.77%) rated their sexual desire as “average.” It was interesting to find that only two college students rated their sexual desire as “out of control.” It was unexpected to find that the majority of college students rated their sexual desire as only “average” since sexual desire is high among that age level.

Interestingly, as shown in Table 6 and Figure 6, the second highest response provided by college students (21.78%) reported their sexual activity as “very low.” The highest response (37.12%) was “average.” Surprisingly, the responses of college students who reported their sexual activity were positively skewed.

Limitations

This study has limitations that in future studies a few issues should be taken into consideration. One limitation is that the sample size of clinically depressed participants was very low. Therefore, any reliable comparisons could not be examined. A questionnaire that would better assess depression could have been used to reveal a more accurate amount of college students that have depression since most are probably not taking anti-depressant medications. Even though a questionnaire like Beck Depression Inventory could have resulted in more depressed participants, this study was interested in the effects of SSRIs on sexual function but future studies might also look at the report of depression without medication and determine whether or not their sexual function was any better or worse than those who were taking antidepressant medications. In any event, for the purposes of the present study it was necessary for the participants to be taking prescriptive medications in order to assess the impact of those medications on sexual function. One other limitation is that the study consisted of a self-report questionnaire. Participant's responses could be underestimated due to inaccurate responses from reluctance to disclose intimate personal information. Moreover, sexual dysfunction questions concerning specifically to males were not asked. Questions about premature ejaculation and erectile dysfunction, for example, were failed be asked.

Conclusion

In conclusion, past research has examined the effects of Selective Serotonin Reuptake Inhibitors (SSRIs) on sexual dysfunction. This study was originally going to examine those

effects in college students. To my surprise, only thirteen students reported to be taking antidepressant medications at The University of Texas Pan-American out of 328 students who participated. Therefore, any reliable comparisons and assessments of sexual dysfunction in this sample could not be made. A descriptive study was conducted to examine the responses of sexual function/dysfunction in college students.

REFERENCES

- Althof, S.E., Leiblum, S.R., Chevret-Measson, M., Hartman, U., Levine, S.B., McCabe, M., Plaut, M., Rodrigues, O., & Wylie, K. (2005). Psychological and interpersonal dimensions of sexual function and dysfunction. *J Sex Med*, 2, 793-800.
- American Psychiatric Association. Diagnostic and statistical manual of mental disorders, 4th edition (DSM-IV-TM). Washington, DC: American Psychiatric Association; 2005.
- Balon, R. (2008). The DSM criteria of sexual dysfunction: Need for a change. *Journal of Sex & Marital Therapy*, 34, 187-197.
- Balon, R., & Segraves, R. T. (2008). Survey of treatment practices for sexual dysfunction(s) associated with anti-depressants. *Journal of Sex & Marital Therapy*, 34, 353-365.
- Balon, R., & Segraves, R.T. (2009). Clinical manual of sexual disorders. Arlington, VA: American Psychiatric Publishing, Inc.
- Basson, R. (2005). Women's sexual dysfunction: Revised and expanded definitions. *CMAJ*, 172(10), 1327-1333.
- Basson, R. (2008). Women's sexual desire and arousal disorders. *Primary Psychiatry*, 15(9), 72-81.
- Boyarsky, B. K., Haque, W., Rouleau, M. R., & Hirshfeld, R. M. A. (1999). Sexual functioning in depressed outpatients taking mirtazapine. *Depression and Anxiety*, 9, 175-179.
- Breggin, P.R. (2001). The antidepressant fact book. Cambridge, MA: Perseus Publishing.
- Butcher, S., & Ling, F. W. (2008). Sexual pain disorders: Both a psychogenic and biologic diagnosis. *Primary Psychiatry*, 15(9), 53-60.
- Charlton, R.S., & Yalom, I.D. (1997). Treating sexual disorders. San Francisco, CA: Jossey-Bass Inc.
- Csoka, A., Bahrack, A., & Mehtonen, O. (2008). Persistent sexual dysfunction after discontinuation of selective serotonin reuptake inhibitors. *J Sex Med*, 5, 227-233.

- DeFronzo Dobkin, R., Leiblum, S. R., Rosen, R. C., Menza, M., Marin, H. (2006). Depression and sexual functioning in minority women: Current status and future directions. *Journal of Sex & Marital Therapy*, 32, 23-36.
- Dennerstein, L., Anderson-Hunt, M., & Dudley, E. (2002). Evaluation of a short scale to assess female sexual functioning. *Journal of Sex & Marital Therapy*, 28, 389-397.
- Devane, C.L. (1995). Comparative safety and tolerability of selective serotonin reuptake inhibitors. *Human Psychopharmacology*, 10, S185-S193.
- Dickman, G. (2003). A role of sexologists: Helping manage medication-induced sexual dysfunctions associated with treatment of depression. *Contemporary Sexuality*, 37(5), i-viii.
- Edwards, J.G., & Anderson, I. (1999). Systematic review and guide to selective serotonin reuptake inhibitors. *Drugs*, 57 (4), 507-533.
- El-Sakka, A.I. (2006). Association of risk factors and medical comorbidities with male sexual dysfunctions. *J Sex Med*, 4, 1691-1700.
- Frohlich, P., & Meston, C. (2002). Sexual functioning and self-reported depressive symptoms among college women. *The Journal of Sex Research*, 39(4), 321-325.
- Gitlin, M. J. (1995). Effects of depression and antidepressants on sexual functioning. *Bulletin of the Menninger Clinic*, 59(2), 232-248.
- Gotlib, I.H., & Hammen, C.L. (2002). Handbook of depression. New York, NY: The Guilford Press.
- Hale, A.S. (1996). Dopamine and the use of SSRIs for conditions other than depression. *Human Psychopharmacology*, 11, S103-S108.
- Harsh, V., McGarvey, E. L., & Clayton, A. H. (2008). Physician attitudes regarding hypoactive sexual desire disorders in a primary care clinic: A pilot study. *J Sex Med*, 5, 640-645.
- Hatzimouratidis, K., & Hatzichristou, D. (2007). Sexual dysfunctions: Classifications and definitions. *J Sex Med*, 4, 241-250.
- Hayes, R.D., Dennerstein, L., Bennett, C.M., Sidat, M., Gurrin, L.C., & Fairley C.K. (2008). Risk factors for female sexual dysfunction in the general population: Exploring factors associated with low sexual function and sexual distress. *J Sex Med*, 5, 1681-1693.
- Hensley, P. L., & Nurnberg, H. G. (2002). SSRI sexual dysfunction: A female perspective. *Journal of Sex & Marital Therapy*, 28, 143-153.

- Kadri, N., Mchichi Alami, K.H., & MchakraTahiri, S. (2002). Sexual dysfunction in women: Population based epidemiological study. *Archives of Women's Mental Health, 5*, 59-63.
- Kaplan, H.S. (1979). Disorders of sexual desires. New York, NY: Brunner/Mazel, Inc.
- Masand, P.S., Gupta, S. (1999). Selective serotonin-reuptake inhibitors: An update. *Harvard Rev Psychiatry, 7*, 69-84.
- Mercan, S., Karamustafalioglu, O., Ayaydin, E. B., Akpınar, A., Goksan, B., Gonenli, S., & Guven, T. (2006). Sexual dysfunction in female patients with panic disorder alone or with accompanying depression. *International Journal of Psychiatry in Clinical Practice, 10* (4), 235-240.
- Merino, M. J., Gonzalez, P., Muniz, J., & Bobes, J. (2000). Sexual dysfunction in depressed patients undergoing treatment with antidepressants. *International Journal of Psychiatry in Clinical Practice, 4*, 311-317.
- Meston, C.M. (2004). A randomized, placebo-controlled, crossover study of ephedrine for SSRI-induced female sexual dysfunction. *Journal of Sex & Marital Therapy, 30*, 57-68.
- Michael, A., & O'Keane, V. (2000). Sexual dysfunction in depression. *Human Psychopharmacology, 15*, 337-345.
- Mitchell, K., & Graham, C. A. (2008). Two challenges for the classification of sexual dysfunction. *J Sex Med, 5*, 1552-1558.
- Murray, J.B. (1998). Physiological mechanisms of sexual dysfunction side effects associated with antidepressant medication. *The Journal of Psychology, 132*(4), 407-416.
- Nicolosi, A., Laumann, E. O., Glasser, D. B., Brock, G., King, R., & Gingell, C. (2006). Sexual activity, sexual disorders and associated help-seeking behavior among mature adults in five anglophone countries from the global survey of sexual attitudes and behaviors (GSSAB). *Journal of Sex & Marital Therapy, 32*, 331-342.
- Perlis, R. H., Fava, M., Nierenberg, A. A., Pollack, M. H., Falk, W. E., Kienke, A. S., & Rosenbaum, J. F. (2002). Strategies for treatment of SSRI-associated sexual dysfunction: A survey of an academic psychopharmacology practice. *Harvard Rev Psychiatry, 10*, 109-114.
- Pesce, V., Seidman, S.N., & Roose, S. P. (2002). Depression, antidepressants and sexual functioning in men. *Sexual and Relationship Therapy, 17*(3), 281-287.

- Saiz-Ruiz, J., Montes, J. M., Ibanez, A., Diaz, M., Vicente, F., Pelegrin, C., Vinas, R., Arias, F., Carrasco, J. L., & Ferrando, L. (2005). Assessment of sexual functioning in depressed patients treated with mirtazapine: A naturalistic 6-month study. *Human Psychopharmacol Clin Exp*, *20*, 435-440.
- Segraves, R. T. (2002). Female sexual disorders: Psychiatric aspects. *Can J Psychiatry*, *47*, 419-425.
- Spencer, S.L., & Zeiss, A.M. (1987). Sex roles and sexual dysfunction in college students. *The Journal of Sex Research*, *23*(3), 338-347.
- Steffens, D.C., Krishnan, K.R.R., & Helms, M.J. (1997). Are SSRIs better than TCAs? Comparison of SSRIs and TCAs: A meta-analysis. *Depression and Anxiety*, *6*, 10-18.
- Werneke, U., Northey, S., & Bhugra, D. (2006). Antidepressants and sexual dysfunction. *Acta Psychiatrica Scandinavica*, *114*, 384-397.
- Wincze, J.P., & Carey, M.P. (2001). *Sexual dysfunction: A guide for assessment and treatment*. New York, NY: The Guilford Press

APPENDIX A

APPENDIX A

INFORMED CONSENT WITH IRB APPROVAL

The University of Texas - Pan American

Approved by
UTPA IRB
IRB#2009-103-11
(Expires: N/A)

Informed Consent Form

Study title: Attitudes about Personal Questions in a College Population

This research survey is being conducted by Dr. Fred Ernst who is a professor in the UTPA Psychology and Anthropology department. I am conducting a research study primarily about attitudes of people toward being asked personal questions for the purpose of research. If you agree to participate, the questionnaires should take 45-minutes or less to complete. After completing the questionnaires, you will be asked to deposit them in a box and proceed to a room where one photocopy will be made of each of your hands with using an HP printer/copier. These hand copies will be coded to match your questionnaires *without revealing your identity*. After finger length measurements have been made from the photocopies, they photocopies will be shredded and disposed of using UTPA institutional procedures for disposing of shredded materials.

I emphasize that you should not put your name anywhere on the questionnaire. If you agree with the terms of this consent form, you are agreeing to complete the questionnaire but you should be aware that you can change your mind at any time and elect not to participate. If you elect not to participate or if you prefer to terminate your participation after you have started, you can destroy the questionnaire yourself or you can turn it in incomplete.

If you complete the questionnaire or parts of it, return it to the receptacle (box) at the front or side of the room. Be sure to print your name clearly on the sign-in sheet when you are done so that your professor can record your extra credit points. **HOWEVER, DO NOT PUT YOUR NAME ANYWHERE ON THE QUESTIONNAIRE ITSELF.**

If you would prefer not to participate, simply return the blank survey. You must be at least 18 years old to participate. *If you are not 18 or older, please inform the researcher and do not complete the survey.*

Researcher contact information: Name: Dr. Fred Ernst
Title: Professor
Dept: Psychology and Anthropology
The University of Texas-Pan American
Phone: 381-3323
Cell: 615-243-7783
Email: fernst@utpa.edu

If, at any time, you feel any need to speak with Dr. Ernst about anything related to having participated in this study, please feel free to call him on his cell phone at any time. The number is listed above.

This research has been reviewed by the Institutional Review Board for the Protection of Human Subjects (IRB). If you have any questions about your rights as a participant, or if you feel that your rights have been violated, please contact the IRB at 956-384-5004.

Please keep this sheet for your reference.

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APPENDIX B

APPENDIX B

QUESTIONNAIRE

**THANK YOU VERY MUCH FOR ASSISTING OUR RESEARCH PROGRAM BY
AGREEING TO COMPLETE THIS BRIEF QUESTIONNAIRE**

PLEASE REMEMBER THAT YOUR PARTICIPATION IS VOLUNTARY AND THAT YOU SHOULD FEEL FREE TO WITHDRAW FROM ANSWERING AT ANY TIME WITHOUT PENALTY. **DO NOT PUT YOUR NAME ANYWHERE ON THIS QUESTIONNAIRE!**

THIS DEMOGRAPHICS PAGE AND A COVER SHEET ARE PROVIDED TO KEEP YOUR ANSWERS PRIVATE. NO ONE ELSE WILL HAVE ACCESS TO THIS QUESTIONNAIRE EXCEPT THE PERSONS DOING THIS RESEARCH. THE INFORMATION YOU PROVIDE WILL BE PUT ONTO A COMPUTER DATABASE BY DR. ERNST OR A RESEARCH ASSISTANT AND THE QUESTIONNAIRES WILL BE IMMEDIATELY DESTROYED BY SHREDDING.

Please provide this information and answer the questions which follow ONLY IF YOU ARE COMFORTABLE DOING SO AND ONLY IF YOU WANT TO.

Please your preferred answer when given more than one option to choose from.

AGE ____ SEX ____ CLASS STANDING: *Freshman Sophomore Junior Senior*

RACE/ETHNICITY (Circle One): *Mexican-American European-American Asian-American*

African-American Other Hispanic/Latino _____ Other _____

State and Country of Birth _____ I am *right left* handed.

Are you Bi-Lingual? Yes No What is your "first language"? _____

What is your "second language"? _____

Age of your *mother* when you were born ____ Age of your *father* when you were born ____

Please the highest level of education attained by your mother.

<i>Some grade school</i>	<i>Completed grade school</i>	<i>Some high school</i>	<i>Completed high school</i>
<i>High school + additional training</i>	<i>Some graduate school</i>	<i>Some college</i>	<i>Completed college</i>
		<i>Graduate degree</i>	<i>Doctorate</i>

Please circle the highest level of education attained by your father.

Some grade school *Completed grade school* *Some high school* *Completed high school*
High school + additional training *Some college* *Completed college*

Some graduate school *Graduate degree* *Doctorate*
MARITAL STATUS _____ NUMBER OF CHILDREN _____

NUMBER OF OLDER SISTERS _____ NUMBER OF YOUNGER SISTERS _____

NUMBER OF OLDER BROTHERS _____ NUMBER OF YOUNGER BROTHERS _____

RELIGIOUS PREFERENCE _____

If you were a participant in a research project, how would you feel about being asked personal questions for research?

Very Uncomfortable *Uncomfortable* *Comfortable* *Very Comfortable*

How would you feel about answering questions about aspects of your sexual behavior?

Very Uncomfortable *Uncomfortable* *Comfortable* *Very Comfortable*

How would you feel about being asked if you have experienced sexual abuse as a child?

Very Uncomfortable *Uncomfortable* *Comfortable* *Very Comfortable*

How would you feel about answering questions concerning details of childhood sexual abuse without naming the person who did the abuse?

Very Uncomfortable *Uncomfortable* *Comfortable* *Very Comfortable*

Have you ever tried alcohol? *Yes* *No* If so, at what age did you begin using?

In the past month, how often have you had 5 alcoholic beverages (4 if you are female) in one night? _____

In the past year, how often have you had 5 alcoholic beverages (4 if you are female) in one night? _____

Other than alcohol, have you ever used other substances for recreational purposes? *Yes* *No*

If "Yes," at what age did you begin using? _____

***** **PLEASE ANSWER THE FOLLOWING QUESTIONS ONLY** *****
IF YOU ARE COMFORTABLE DOING SO AND ONLY IF YOU ARE SURE YOU WANT TO.

(Select one of these options): I elect to continue _____ I prefer to not continue _____

1. I believe that I was sexually abused before age 6. *Yes* *No*

2. I believe that I was sexually abused between ages 6 and 12. Yes No

3. I believe that I was sexually abused between ages 12 and 18. Yes No

4a. Were criminal authorities notified? Yes No 4b. Was legal action taken? Yes No

5. If "Yes" to any of # 1 through # 3, was the person a...? (Check as many as apply):

Stranger *Friend or acquaintance* *Relative* *Parent or caregiver* *Step-parent*

6. If "Yes" to any of #1 through #3, how often did this occur?

Once *Twice* *3 times* *4 times* *5 times* *More than 5 times*

7. If "Yes" to any of # 1 through # 3, please circle any of the following people you have **talked** to about these experiences.

Family Doctor *Psychologist* *Husband* *Parent* *Uncle/Aunt*
Psychiatrist *Social Worker* *Counselor* *Sibling* *Friend* *Teacher*

Other _____ (Please specify)

8. Which of these people did you talk to FIRST? _____

9. If "Yes" to any of #1 through #3, please estimate the **percentage** (0% to 100%) of "adjustment to" or "recovery from" the effects of the experience(s) you feel **at this time in your life**. _____%

10. I believe that I was *physically* abused as a child. Yes or No

If "Yes," how often? *Once* *Twice* *3 times* *4 times* *5 times* *More than 5 times*

11. How many caregivers did you have between the time you were born and age 17? _____

12. Did you ever see your caregivers hitting, throwing objects at each other, or using weapons against each other? Yes No

13. Did your mother ever experience mental or emotional problems? Yes No

drinking problems? Yes No

or was arrested for a crime? Yes No

14. Were you often left alone at home when an adult or responsible babysitter should have been there? Yes No

15. I was physically assaulted **after** the age of 17. Yes No

If "Yes," how often? *Once* *Twice* *3 times* *4 times* *5 times* *More than 5 times*

16. I was sexually assaulted **after** the age of 17. Yes No

If "Yes," how often? *Once* *Twice* *3 times* *4 times* *5 times* *More than 5 times*

**REMINDER: PLEASE ANSWER THE FOLLOWING QUESTIONS ONLY
IF YOU ARE COMFORTABLE DOING SO AND ONLY IF YOU ARE SURE YOU WANT TO.**

(Select one of these options): I elect to continue _____ I prefer to not continue _____

Please circle, check, or fill in the correct answer as it applies to you...

17. Have you ever been diagnosed with Attention Deficit Disorder (ADD or ADHD)? Yes No

If yes, at what age? _____ If yes, are you currently taking medication for this? Yes No

18. As a child, did you experience problems with bed-wetting? Yes No

19. Are you currently taking prescriptive medication for depression? Yes No

If yes, which medication(s) are you taking?

If yes, do you experience any adverse side effects from the medication? Yes/No

If yes, what side effects do you experience?

20. Have you had headaches for the past six months or more? Yes No

If yes, has a doctor diagnosed them as: *tension (muscle contraction) headaches?*

or *migraine (vascular) headaches?*

or *both?*

or *other*

21. If Yes, how long ago did your headaches begin? _____Weeks ago _____Months ago _____Years ago

22. If you have had headaches for the past six months or more, how do they affect your ability to function?

I have too few to cause me concern

I have them frequently, but I can ignore them

My headaches frequently interfere with my ability to function

My headaches interfere with my ability to function on a daily basis

23. If you have headaches, are most of your headaches? _____Mild _____Moderate _____Severe

24. Which statement best describes the frequency of your headaches? _____one each day _____more than one daily

_____one each week _____more than one weekly _____one per month _____more than 4-5 per month

25. How many *days per year* do you miss school or work because of a headache? _____

26. I am taking medication for headaches... *rarely* *occasionally* *frequently* *daily*

The medication(s) I take for headache
is/are _____

27. Are you currently in an intimate relationship? *Yes* *No*

28. If yes, how long have you been in your current relationship? _____

29. What is the longest period of time you have been in a continuous intimate relationship?

30. How easy or difficult do you find talking about sex to your partner or boyfriend/girlfriend?

No difficulty at all *Difficult on **some** topics but not others* *Difficult on **most** topics* *Difficult on **all** topics*

31. How many consensual sexual partners have you had in your lifetime? _____

32. During your current or previous romantic relationships, how often have you “cheated” on your partner by having sex with another person?

Never *Once* *Occasionally* *Often*

33. Approximately **how many** X-rated videos or films have you viewed in the past year? _____

What percentage (%) were viewed...

[*alone* _____%] [*with a female* _____%] [*with a male* _____%] [*with a group* _____%]?

34. On average, how many **hours per week** do you spend visiting internet porn sites or viewing pornographic media on your computer? _____

What percentage (%) were viewed...

[*alone* _____%] [*with a female* _____%] [*with a male* _____%] [*with a group* _____%]?

35. Does it ever sexually arouse you to think about being raped ? *Yes* *No*

36. Does it ever sexually arouse you to think about raping someone ? *Yes* *No*

37. How would you describe your sexual orientation/preference?

Exclusively Heterosexual *Occasionally Bi-Sexual* *Regularly Bi-Sexual* *Exclusively Gay or Lesbian*

38. I consider myself exclusively homosexual (gay or lesbian) but occasionally I have sex with the opposite sex.

Yes *No* *Not Applicable, I do not consider myself exclusively homosexual*

39. I am exclusively heterosexual but I *have thought about* being with someone of the same sex.

Never *Occasionally* *Often* *Always*

40. If you indicated you were sexually abused as a child, how much do you believe your sexual orientation is related to the experience of having been sexually abused?

0% 5% 10% 25% 50% 75% 100%

41. How many times, on average, do you masturbate per month? _____

42. Which of these terms describes your **typical** ability to achieve orgasm by masturbation?

_____ I have never been able to achieve orgasm this way _____ It is difficult for me to achieve orgasm

_____ It is easy for me to achieve orgasm _____ Not Applicable, I do not masturbate

43. Which of these terms describes your **typical** ability to achieve orgasm with a partner?

_____ I have never been able to achieve orgasm this way _____ It is difficult for me to achieve orgasm

_____ It is easy for me to achieve orgasm _____ Not Applicable, I have not had sex with anyone

44. How would you rate the amount of your usual sexual desire?

Very Low Low Average High Very High Out of Control

45. How much, if any, do you worry about your level of sexual desire?

None A Little Average A Lot

46. How would you rate the amount of your usual sexual activity?

Very Low Low Average High Very High Out of Control

47. How much, if any, do you worry about your level of sexual activity?

None A Little Average A Lot

Please continue to the next (last) page.

Please note that *NONE* of the activities described in the following questions are illegal or considered “abnormal” if performed alone or with another consenting adult...

Please indicate the frequency with which you have performed the following sexual activities:

“Threesome”:	<i>Never</i>	<i>Once</i>	<i>Occasionally</i>	<i>Often</i>	
“Foursome”:	<i>Never</i>	<i>Once</i>	<i>Occasionally</i>	<i>Often</i>	
Group Sex (more than 4):	<i>Never</i>	<i>Once</i>	<i>Occasionally</i>	<i>Often</i>	
Swinging: (trading sexual partners with one couple)	<i>Never</i>	<i>Once</i>	<i>Occasionally</i>	<i>Often</i>	
Fetish:	<i>Never</i>	<i>Once</i>	<i>Occasionally</i>	<i>Often</i>	
Bondage (“Receiver”)	<i>Never</i>	<i>Once</i>	<i>Occasionally</i>	<i>Often</i>	
Bondage (“Giver”)	<i>Never</i>	<i>Once</i>	<i>Occasionally</i>	<i>Often</i>	
(Non-Bondage) S & M:					
S:	<i>Never</i>	<i>Once</i>	<i>Occasionally</i>	<i>Often</i>	
M:	<i>Never</i>	<i>Once</i>	<i>Occasionally</i>	<i>Often</i>	
Auto-Erotic Asphyxiation: (Strangling to enhance orgasm)		<i>Never</i>	<i>Once</i>	<i>Occasionally</i>	<i>Often</i>
Bestiality: (Sexual Contact with an animal)		<i>Never</i>	<i>Once</i>	<i>Occasionally</i>	<i>Often</i>
Sex involving urine:	<i>Never</i>	<i>Once</i>	<i>Occasionally</i>	<i>Often</i>	
Sex involving feces:	<i>Never</i>	<i>Once</i>	<i>Occasionally</i>	<i>Often</i>	
Cross-Dressing:	<i>Never</i>	<i>Once</i>	<i>Occasionally</i>	<i>Often</i>	
Have you ever considered a sex-change?		<i>Yes</i>	<i>No</i>		

A resource sheet about sexual abuse & assault and physical abuse & assault is available. If you would like one, please let the Proctor know.

BIOGRAPHICAL SKETCH

Adriana Ivette Sanchez is the daughter of Ricardo A. Sanchez and Maria M. Sanchez. She earned her Bachelor of Arts in Psychology Degree in August 2007 from The University of Texas Pan-American. She earned her Master of Arts in Experimental Psychology Degree with an Emphasis in Applied Behavior Analysis in August 2010 from The University of Texas Pan-American. She completed her practicum at The Autism Treatment Center in San Antonio, TX. She worked as a Case Manager for at-risk students at La Joya I.S.D. She is currently working as a Lead Behavior Therapist at The Autism Treatment Center Rehabilitation Agency.