SEXUAL SELF-SCHEMAS: AN EXPLORATION OF THEIR IMPACT ON
FREQUENCY OF MASTURBATION AND SEXUAL ACTIVITY, SEXUAL
SATISFACTION, AND MARITAL ADJUSTMENT

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ABSTRACT

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This study aimed to assess whether differences among categories of sexual self-schemas of men and women existed for weekly frequency of masturbation and sexual activity, level of sexual satisfaction, and level of marital adjustment in the context of marital relationship. In order to evaluate this, the Sexual Self-Schema Scale (Hill, 2007) was translated into Turkish, and its psychometric quality was tested on undergraduate university students. In a sample of 204 married individuals, the interrelationship between sexual self-schema categories and study variables was evaluated through univariate analyses of covariance. Results revealed that the Sexual Self-Schema Scale consisted of three factors in the sample of university students: Loving/Compassionate, Sensual/Stimulating, and Direct/Outspoken. However, the pattern of factors differed for married individuals; factors were labeled as Loving/Warm, Direct/Outspoken, and Reserved/Conservative in this sample. For married individuals, differences among categories of sexual self-schemas were reported for frequency of sexual activity, sexual satisfaction and marital adjustment. Specifically, individuals having positive sexual self-

schemas in the present study reported higher frequency of sexual activity, higher levels of sexual satisfaction and marital adjustment in their relationships compared to aschematic and negative schematic individuals. However, weekly frequency of masturbation did not result in any difference among categories. Moreover, gender differences were demonstrated. Women were shown to endorse lower levels of sexual satisfaction and to engage in less frequent masturbation than men. After findings were evaluated, limitations were discussed with an emphasis on recommendations for future research, and implications for clinical psychology were mentioned.

Keywords: Sexual self-schemas, masturbation, sexual activity, sexual satisfaction, marital adjustment.

ÖZ

CİNSEL BENLİK ŞEMALARI: ÖZDOYUM VE CİNSEL ETKİNLİK SIKLIĞI, CİNSEL DOYUM VE EVLİLİK UYUMU ÜZERİNDEKİ ETKİLERİNİN BİR ARAŞTIRMASI

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Bu çalışma kadınların ve erkeklerin cinsel benlik şeması kategorileri arasında haftalık özdoyum ve cinsel etkinlik sıklığında, cinsel doyum ve evlilik uyumu düzeylerinde farklılıkların var olup olmadığını değerlendirmeyi hedeflemiştir. Bu değerlendirmenin yapılması amacıyla, Cinsel Benlik Şeması Ölçeği (the Sexual Self-Schema Scale, Hill, 2007) Türkçe'ye çevrilmiştir ve üniversite lisans öğrencileri üzerinde ölçeğin psikometrik niteliği test edilmiştir. 204 evli bireyden oluşan bir örneklemde, cinsel benlik şeması kategorileri ve çalışma değişkenleri arasındaki ilişki tek değişkenli kovaryans analizi yoluyla değerlendirilmiştir. Sonuçlar Cinsel Benlik Şeması Ölçeği'nin üniversite öğrencileri örnekleminde üç faktörden oluştuğunu göstermiştir: Sevgi dolu/Şefkatli, Şehvetli/Tahrik edici olan ve Dolaysız/Açık sözlü. Ancak, faktörlerin örüntüsü evli bireyler için farklılık göstermiştir; bu örneklemde faktörler Sevgi dolu/Sıcak, Dolaysız/Açık sözlü ve Tutucu/Muhafazakar olarak adlandırılmıştır. Evli bireyler için, cinsel benlik şeması kategorileri arasında cinsel etkinlik sıklığında, cinsel doyumda ve evlilik uyumunda farklılıklar bildirilmiştir. Pozitif cinsel benlik şemalarına sahip

bireylerin şematik olmayan ve negatif şemaları olan bireyler ile karşılaştırıldıklarında daha yüksek cinsel etkinlik sıklığını bildirdikleri, daha yüksek cinsel doyum ve evlilik uyumu düzeylerine sahip oldukları bulunmuştur. Ancak, haftalık özdoyum sıklığı kategoriler arasında herhangi bir farklılığın görülmesine neden olmamıştır. Ayrıca, cinsiyet farklılıkları da ortaya konulmuştur. Kadınların erkeklere göre daha düşük cinsel doyuma sahip oldukları ve daha az özdoyum sıklığı bildirdikleri gösterilmiştir. Sonuçların değerlendirilmesinin ardından, gelecek çalışmalar için öneriler üzerine vurgu yapılarak kısıtlılıklar tartışılmıştır ve sonuçların klinik psikoloji alanına yansımaları belirtilmiştir.

Anahtar Kelimeler: Cinsel benlik şemaları, özdoyum, cinsel etkinlik, cinsel doyum, evlilik uyumu.

Dedicated to my parents and to my grandparents,

for all the love they gave to me and for all the things they provided

and dedicated to all others who cared for me and whom I cared back,

with great love and best wishes…

anxiety down. I greatly appreciate her friendship, motivation, and encouragement. You are the best friend I have ever had.

And, as always, I thank Fırat Nemut for his love and commitment, his always being there for me in good and bad times, his understanding, and his emotional support in hard times. You always believed in me. I love you. I am also very deeply grateful to my grandparents for their endless unconditional love they provided throughout my life, their patience and support. They shared and relieved my anxiety throughout the process of planning and writing this thesis work. Finally, I would like to express my deepest gratitude to Keramettin Koçak and Şenay Koçak, to my dearest parents made my life possible and always joyful.

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INTRODUCTION

Throughout the history, the conceptualization of sexuality has gone a long way with an understanding changing from highly erotic and sensual ancient civilizations to the advent of Christianity which deemphasized sex and from Lutherian declaration that sexual activity was necessary to preserve health to "necessary evil" approach in the Victorian period (Murstein, 1974). Later on, sexuality was began to be viewed from a naturalistic point of view with its assumption regarding sexuality as purely biological (Seidman, Fischer, & Meeks, 2006). It was assumed that a sexual instinct, a procreative gene or a maternal drive was driving humans to reproduce and to rear their children. Human beings were assumed to be wired for sex with a conviction that they "were...born sexual" (p. xi). Islamic perspectives also viewed sexuality as a means of reproduction: "Sexual desire was created solely as a means to entice men to deliver the seed and to put the woman in a situation where she can cultivate it..." (Mernissi, 1987; as cited in Kholifah, 2005). Kholifah (2005) argued that according to Islamic view of sexuality, normal sexuality included sexual acts that were not against social norms and religious values and those acts took place within marriage, heterosexuality, fidelity and obedience. Homosexuality, masturbation, and pre-marital sexual activity are considered as abnormal sexuality. Although both men and women are accepted to have sexual drives and right to sexual fulfillment; women were viewed as irrational and lacking self-control while men could control their sexual desires. In addition, eroticism "is presented as foretaste at the heaven but a divinely ordained necessity for reproduction at earth" (p. 16).

The perspectives mentioned above have been challenged by new social studies of sexuality which recognized possible social constructions of sexuality and also the importance of social forces, meanings, and norms in an effort to grasp the totality of human sexuality. Opponents of a biological deterministic approach to sexuality began to discuss about the social constitution and construction of sexuality (Gagnon & Simon, 1974; as cited in Jackson, 2007). According to Gagnon and Simon (1974), sexuality is constantly modified throughout time and the present reshapes the past in contrast to

psychoanalitic conviction that the past shapes the present (Jackson, 2007). In Gagnon and Simon's (1974 as cited in Jackson, 2007) model, "the sexual self is viewed as actively 'doing sex', not only in terms of sexual acts, but as making and modifying sexual meaning, since intrapsychic scripting is inevitably interdependent with both the interactional and wider sociocultural scripting of the sexual" (p. 4). Refusing essentialist and drive theories, they proposed that sexuality is not natural; it is learned in an interaction with social environment. Some other researchers who proposed a social or a cultural basis for sexuality were Berger and Luckmann (1967), Bird and Melville (1994), Masters, Johnsons, and Kolodny (1995), and Rosenthal (1998).

Similar to the evolving perspectives regarding sexuality, definition of sexuality has changed in time, too. Early psychoanalytic theories defined sexuality in regard to unknowable unconscious (Jackson, 2007). However, later definitions seemed to have en effort to understand the concept of sexuality as a whole. Shope (1975) defined sexuality as "the total characteristics of an individual - social, personality, and emotional - that are manifest in his or her relationship with others and that reflect his or her gender-genital orientation" (p. 36). In this sense, he proposed that sexuality encompasses the whole individual, not only his or her sexual behaviors, feelings, attitudes, and beliefs.

Human sexuality is no longer regarded as a pure biological and reproductive drive; instead, it is viewed as being much more than an individual's genital functioning (Whipple & McGreer, 1997). Human beings have a tendency to utilize sexuality as means of experiencing pleasurable time (Means, 2000), communicating affect (Barash & Lipton, 2002), and validating intimacy within a romantic relationship, experiencing new feelings, risks, and excitement, engaging in a recreational activity, alleviating feelings of insecurity, and even showing power to attract others and "to avenge earlier rejections by enciting partners and then turning them down" (Crooks & Baur, 2005, p. 199).

Given that biological and sociocultural components of sexuality are slowly recognized and adopted, in the last decade researchers began to pay attention to other much less emphasized factors in sexuality, such as cognitions (Ackerman, 1995). Grounded on the distinction of William James between the "known" self "I" and the "knower" self "me", Markus introduced the concept of self-schemas as "cognitive generalizations about the self, derived from past experiences, that organize and guide processing of self-related information" (1977). Based on Markus's inspirational work on self-schemas and the

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recognition of the multifaceted nature of self-schemas (Carver & Scheier, 1981; Epstein, 1980; as cited in Andersen & Cyranowski, 1994), Andersen and Cyranowski (1994) assumed that there would exist a sexual component in self-schemas and subsequently, proposed the concept of sexual self-schemas.

As mentioned in the previous paragraph, Andersen and Cyranowski (1994) were the first researchers to define and to study sexual self-schemas in both women and men. Sexual self-schemas were defined as the "...cognitive generalizations about sexual aspects of oneself. They are derived from past experience, manifest in current experience, influential in the processing of sexually relevant social information, and guide sexual behavior" (Andersen & Cyranowski, 1994, p. 1079).

Utilizing different scales for women and men created with a trait-adjectives methodology, Andersen and Cyranowski (1994) have shown that sexual self-schemas influenced women's experience of sexual relationships, their behavioral repertoire related to sex and emotions during sexual activity depending on whether those women held positive or negative sexual self-schemas. For men, this distinction was different than for women. In the original study of men's sexual self-schemas, Andersen, Cyranowski, and Espindle (1999) have found that men does not hold negative schemas related to their sexual selves. Indeed, they were categorized based on whether they did hold schemas or not; and it has been demonstrated that similar to women, men's sexual self-schemas had an effect on sexual relationships, sexual arousal, romantic capacity and feelings, and sexual experiences. However, using a combined version of the original sexual self-schema scales, Hill (2007) conducted a study in which it was revealed that in contrast to Andersen et. al.'s (1999) findings, men also held negative sexual self-schemas as in the case with women.

Although Andersen, Cyranowski, and Espindle (1999) categorized men as schematic (with positive sexual self-schemas) or aschematic (with no positive sexual self-schemas) only, women were categorized into one of positive schematic, co-schematic, negative schematic, and aschematic categories based on their scores on negative and positive factors (Andersen & Cyranowski, 1994). According to these researchers, positive schematic individuals hold a positive view for their sexual selves. They report increased arousability during sexual encounters, they tend to be more willing to engage in sexual relationships, and they evaluate sexual behaviors positively. In contrast, negative

schematic individuals have weak positive and strong negative sexual self-schemas. They experience negative emotions during sexual activities such as increased anxiety and avoidance and also report heightened anxiety about being unloved or abandoned. Co-schematic individuals hold both positive and negative sexual self-schemas, meaning that they have conflicting views related to their sexuality. Finally, individuals in the aschematic group hold both positive and negative sexual self-schemas similar to co-schematic individuals; however, both schemas are weak. They have few romantic and sexual experiences; although they do not view sexuality as an aversive experience, they do not seek to foster sexual relationships and they report low sexual desire and high avoidance.

In relation with romantic relationships, Andersen and Cyranowski (1994) and Andersen, Cyranowski, and Espindle (1999) have shown that sexual self-schemas were associated with the number of current and lifetime romantic partners, tendency to fall in love and stay in romantic relationships in a college sample. Aarestad (2000) demonstrated that positive schematic women and schematic men reported more intense love experiences in their romantic relationships, and schematic men experienced greater relationship quality, even after controlling for the effects of relationship history and attachment style.

Nonetheless, sexual self-schemas attracted the attention of some other researchers than Andersen et. al. (1994, 1999). In several studies conducted in order to gain an understanding on sexual self-schemas, sexual self-schemas were shown to be in relation with various individual variables such as facial and bodily attractiveness and concerns over personal appearance (Wiederman & Hurst, 1997), age (Volsky Rushton, 2002), sexual experiences and risky sexual behaviors (Pornchaikate, 2003), history of child sexual abuse (Meston, Hellini, & Heiman, 2006).

Sexual self-schemas are widely studied in samples of individuals having chronic and disabling physical disorders. For instance, sexual self-schemas were shown to be in association with sexual avoidance and stres in sexually-relevant situations in breast cancer survivor women (Yurek, 1997); with sexual responsiveness in gynecologic cancer survivor women (Andersen, Woods, & Copeland, 1997); with sexual inhibition in women treated for breast cancer (Curran, 1999); with frequency of sexual activity and sexual difficulties in the case of vulvar vestibulitis (Gates, 2000); with sexual attitudes and sexual self-view for women having either vaginismus or dyspareunia/vulvar vestibulitis

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syndrome (Reissing, Binik, Khalife, Cohen, & Amsel, 2003); with body and sex esteem, sexual esteem, sexual arousability, ability to have an orgasm, sexual depression, sexual anxiety, and sexual esteem in women with spinal cord injuries (Davidov, 2006).

Sexual self-schemas, therefore, appear to relate with several demographic, sexual, and relationship-related variables. However, due to the fact that they only represent a cognitive component, other factors are in need of investigation. Hence, despite the critical position of the cognitive aspect of sexuality, every component in the sexuality sphere requires similar amounts of attention and investigation because sexuality as a whole is an important aspect of human life, it refers to a biopsychosocial phenomena (Kring, 2000).

Regarding the behavioral domain, sexual self-schemas are thought to play a role in the enactment of sexuality and they are shown to predict sexually relevant behavior in studied populations (e.g., Andersen & Cyranowski, 1994; 1999). Two kinds of sexual activity will be covered in this study which are shown (Hunt, 1974; Kinsey, Pomeroy, & Martin, 1948, Kinsey, Pomeroy, Martin, & Gebhard, 1953; Greenberg, Bruess, & Haffner, 2004) to be the possible sexual acts that can be observed in a marital relationship: Masturbation, and sexual activity involving genital sexual contact between spouses.

Masturbation is defined as the "self-stimulation of one's genitals for sexual pleasure" and the term "autoeroticism" is also used for masturbation (Crooks & Baur, 2005). In other words, masturbation is a sexual act which is performed on a particular individual by herself/himself. Masturbation, unfortunately, has been one of the most secret and embarassing subjects in many societies because of negative attitudes and beliefs held about masturbating (Halpern et. al., 2000; Laqueur, 2004; as cited in Hock, 2007). In the last decades, benefits of masturbation are also began to be recognized. Hock (2007), in his book named "Human Sexuality", outlined the benefits mentioned in the literature (Davidson & Moore, 1994; Kay, 1992; Kelly, Strassberg, & Kircher, 1990; Masters & Johnson, 1974; "The Politics of Masturbation", 1994; Tiefer, 1998; as cited in Hock, 2007) and these include sexual self-discovery, release of sexual tension or frustration, enhancement of sexual interactions with a partner, resolution of sexual problems, orgasm, relief from stress, relief from menstrual pain, compensation for a disparity in a couple's levels of sexual desire, and safe sex.

Frequency is one the attributes of masturbation and/or sexual activity. It refers to the number of times masturbation/sexual activity occurs with a period of time (e.g, per week in last six months). Despite the evidence regarding negative attitudes held for masturbatory activity and the fact that masturbation seems to be reserved and accepted for male gender only (Darling & Davidson, 1987; Leitenberg, Detzer, & Srebnik, 1993), studies have shown that masturbation is indeed common in the society (Lipsith, McCann, & Goldmeier, 2003; as cited in Soyer, 2006). As implied in the findings demonstrating that masturbation of women is viewed as less acceptable and less pleasurable than of men (Leitenberg, Detzer, & Srebnik, 1993), a gender difference seems to be ensured: Men tend to masturbate more frequently than women in general, and masturbating women tend to engage in self-stimulation of genitals less frequently than masturbating men (Arafat & Cotton, 1974; Clement, 1990; Greenberg et. al., 2004; Hunt, 1974; Jones & Barlow; 1990; Kinsey et. al., 1948, 1953; Leitenberg et. al., 1993; Sigusch & Schmidt, 1973).

Some of the sex researchers described the established gender differences in frequency of masturbation as a result of lower levels of sexual desire in women compared to men (Arafat & Cotton, 1974), as a result of negative attitudes in the society against women's masturbation (e.g., Leitenberg, Detzer, and Srebnik, 1993) and the occurence of masturbatory guilt in some women (Darling & Davidson, 1987) or as a result of different socialization processes of men and women (Clark & Wiederman, 2000; Shulman & Horne, 2003; as cited in Soyer, 2006).

Although masturbation is undeniably an important aspect of human sexual life, thinking of a marital relationship, sexual activity possibly have a more important position compared to masturbation in a couple's sexual relationship. Starting with studies of Kinsey and colleagues (Kinsey, Pomeroy, & Martin, 1948; Kinsey, Pomeroy, Martin, & Gephard, 1953), many researchers conducted studies in order to reveal the average frequency of sexual activity in married couples. Frequency of sexual activity is also dealt with in large-scale studies using national probability samples (e.g., Westoff, 1974) and in population surveys. For instance, in a 1998 survey of 10,000 people living in the United States, it was found that the average frequency of sexual activity was once per week and each episode lasted about half an hour on average (Robinson & Goldbey, 1998; as cited in Crooks & Baur, 2005). Moreover, results of Durex's Global Sex Survey (2005) revealed that Turkish individuals engaged in sexual activity average 111 times in a year.

The importance of frequency in sexual life, however, is not well-defined in the literature. Christopher and Kisler (2004) mention that although Terman (1938) revealed that coital frequency and marital satisfaction did not have a strong relationship, other researchers found a strong association between these variables (Ard, 1977; Call et. al., 1995; Laumann et. al., 1994; Smith, 1994). Crooks and Baur (2005) suggested that frequency is only one way of measuring sexuality and it is not the only way; "the duration of sexual encounters and the subjective quality are probably better indicators of sexual fulfillment" (p. 254). Similarly, increasing the frequency of sexual activity did not lead to an increase in quality of encounters and perceived satisfaction of women (Bridges, Lease, & Ellison, 2004). In contrast, studies reporting a relationship between marital and sexual satisfaction also report increased frequency of sexual activity if a couple has a satisfying marriage relationship (Barnett & Nietzel, 1979). More importantly, psychological factors such as discrepancies in expectations of individuals in a couple regarding coital frequency can exacerbate problems and lead couples to seek therapy (Winceze & Carey, 2001).

Although a discrepancy exists between findings, it seems clear that sexual activity is of crucial importance in marriage not just because it is a pleasurable activity, but also it is somehow connected to the amount of satisfaction derived from sexual and marital relationship (e.g., Barnett & Nietzel, 1979; Winceze & Carey, 2001). Therefore, given the complexity of human thinking and perceptions, it can be argued that what is more important than the sexual activity itself may be the subjective perceptions related to sexual activity: How does a particular individual view his/her sexual life? Does it satisfy that individual? Satisfaction gained from one's sexual life and factors related to it may be considered as important factors in order to be able to grasp the totality of individual satisfaction (Lawrence & Byers, 1995; as cited in Timm, 1999).

As implied above, sexual satisfaction is defined an essential aspect of an individual's overall happiness and it is defined as "an affective response arising from one's subjective evaluation of the positive and negative dimensions associated with one's sexual relationship" (Lawrence & Byers, 1995; as cited in Timm, 1999, p. 17). It does not only have an important link with physical and psychological health (e.g., Crowe, 1995; Henderson-King & Veroff, 1994) but it also constitutes one of the pivotal parts of an intimate sexual relationship (Crowe, 1995).

Renaud, Byers, and Pan (1997) indicated that sexual satisfaction has sometimes been conceptualized as the absence of dissatisfaction. Sexual satisfaction can also be viewed as a continuum with two opposing ends: individuals who are totally sexually satisfied and individuals who are totally sexually dissatisfied (Basat, 2004). In this regard, individuals at the "totally dissatisfied" end are more likely to be vulnerable to sexual problems and dysfunctions. Although as a minority, individuals at this end do not constitute a small group as it would be hoped. According to the analysis by Laumann et. al. (1999) of the National Health and Social Life Survey, the prevalence of sexual dysfunction in the United States was found to be 43% for women and 31% for men. Therefore, because of these relatively high factual numbers, much of the sexuality research tend to focus on mere functionality and dysfunctionality in relation to sexuality (Winceze & Carey, 1991).

Sexual satisfaction is shown to be related with various individual and relationship variables such as demographic characteristics including gender (e.g., Basat, 2004; Gökmen, 2001) and age (e.g., American Association of Retired Persons, 1999; Çetin, 1994; Edwards & Booth, 1994), personality traits (e.g., Adabjian-Mozian, 2005; Davis, 1986), gender roles (e.g., Kimlicka, Cross, & Tarnai, 1983; Obstfeld, Lupfer & Lupfer, 1985; Spencer & Zeiss, 1987), attachment (e.g., Birnbaum, 2005; Hazan & Shaver, 1987, as cited in Aarestad, 2000), sexual dysfunctions (e.g., Gralla et. al., 2008; Mulhall et. al., 2008), and a range of physical and psychological problems (e.g., Crowe, 1995; Hawton, 1985).

Moreover, sexual satisfaction is thought to have a connection with sexual self-schemas; however, this connection remains partially unclear because only a few studies investigated such relationship. Andersen and Cyranowski (1998) have found that both negative and positive schematic women experienced a moderate degree of sexual satisfaction. Aarestad (2000) studied sexual self-schemas in a college sample and found that women's sexual self-schemas were found to be associated with better sexual functioning across domains of sexual behavior, sexual satisfaction, and sexual response. For men, however, sexual self-schemas were only related to sexual response. In addition, Davidov (2006) concluded that the relationship between sexual self-schemas and sexual satisfaction was mediated by sexual arousability in a sample of spinal cord injured women; women with positive sexual self-schemas experienced higher levels of sexual arousability and this lead them to become more sexually satisfied.

Sexual satisfaction is critical to any intimate relationship which includes a sexual component, however, does not stand on its own in a marriage relationship. It has been shown to be correlated with sexual and with non-sexual aspects of a couple's relationship such as length of marriage, overall satisfaction within marriage, communication between partners, orgasm and intercourse frequency, sexual agreement between partners (e.g., Veroff, 1994; Colebrook Seymour, III, 1998; Larson, Anderson, Holman, & Niemann, 1998; Young, Denny, Luquis, & Young, 1998; Purnine & Carey, 1997; 1999; Gossman et. al., 2003; Basat, 2004; Bridges, Lease, & Ellison, 2004; Fisher & McNulty, 2008).

Although couples are generally found to be content with their sexual lives in community surveys (Greeley, 1991; as cited in Bridges et. al., 2004; Hunt, 1974), there is still a minority in nonclinical women samples who are dissatisfied with their sexual lives (17% for intercourse and 25% for erotic contact) and "greater levels of dissatisfaction are likely to be experienced by women seeking counseling for relationship problems" (Bridges et. al., 2004, p. 163). These findings are consistent with the notion that sexuality is a microcosm of the marital relationships (Crowe, 1995) and the knowledge that sexual satisfaction and marital adjustment are closely linked with each other, as many researchers have demonstrated (e.g., Brezsnyak, 2001; Fielder, 2001; Guo & Huang, 2005).

As implied in the previous paragraph, sexuality is often conceptualized as deeply integrated in intimate relationships and marriage can be undoubtedly referred as the "the most intimate relationship" that many individuals voluntarily enter (Halford, Kelly, & Markman, 1997). In every society, individuals become a couple by virtue of various personal and/or social reasons. Crooks and Baur (2005) have listed some of the functions of marriage as follows: Social norms are conveyed primarily through these stable units of families, children mostly learn rules and norms in their society from their parents or relatives. In addition, marriage involves "an economic partnership" in order to perform household tasks, to raise and finance children and to earn for the family (Timmer & Orbuch, 2001; as cited in Crooks & Baur, 2005). Rights related to how family property would be inherited are also regulated by marriage (Miya-Jervis, 2000; as cited in Crooks & Baur, 2005). Functions of marriage are definitely not limited by its social and economical implications. It also "…represents the only relationship where society positively sanctions most forms of sexual expression" (Christopher & Kisler, 2004, p. 371) and provides a sexual outlet and legitimizes reproduction (Greenberg et. al., 2004).

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Because marriage has several functions in an individual's life, its importance for that particular individual should not be underestimated. Many people seek to have happy and satisfying marital relationships with their spouses and it has been found that married people are happier and healthier both psychologically and physically when compared to unmarried people (Horwitz et. al., 1996; Prior & Hayes, 2003; as cited in Crooks & Baur, 2005). Bird and Melville (1994) discussed that a supportive marital partner acted like a barrier between people and the problems of life.

Therefore, possible due to an effort to gain an understanding on the elements of satisfied marriages, marital adjustment is a widely studied topic in the literature. However, there is no consensus regarding the label and its definition. Marital adjustment is also labeled as marital satisfaction, marital success, marital happiness and marital quality (Kluwer, 2000; as cited in Tuncay, 2006) and in the present study, marital adjustment and marital satisfaction will be used interchangeably. In regard to its definition, it is easy to come across many different definitions and there is still an ambiguity (Glenn, 1990; Robinson & Blanton, 1993; as cited in Tuncay, 2006). Spanier (1976) defines marital adjustment as "a process of movement along a continuum which can be evaluated in terms of proximity to good or poor adjustment", it is a continuing and ever-changing process.

Marital adjustment seems to be also in relation with some individual and relationship variables. For instance, although it is not clear whether higher or lower levels are influential, marital adjustment was shown to be in relation with education (Colebrook Seymour, III, 1998; Dökmen & Tokgöz, 2002), and gender differences (Çelik, 1997; Dökmen & Tokgöz, 2002; Gökmen, 2001; Lee, 1999). In addition to demographic variables, marital satisfaction was also found to be related with contextual factors such as number of children and length of marriage (Kurdek, 1991; Bradbury, Fincham & Beach, 2000). Similarly, Bir Aktürk (2006) concluded that low levels of marital satisfaction in first married families was associated with low levels of income, and marital satisfaction increased as length of marriage increased.

Most importantly for the present study, there is vast evidence related to the association between marital adjustment and sexual satisfaction. As Crooks and Baur (2005) suggested, sexual gratification is one of the promises of marital relationship. In other words, sexual satisfaction is highly related to the existence of a close relationship with a sexual partner. The close relationship between sexual satisfaction and marital adjustment

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is also granted by the work of many theorists and researchers such as Renaud et. al. (1977; as cited in Guo & Huang, 2005), Brezsnyak (2001), Fielder (2001) and Guo & Huang (2005). Based on the suggestion that demographic variables such as income and education would effect marital satisfaction (Pimentel, 2000; Trudel, 2002; as cited in Guo & Huang, 2005), researchers also demonstrated the existence of several variables that strengthen the relationship between sexual satisfaction and marital satisfaction such as gender, educational attainment, and number of children (Guo & Huang, 2005).

1.1. Purpose of the Study

The primary goal of the present study was to investigate and to gain an understanding of sexual self-schemas. Sexual-self schemas were the major focus of this study. As discussed above, sexual self-schemas are cognitive variables that are shown to affect and to be affected by several sexual and non-sexual factors. Therefore, the present study mainly investigated the interrelationship between sexual self-schemas of women and men, and both sexual and non-sexual variables which are associated with marital relationships. Specifically, this study aimed to demonstrate whether categories of sexual self-schemas of women and men are associated with a difference in the frequency of masturbation and sexual activity, levels of sexual satisfaction and marital adjustment.

1.2. Research Question of the Study

With an effort to investigate the interrelationship between sexual self-schemas and identified research variables, the present study aimed to achieve an answer for the following research question:

- Are there differences in frequency of masturbation and sexual activity, sexual satisfaction, and marital adjustment of men and women associated with categories of sexual self-schema?

1.3. Importance and Implications of the Study

As Ackerman (1995) stated, sexuality is a complex phenomenon in regard to its interrelation with cognitions, affect, and relationship and sociocultural variables. However, sexuality research is not yet eligible to provide an integral and complete picture for sexual variables such as sexual satisfaction. The role of psychology, in this sense, remains to be one in need of answering questions and resolving problems but the field provides insufficient information on sexuality.

Sexuality of married individuals is a field on which research in psychology is much less focused. The neglect related to sexuality in marital life is discussed by Clark (1994; as cited in Timm, 1999), Apt, Hulbert, and Clark (as cited in Hayden, 1999), and Christopher and Sprecher (2000). Greenberg et. al. (2004) added "nonmarital sexual behavior has received more attention from researchers and reformers alike than sexual behavior in marriage" (p. 477). According to Tiefer (1994), sexuality research constantly faces real challenges with media inundating the public with sexual topics, with academicians hesitating to accept sexuality research as legitimate as other forms of psychology research and with researchers having a tendency to ignore the comprehensive nature of people and society with a solitary focus on medical topics. This challenges doubled with the neglect of marital sexuality require the investment of much more energy than before in order to gain an understanding on how couples' function as a sexual unit.

One of the views in the field asserts that individuals have a tendency to stay in relationships when their interactions with their partners are perceived as happy and pleasant by themselves (Gottman, 1993; Canary & Stafford, 1994). Therefore, it is very critical to understand the dynamics of a pleasurable marital and sexual relationship and the contribution of any sexually-related variable to married individuals' relationships. This would help to gain an understanding on variables influencing marital and sexual adjustment of satisfied individuals and next to help unsatisfied individuals to make decisions on their marriages. In addition, there exists the fact that approximately each 1.34 individuals per 1,000 individuals in Turkey and 3.6 individuals per 1,000 individuals in the United States get divorced each year (Turkish Statistical Institute, 2007; National Center for Health Statistics, 2007) and these numbers call in an ambitious investigation of those factors.

A review of the sexuality literature demonstrates that a study investigating the relationship among sexual self-schema categories in a marriage context is absent (Hill, 2007). Specifically, the association between frequency of masturbation with sexual self-schemas was not investigated in the literature. This is also the case with marital adjustment; relationship between sexual self-schemas and marital adjustment were not previously examined. Moreover, studies focusing on sexual satisfaction in the context of sexual self-schemas revealed less relevant findings for a sample of married individuals. Andersen & Cyranowski (1998) and Davidov (2006) investigated sexual self-schemas in relation to

sexual satisfaction; however, this study's sample also was only consisted of women. Aarestad (2000) studied sexual self-schemas in relation to sexual functioning and relationship quality; however, the sample in this study only consisted of dating couples and results were not generalizable to samples including married individuals.

Hence, there has been a controversy regarding men holding negative sexual self-schemas and the relationship among sexual self-schemas and sexual and marital variables is not totally clear. The present study aims to reveal findings that would deal with existing controversies and unclear information bodies. In addition, although sexual self-schemas are studied in the context of romantic relationships (Andersen & Cyranowski, 1994; Andersen, Cyranowski, & Espindle, 1997), these studies only included unmarried individuals. Given the statistics showing that approximately two millions of individuals in United States (National Center for Health Statistics, 2007) and approximately seven hundred thousands of individuals in Turkey (Turkish Statistical Institute, 2007) got married in the last year, taking married individuals as an object of analysis in sexual self-schema studies would be another necessary major goal.

Moreover, further research focusing on frequency of masturbation and sexual activity is necessary in order to determine its place in marital sexuality and to understand whether cognitive factors (i.e., sexual self-schemas) like in Winceze and Carey's (2001) study are critical in determining how frequency is interpreted by married individuals. In addition, regarding another variable of this study, i.e. marital adjustment, it seems important to understand the relationship between marital adjustment and sexual selves. However, characteristics of such relationship are unknown. For a marriage relationship, sexual satisfaction appears to be closely associated with marital adjustment (e.g., Litzinger & Gordon, 2005; Witting et. al., 2008) and in studies of Andersen and Cyranowski (1998), Aarestad (2000), and Davidov (2006), sexual self-schemas are to be considered as related to sexual satisfaction of couples, however, either this link is not well-understood or findings are not generalizable to married individuals (e.g., findings from Aarestad's study [2000] with dating couples). Hence, it is possible that sexual self-schemas are also related to the perceived quality of marital relationship and this putative link is one to be investigated.

Finally, previous research on sexual self-schemas tended to focus on clinical samples such as patients with gynecological cancers or other painful chronic disorders (Andersen,

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Woods, & Copeland, 1997; Curran, 1999; Davidov, 2006; Gates, 2000; Reissing, Binik, Khalife, Cohen, & Amsel, 2003; Yurek, 1997). However, the impact of these schemas in presumably healthy and sexually functional individuals is unknown. The present study aims to investigate the existence of sexual self-schemas in a presumably functional sample. Therefore, it is hoped to provide additional information regarding the impact of this cognitive phenomena on individuals' lives that would also generalize to community samples.

As mentioned previously, grasping the complexity of sexuality as a phenomenon, researchers recently began to pay attention to different components such as cognitive and relationship-related components of sexual problems (Ackerman, 1995). However, still, a gap exists in the way that these variables are studied together. Therefore, this study will be the first in the literature to examine the relationship between cognitive component and relationship-related component; namely, between schemas and both sexual and relationship variables.

In Turkey, gap in sexuality research is more apparent than abroad. Hopefully, the present study would help to fill this gap in Turkey by means of its theoretical findings and practical contributions. There is a limited number of empirical studies related to sexuality (Kabakçı & Batur, 2002; Kabakçı & Daş, 2002; Kayır, Yüksel, & Tükel, 1987; Öksüz & Malhan, 2005; Uçman, 1982) and many of these studies focus on sexual dysfunctions and related attributes. In addition, unfortunately, there are no studies in the sexual self-schema field in Turkey. Given that most sexuality studies in Turkey tend to focus on dysfunctionalities, studying sexual self-schemas in a Turkish population would help to complete the whole picture. In addition, translation of and attainment of basic reliability and validity for the Sexual Self-Schema Scale (Hill, 2007) will help the researchers in Turkey who would like to conduct empirical studies on sexual self-schemas and would also open the pave for future studies on this domain.

In addition to its theoretical contributions, the present study can also be helpful in the field of clinical practice. It is expected to make practical contributions so as to increase the awareness related to the importance of including sexuality component in marital and even in more general couple therapies. Spence (1997) reported that approximately half of the marital therapy couples also had sexual problems (Hahlweg, Schindler, & Revenstorf, 1982) and 75% of couples seeking help for their sexual problems also had marital

problems. In addition, it was shown that marital distress predicted the outcome in the treatment of sexual problems. Therefore, marital and sexual problems appear to go hand in hand in a marriage relationship and understanding of any causal factors (i.e., conflicting and weak sexual self-schemas) may be critically important for efforts to help married individuals seeking therapy. Indeed, there has been a shift in the literature towards the integration of marital and sexual therapies (Atwood & Dershowitz, 1992; Tamerin & Tamerin, 1986; Schnarch, 1991; Spence, 1991; Weeks & Hof, 1987; as cited in Spence, 1997) and the present study aims to contribute to this recent shift through its findings which would demonstrate a link between marital relationships and sexuality.

Moreover, given that sexual self-schemas are at the core of the individual, they may be predicting the overall sexual adjustment (Davidov, 2006). Therefore, recognizing the importance of this construct may help in the intervention processes relating to sexual problems; clinicians may include changing sexual self-schemas that are possibly hindering and decreasing the quality of sexual conduct between married partners as an ultimate long-term goal in sexual therapies.

To conclude, a review of available literature reveals that a study investigating frequency of masturbation and sexual activity, sexual satisfaction, and marital adjustment in the context of sexual self-schemas is absent and the present study will be the first attempt to examine the relationship among all of these variables. Moreover, this study will help to fill the research gap existing in the sexuality field in Turkey where number of individuals seeking sexual therapies is getting more common and where the need for therapists to be more informed and prepared is increasing (CETAD, 2006). As existing literature on sexual self-schemas demonstrated that all components of sexuality, namely feelings, behaviors and cognitions, are interrelated, conducting as many as studies on sexuality should be a significant issue for mental health professionals in Turkey.

CHAPTER 2

LITERATURE REVIEW

In this section, literature regarding study variables was reviewed in detail. Previous findings on definitions, characteristics, and dimensions of sexual self-schemas, frequency of masturbation and sexual activity, sexual satisfaction, and marital adjustment were reported. In addition, findings from previous studies focusing on the relationship of these variables with various individual, relationship, sociocultural variables were also reviewed.

2.1. Sexual Self-Schemas

2.1.1. Definition and Characteristics of Sexual Self-Schemas

When William James (1890; as cited in Markus, 1977) elaborated on the self concept for the first time drawing a distinction between the "known" self "I" and the "knower" self "me", nobody might have predicted this concept would be that much inspirational for research in psychology. Markus's (1977) introduction of the concept "self-schema" was one of the developments grounded on James' theory. The term "self-schema" actually refers to the answer for the essential question "Who am I?". Self-schemas are "cognitive generalizations about the self, derived from past experiences, that organize and guide processing of self-related information" (1977, p. 64). Everything individuals know about themselves and similarly, everything they can imagine is a building block for the formation of self-schemas. Moreover, memories related to one's past, expectations about the future and trait characteristics of that particular individual are factors which contribute to these schemas. As Markus (1977) pointed out, self-schemas help individuals process incoming information. In other words, they guide, interpret and organize information depending on the type of schemas and self-relevant information is found to be processed more quickly than self-irrelevant information.

The existence of different self-schemas for different domains of behavior was discussed by Bruch, Kaflowitz, and Berger (1988). However, little effort was given in order to understand the possible sexual component in those schemas. In 1995, Gaynor and

Underwood proposed that sexual self-esteem was related to sexuality. For these authors, sexual self-esteem was the tendency to value one's own sexuality. According to them, values with family and peer group origins and all sexual experiences combined to produce sexual self-esteem and individuals who value their sexuality positively were more able to experience pleasurable relationships. However, these proposed connections were not tested. In addition, Garcia and Carrigan (1998) studied individuals' perceptions about the sexual component of their sexual selves using an adjective checklist with six subscales (sexual experience, sexual deviance, attitudes regarding sexuality, sexual attractiveness, sexual responsiveness, romance/affection). It was found that sexual attitudes were correlated with sexual experience, sexual deviance, sexual responsiveness, and attitudes; and heterosexual behavior was correlated with sexual experience, attitudes regarding sexuality, sexual attractiveness, and sexual responsiveness. However, this study was criticized for not analyzing the factorial structure of the scale and for drawing causal links through correlations.

Building on Markus's (1977) creative work, Andersen and Cyranowski (1994) started to investigate the sexual and cognitive aspect of the self. To understand how sexuality was conceptualized in relation to different aspects of personality in the previous literature, Andersen & Cyranowski (1994) examined the historical traditions in the domain of sexuality research. Bryne & Schulte (1990; as cited in Andersen & Cyranowski, 1994) grouped these traditions into three different strategies. The first one is to examine whether there are differences in affective and evaluative (attitudinal) reactions given to sexual cues. Another strategy was to investigate patterns of sexual behaviors and thirdly, researchers have examined the differences in physiological aspects of sexuality, such as sexual arousal. Therefore, previous research in sexuality had focused on affective and evaluative, behavioral and physiological aspects of sexuality; however, there was little effort to understand the cognitive aspect of sexuality.

To gain an understanding on the cognitive aspect of sexuality, Andersen & Cyranowski (1994) introduced the concept "sexual self-schema". Indeed, "sexual self-schemas" were first defined by Mahoney and Strassberg (1993) as "self-involvement with erotic stimuli…i.e. cognitions concerning the self in a sexual context" (Volsky Rushton, 2002); however, this term was much less elaborated on than that of Andersen & Cyranowski's (1994). Sexual self-schemas are defined as "...cognitive generalizations about sexual

aspects of oneself. They are derived from past experience, manifest in current experience, influential in the processing of sexually relevant social information, and guide sexual behavior" (Andersen & Cyranowski, 1994, p. 1079). Sexual self-schemas provide historical representations of sexual life and they direct how a particular individual behaves, decides, predicts or judges. In other words, a clear schematic representation of one's sexuality would represent a quick summary of that particular individual's history of sexuality and in addition, it would act as a reference point about both current and future sexual self. They tend to activate in specific situations, namely sexually relevant situations. Based on this definition, sexual self-schemas are conceptualized to be stable across situations and time; therefore, focusing on such cognitive representations would provide useful information in predicting sexual attitudes and behavior.

In the domain of sexual self-schemas, individuals are differantiated on whether they have sexual self-schemas with a positive valence or with a negative valence. Two kinds of categorizations are available in the literature: A bipolar categorization style and a bivariate categorization style. Early studies of Andersen and Cyranowski (1994) focused on positive and negative self-schemas and individuals were differentiated on the basis whether they held either positive or negative sexual self-schemas. However, later on they re-conceptualized sexual self-schemas and hypothesized that sexual self-schemas were bivariate phenomenon (for a representation of sexual self-schema categories, see Figure 1 on page 19), and positive and negative sexual self-schemas were independent constructs. They assured "such a model would allow both positive and negative dimensions to have some functional independence, be opposing in their effects on behavior, and provide for the possibility of effects attributable to differantial levels of activation" (Andersen & Cyranowski, 1998, p. 1365). In this sense, individuals would differ in terms of their sexuality as a function of differences in valence of their positive and/or negative sexual self-schemas.

According to this model, positive schematic individuals hold a positive view for their sexual selves. They are emotionally romantic and passionate and behaviorally, they are open to sexual experiences and relationships. They also tend to be free of social inhibitions such as self-consciousness and embarrassment and to have liberal attitudes towards sexuality. In addition, they report increased arousability during sexual encounters, they are more willing to engage in sexual relationships, and they evaluate sexual behaviors

Total score for positive factors

		Low	High
Score for negative factor	Low	Aschematic	Positive schematic
	High	Negative schematic	Co-schematic

Figure 1. Bivariate representation of sexual self-schemas. Source: Andersen, & Cyranowski, 1994, p. 1092.

in a positive way. In contrast, negative schematic individuals endorse low levels of love and arousal. They have weak positive and strong negative sexual self-schemas. Moreover, they experience negative emotions during sexual activities such as increased anxiety and avoidance and also report heightened anxiety about being unloved or abandoned. Co-schematic individuals hold both positive and negative sexual self-schemas, meaning that they have conflicting views related to their sexuality. It has been suggested that "as a result of their conflicting responses, they display a moderately restricted pattern of sexual activity, falling between behavioral levels reported by the Positive and Negative schema groups" (Cyranowski & Andersen, 2000, p. 521). For instance, they report increased levels of arousal; however, at the same time, they exhibit high levels of anxiety during sexual encounters (Andersen & Cyranowski, 1998). Finally, individuals in the aschematic group hold both positive and negative sexual self-schemas similar to co-schematic individuals; however, both schemas are weak. They have few romantic and sexual experiences; although they do not view sexuality as an aversive experience, they do not seek to foster sexual relationships and they report low sexual desire and high avoidance.

Dimensions of sexual self-schemas were seperately for women and men in studies of Andersen and colleagues (Andersen & Cyranowski, 1994; Andersen, Cyranowski, & Espindle, 1999). The Women's Sexual Self-Schema Scale (Andersen & Cyranowski, 1994) revealed three aspects of women's sexuality: Passion/romantic, open/direct and embarassed/conservative. In other words, it was shown that sexual self schemas included "an inclination to experience passionate-romantic emotions and a behavioral openness to sexual experience" (Andersen & Cyranowski, 1994, p. 1094);

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moreover, they included embarassment and conservatism as a negative aspect. All three aspects of sexuality for women effected, or more specifically, determined affects and behaviors relevant to sexuality in general. In contrast, aspects found using the Men's Sexual Self-Schema Scale (Andersen, Cyranowski, & Espindle, 1999) were shown to be passionate/loving, powerful/aggressive and open-minded/liberal. Despite the mixed positive and negative nature of women's sexual self-schemas, all aspects of men's sexual selves were found to be positive. Andersen and Cyranowski (1994) and Andersen, Cyranowski, and Espindle (1999) were the first ones to evaluate on sexual self-schemas, the development of the concept, classification and the scales to measure it opened the pave for sexual self-schema research.

Another effort for revealing the specific dimensions of sexual self-schemas was by Hill (2007). He developed a composite scale to be utilized for both women and men, and demonstrated that men also endorsed a negative trait as women did. Although a nine factor solution suggested an ever stronger model of sexual selves, a three factor model was the most preferable factor model in a mixed sample. Men and women considered the same broad dimensions. 25% of the men in this study rated their sexual selves as negative and almost one third of the men rated themselves as aschematic. This was in contrast with the ratings of women because fewer women were found to be aschematic and more women were found to be co-schematic. "Thus, women were more likely to see their sexual selves as having both positive and negative dimensions than men, but men were more likely (than chance) to see their sexual self as either negative overall or low on both positive and negative dimensions" (p.141). However, men's ratings were slightly, but significantly, lower on loving/warmth dimension and reserved/conservative factors. Hill (2007) brought an explanation to this finding through discussing internalization of gender role and expectations and reluctancy to express emotions, especially warmth and love (Alexander & Wood, 2000; as cited in Hill, 2007).

2.1.2. Sexual Self-Schemas and Individual Variables

Sexual self-schemas are shown to be related with various individual variables in several studies. Having introduced the concept of sexual self-schemas, Andersen and her colleagues started testing the concept in samples with different characteristics. They studied sexual schemas in cancer survivors. In a study of gynecologic cancer survivors, Andersen, Woods, and Copeland (1997) compared gynecologic cancer survivor women

and gynecologically healthy women based on the knowledge that most women treated for gynecologic cancers develop sexual dysfunctions. The findings revealed that considering prior levels of sexual activity, extent of medical treatment, symptoms, and sexual self-schemas, only sexual self-schemas were predictive of total sexual responsiveness. All four variables were found to predict current frequency of sexual behavior. In addition, women with negative sexual self-views had a dysfunctional pattern "...characterized by low arousal, behavioral inhibiton, and negativity – a constellation of responses relevant to sexual schema" (p. 227).

In another study of sexual self-schemas, Yurek (1997) has shown that sexual self-schemas did not predict intrusive thoughts related to changes in sexual physique and sexual depression in women following breast surgery. Moreover, they were not significantly related to overall ratings of body satisfaction. However, the findings of this study also revealed that positive sexual self-schemas in breast cancer survivor women predicted less frequent sexually avoidant behaviors and experiencing less emotional stress in sexually-relevant situations beyond that explained by the extent of surgical intervention compared to negative sexual selves. Sexual self-schemas were also associated with the frequency of sexually intimate (approach) behaviors following breast cancer surgery. The author concluded that women with negative sexual selves might be at greater risk for developing sexual dysfunctions. In addition, age played a role in the prediction of avoidance behaviors. In particular, younger age and negative sexual self-schemas were thought to be possible risk factors for avoidance of sexual activity after resuming sexual intercourse with partner.

Yurek (1997) explained the discrepancy between her findings and Andersen et. al.'s (1997) previous findings on gynecologic cancer survivors by two methodological differences. Firstly, Yurek (1997) conducted her study with patients who underwent surgical intervention less than three months before interviewing; however, Andersen et. al. (1997) interviewed patients in the second year following surgery. Furthermore, in the formerly mentioned study, statistical analysis were conducted controlling for sexual depression. This control would have led to the occurence of effects which otherwise would have been obscured by error variance.

Other researchers also examined the relationship between sexual self-schemas and physical conditions. For instance, Curran (1999) showed a reduction in sexual inhibition

in terms of the negative aspect –embarrassment and conservatism- of women's sexual self-schemas as indicated by Andersen & Cyranowski (1994), between the baseline and follow-up assessments of women treated for breast cancer. However, the results of this study did not reveal a report of poorer sexual functioning in this group of women, as hypothesized beforehand. Moreover, women who received an intervention directed at reducing stres and improving health promotion reported being less passionate and romantic compared to women who did not receive any intervention. Curran (1999) concluded that the intervention might have produced a detrimental effect on self-reported sexual arousal and on feelings of love toward a romantic partner or these results might have appeared due to statistical issues, such as extraneous variables that were not controlled for in the statistical analysis.

In addition, Gates (2000) studied sexual self-schemas in the context of vulvar vestibulitis, a chronic, frequent and of long-duration gynecological disease causing coital pain. She found that age and schema independently predicted the current frequency of sexual activity. Furthermore, the presence of negative sexual self-schemas in those women was associated with sexual difficulties following the onset of vulvar vestibulitis. In relation to these findings, Gates (2000), referring to Andersen et. al.'s (1999) argument that negative, conflicted, or weak sexual self-schemas might act as a vulnerability factor for the occurence of a subsequent sexual dysfunction, discussed those women would have been more vulnerable to the stressors of vulvar vestibulities. In addition, they might have developed sexual difficulties more than women having positive sexual self-views. Therefore, positive sexual-self schemas might be protective for such kind of a health problem. Due to their high level of self-confidence and better communication abilities, they might have not experienced that aversive health condition.

Another study of sexual self-schemas in a group of women having aversive physical conditions (e.g, vaginismus, dyspareunia/vulvar vestibulitis syndrome) was conducted by Reissing, Binik, Khalife, Cohen, & Amsel (2003). The findings of this study revealed that vaginismic women had a less positive sexual self-schema; however, they did have an altered negative sexual self-schema, which is in contrast with the knowledge that women having vaginismus tend to hold more negative attitudes towards sex (DSM-IV, American Psychiatric Association, 1994; as cited in Reissing et. al., 2003). This finding was evaluated by the researchers in the sense that a less positive sexual self-view was

consistent with the sexual behavior observed for this women; in addition, it could have been preceeded the development of vaginismus. Furthermore, women in the vulvar vestibulitis group also had less positive sexual self-views.

Sexuality research also tapped on the relationship between sexual self-schemas and aversive sexual life events, such as child sexual abuse. Meston, Hellini, & Heiman (2006) shown that women having a history of child sexual abuse scored higher on positive sexual self-schema attributes. In other words, compared to women who did not have a history of child sexual abuse, those women were less romantic and less passionate and this was related to negative sexual affect. Although the reason for alteration of the positive sexual self-schema in these women is unclear, authors mentioned that "women may be linking feelings of romance and passion with intimacy needs – a domain of sexuality that has long been shown to be adversely affected among CSA (child sexual abuse) survivors" (Merrill, Guimond, & Thomsen, 2003; as cited in Meston et. al., 2006). This study demonstrated that low levels of romantic/passionate sexual self-schemas possibly mediates the negative sexual affect beyond the effects depression and anxiety on sexual affect themselves.

These findings were consistent with Andersen and Cyranowski's (1994) theory that sexual self-schemas are negatively related to a history of traumatic sexual experiences and with Reissing et. al.'s (2003) finding that romantic-passionate sexual self-schema was negatively related to a history of sexual abuse. However, although Andersen & Cyranowski (1994) posit that sexual self-schemas would differ in sexual abuse survivors and healthy participants, they had not found a difference in sexual self-schemas between a group of undergraduate college students who experienced unwanted sexual touching and who were exposed to sexual exhibitionism and a group of students without these experiences. According to Meston et. al. (2006), this contradiction between their findings and previous research findings was due to differences in the definition of sexual abuse, in statistical methods and methodological variables (e.g, self selection, participant sampling). In addition, the severity of the abuse experience would have differed between samples of these two studies, while the latter one which sampled women from community was assumed to include women with a more severe sexual abuse experience compared to college students. In terms of negative self-schemas, Meston et. al. (2006) did not find a significant relationship between history of child sexual abuse and embarrassment/ conservatism sexual self-schemas. It seemed that child sexual abuse had an effect on

positive self-schemas (so as to lowering them); however, it did not alter negative sexual self-schemas. In relation to this finding, authors discussed that it would have been due to inefficiency of Andersen and Cyranowski's (1994) scale to capture these women's negative sexual self-schema.

Sexual self-schemas were also studied in normal populations in a small number of studies. In a study by Volsky Rushton (2002), she found that for young women (mean age: 22.2 years) in a normal population, having positive sexual self-schemas was associated with increased sexual arousability, less sexual anxiety and more positive attitudes about sexuality compared to negative schematic young women. However, these results were not replicated for middle age (mean age: 38.2 years) and old age (mean age: 53.4 years) groups. Author concluded that sexual self-schemas might be less related to sexuality over age 30. This finding suggested that age might be an important factor in evaluating sexual self-schemas.

In a study by Wiederman & Hurst (1997), it has been found that sexual self-schemas were associated with experimenter-rated facial attractiveness, self-rated facial and bodily attractiveness, and degree of social avoidance due to concerns over personal appearance, but not with body size or shape, general body dissatisfaction, history of teasing about weight, and degree of investment in personal appearance. Moreover, positive sexual self-schemas were found to be positively associated with body and sex esteem, sexual esteem, sexual arousability, and ability to have an orgasm and to be negatively associated with sexual depression in a sample of women with spinal cord injuries. In contrast, negative-schematic spinal cord injured women were shown to be experience to increased sexual anxiety and decreased sexual esteem (Davidov, 2006). Specifically, these women tended to be more embarrassed in sexual contexts; and in turn, this lead to a decrease in their self esteem, therefore, they became more sexually anxious. In this study, sexual embarrassment, as revealed by negative schema scores, did not predict the occurence of sexual depression. However, instead, openness to sexually relevant experiences and behaviors appeared to be acting as a protective factor against developing sexual depression. In addition, findings of Davidov's (2006) study yielded that sexual esteem and body esteem and sexual arousability each individually mediated between sexual self-schemas and sexual depression. In other words, women in this study who had a more positive sexual self-view and a less negative sexual self-view had higher sexual esteem

and/or had higher body esteem and/or became more aroused in sexual contexts; this lead them become more sexually satisfied. Author concluded that although these women were physically disabled, they were shown to experience sexual arousability and this finding might reflect the importance of psychological factors, such as sexual self-schemas, in sexual life. A similar pathway was also achieved for sexual esteem and body esteem showing that openness to sexual intimacy and lack of embarrassment were related to a more positive sexual self-view, which in turn predicted increased sexual satisfaction.

2.1.3. Sexual Self-Schemas and Relationship Variables

In the literature, sexual self-schemas are shown to be associated with an array of relationship variables including experience of love, relationship quality and partnered sexuality. Making a distinction between positive and negative self-schemas, Andersen and Cyranowski (1994) have shown that women with positive sexual self-schemas were more willing to experience sexual relationships, had a greater behavioral repertoire related to sex, reported increased number of positive emotions during sexual activity, tended to have experienced a greater number of romantic relationships and anticipated experiencing more positive sexual relationships in the future compared to their negative-schematic counterparts. "These women tend to be liberal in their sexual attitudes and are generally free of such social inhibitions as self-consciousness or embarrassment" (p. 1094). They experienced a greater number of short-termed sexual relations and tended to experience more uncommited sexual relations. They reported a higher level of arousability, their evulations regarding various sexual behaviors had a more positive valence. On the other hand, women having negative sexual self-schemas described themselves as cold, unromantic, and emotionally inhibited as sexual persons. They held more negative attitudes related to sexual matters. These women also described themselves as self-concious and as not being self-confident, they tended to be embarassed, conservative in a variety of social and sexual contexts. Their view of themselves appeared to be moderated and defined by other individuals, this would act as a potential vulnerability factor for these negative-schematic women.

In another study, Andersen and Cyranowski (1998) demonstrated that co-schematic women evaluated themselves as neutral by rating themselves about as sexual as most women in their ages. It was suggested that neutral self-evaluations were products of self-views which are strong but conflicting. They were similar to positive schematics in the

sense that they endorsed high levels of sexual desire and sexual arousal in sexual relationships, had strong feelings of passionate love. However, they reported a restricted pattern of sexual activities putting them in a position between negative and positive schematics. Similarly, they reported a greater variety of current and past sexual activities and a greater number of lifetime sexual partners compared to negative schematics. However, these measures were lower compared to positive schematic women.

In the study mentioned above, aschematic women also reported neutral evaluations of themselves; however, this was regarded as a result of lacking strong self-schemas. They experienced lower levels of sexual desire and arousal in sexually relevant situations, did not recognize sexually relevant cues (in contrast, negative schematics recognize those cues and they regard them as anxiety provoking). However, despite the finding that they did not recognize cues in sexual situations, they had more lifetime sexual partners and also more past and current sexual experiences compared to their negative schematic counterparts. Therefore, it has been suggested that sexual behavior of aschematic women were likely to be driven by external circumstances rather than schemas (Andersen & Cyranowski, 1998).

For men, this distinction was different than for women. In the original study of men's sexual self-schemas, Andersen, Cyranowski, and Espindle (1999) have found that men does not hold negative schemas related to their sexual selves. Indeed, they were distinguished based on whether they did hold schemas or not. Authors concluded that this finding would be a result of men's reluctancy to endorse negative traits related to their sexuality. In addition, is was also shown in this study that for both schematic and aschematic men, it took significantly longer times to respond to items having a negative valence. Andersen, Cyranowski, and Espindle (1999) suggested a relationship of this finding to self-esteem in which admitting positive items as less descriptive of their sexuality and negative items as more descriptive would have been damaging to those men's self-esteem.

The study by Andersen, Cyranowski, and Espindle (1999) demonstrated that schematic men experienced a greater number of sexual relationships, a broader repertoire of sexual behaviors and greater sexual arousal compared to aschematic men. Similar to their sexual capacity, their romantic capacity were more extensive; they had romantic feelings in greater frequency and were the most capable to fall in love. In contrast, aschematic men were less experienced and less involved with their partners. In addition, they thought that

their situation (not being involved with a partner) would not change in near future (e.g., in 2 months) and most importantly, they viewed themselves as less sexual compared to others. These results were consistent with the original notion that sexual self-schemas guide both individuals' thinking and behaviors in relation to their sexual lives.

Aarestad (2000) studied sexual self-schemas in relation to attachment processes in a sample of dating couples. In her study, it was shown that positive schematic women and schematic men reported more intense love experiences in their romantic relationships, and schematic men experienced greater relationship quality, even after controlling for the effects of relationship history and attachment style. It was indicated that a man's tendency to see himself as compassionate and loving was particularly important to the quality of his romantic relationships. Regarding other sexual domains, women's sexual self-schemas were found to be associated with better sexual functioning across domains of sexual behavior, sexual satisfaction, and sexual response. For men, however, sexual self-schemas only predicted sexual response. This lack of relationship between sexual self-schemas and sexual behavior for men was discussed as being incosistent with Andersen, Cyranowski, and Espindle's (1999) findings that sexual self-schemas predicted sexual behavior in men. Author discussed that occurence of such finding might possibly be either due to an indirect relation between men's sexual self-schema and current sexual behavior via sexual history or due to sample characteristics.

In a sample of young Thai women, Pornchaikate (2003) studied sexual self-schemas in four schema groups which originally introduced by Andersen & Cyranowski (1994): Positive schematics, negative schematics, co-schematics (having both positive and negative schemas), and aschematics (having neither positive nor negative schemas). Findings revealed that reports of negative schematic and aschematic women were similar in terms of their erotic personal experiences, types of sexual activities engaged, risk categories associated with sexual activities, levels of expectations to engage in any type of sexual activity, and levels of expectations to engage in sexual activities in each risk category. Positive schematic and co-schematic women were also similar in aforementioned variables.

In Pornchaikate's (2003) study, negative schematic and aschematic women reported significantly less number of erotic personal experiences and fewer sexual experiences than their positive schematic and co-schematic counterparts. These women, behaving very

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similarly, also engaged in fewer risky (in terms of unintended pregnancy and contracting sexually transmitted diseases) sexual activities. Author discussed these findings as consistent with negative schematic and aschematic individuals being avoidant and conservative in sexual matters. In addition, negative schematic women had less vaginal sexual experience compared to positive schematic and co-schematic counterparts. Moreover, sexual behaviors of positive schematic and co-schematic women were similar. It has been suggested that positive schematic women tend to be comfortable related to sexual matters and they explore a wider variety of sexual activities, including risky encounters; and co-schematic women may be more curious about sexuality and may "explore sexuality with much less comfort and possibly more anxiety" (p. 109) as consistent with Andersen and Cyranowski's (1998) finding that co-schematic women report higher levels of desire and anxiety, whereas positive schematics experience less anxiety in sexual situations.

2.1.4. Sexual Self-Schemas and Sociocultural Variables

Researchers also investigated the relationship between sexual self-schemas and several sociocultural variables. For instance, Sanchez (2004) investigated the relationship between sex role orientations, socializations to desire for financial independence and sexual self-schemas of adult heterosexual women. She found that androgynous and masculine sex role orientations were significantly related to positive sexual self-schemas compared to feminine and undifferentiated sex role orientations. Further analyses also showed that masculinity was more highly related to positive sexual self-schemas than femininity. In other words, socializations to higher levels of masculine and feminine characteristics, or to higher levels of masculine characteristics alone, were shown to be related to positive sexual self-schemas in women. In addition, there was a small but significant positive linear relationship between sexual self-schemas and socializations to desire financial independence; the higher the socialization to desire financial independence, the more positive the women's sexual self-schema. The reason for this finding, according to Sanchez (2004), might have been that women who desire for financial independence do not rely on male partners for financial security and they do not view sex as a commodity that can be utilized for financial support and security. Moreover, due to their socialization processes in general, they might have had more positive sexual self-views. All these,

together, might have lead to the appearance of more positive sexual self-schemas in women desiring for financial independence.

Stone (2007) was another researcher who studied sexual self-schemas in a context different than in previous research in the sense that she explored the relationship between sexual messages (from sources of religion, media, peers, and parents/guardians), sexual self-schemas, and sexual contentment. It has been found that in the case that the content of the sexual message was restrictive (in contrast to being permissive), sexual self-schemas appeared to be less positive with increased parental exposure. In a category-based analysis, co-schematic and negative schematic women were shown to experience higher sexual anxiety and reported more restrictive peer messages compared to women with positive sexual self-schemas. In addition, more exposure to peers predicted more positive sexual self-schemas.

Another study which studied sexual content is by Davies, Zhu, and Brantley (2007). These researchers hypothesized that sexual content in advertising would influence the accessibility of sexual constructs in memory through moderation by sexual self-schemas. However, this hypothesis was not supported, "as evidenced by the fact that participants with negative sexual self-schema displayed significantly slower reaction times to ambiguous words than non-ambiguous words in the lexical desicion task" (p. 86). Therefore, these schemas produced an inhibition rather than increased accessibility. The effects for the positive sexual self-schema group only reached marginal levels of significance. These findings were considered as a possibility that negative schematics were more motivated to prevent sexual constructs from entering their mind, and were suppressing their sexual thoughts. Reichert and Fosu (2005) are other researchers who examined the effect of sexual self-schemas on responses to sexual content in commercials. In a sample of women, they found that women with more positive sexual self-schemas had more positive attitudes toward the ad and brand interest for the sexual advertisement.

Taylor (2006) examined the relationship between Lad magazines (a new genre of lifestyle magazines targeted at young adult men such as *Maxim For Men and FHM*) and pornographic magazines and certain sexual variables such as sexual attitudes, behaviors, and schemas. In this study, he focused on the first two distinct facets of men's sexual self-schemas as indicated by Andersen et. al. (1999): Passionate-loving, and powerful-aggressive. In terms of sexual self-schemas, the study revealed that reading Lad

magazines was associated with more aggressive sexual self-schema in young men; however, reading pornographic magazines was not. Authors concluded that the reason might be that Lad magazines were better at addressing or hailing (Althusser, 1987; as cited in Taylor, 2006) young male readers; therefore, men might have felt that those magazines spoke to them, and they were written for them. Another reason might have been the content of the magazines. As Taylor (2005; as cited in Taylor, 2006), Lad magazines tend to discuss about the pursuit of women and they assume it is possible to improve sex lives of such men. However, pornographic magazines have a tendency to idealize women as individuals who are highly sexualized and highly sexually available and readers might have rejected this content. A possible limitation for this study is the lack of analysis relating to romantic/passionate sexual self-schema. Although findings revealed a relationship between aggressive sexual self-schemas and Lad magazine readership, it is not possible to discuss whether those readers have altered romantic/passionate sexual self-schemas.

2.2. Frequency of Masturbation and Sexual Activity

2.2.1. Definitions of Masturbation and Sexual Activity and Characteristics of Frequency of Masturbation and Sexual Activity

Masturbation is defined as the "self-stimulation of one's genitals for sexual pleasure" (Crooks & Baur, 2005). It can be a self-induced or a partner-activated act (Levin, 2007). Despite the negative attitudes and beliefs held about masturbation in the society (Halpern et. al., 2000; Laqueur, 2004; as cited in Hock, 2007), studies have shown that masturbation is indeed common in the society (Lipsith, McCann, and Goldmeier, 2003; as cited in Soyer, 2006). In the last decades, many researchers investigated how often individuals practised masturbation.

Kinsey and colleagues (1948, 1953) were the first researchers to study on the incidence of masturbation in the society. They showed that 92% of men and 62% of women reported having engaged in masturbatory activity. In a survey of 2,026 adults randomly chosen from phone directories in the United States, Hunt (1974) demonstrated that 72% of young married men and 68% of young married women engage in masturbation and men tended to masturbate once or twice a month and women masturbated less than once o month. Laumann et. al. (1994) also conducted a study on a community sample and found that

60% of men and 40% of women reported masturbating in the last year. In a sample of undergraduate university students, Pinkerton, Bogart, Cecil, and Abramson (2002) found that 98% of men and 44% of women reported having masturbated, and frequency of masturbation was average 12 times a month for men, and 4.7 times for women. Likewise, Greenberg et. al. (2004) documented that approximately 90% of adult men and slightly more than 60% of adult women reported having masturbated in the last year (Arafat & Cotton, 1974; Downey, 1980; Hunt, 1974; Kinsey, et. al., 1948, 1953) and this pattern tended to remain constant over the years (Clement, 1990). Soyer (2006) also showed that men tended to masturbate more frequently than women in a monthly period. Das (2007) used the data from the National Health and Social Life Survey and concluded that 38% of women and 61% of men among 18-60 aged individuals reported masturbation in the previous year. Similarly, in a recent study, it was shown that 73% of men and 36.8% of women reported having masturbated in four weeks before the time of interview (Geressu et. al., 2008). In a survey of individuals at midlife and beyond (American Association of Retired Persons, 2005), only 8% of women engaged in self-stimulation as compared to 34% of men.

Sexual activity is also an important aspect of marital sexuality. Sexual activity is defined as "…the manner in which humans experience and express their sexuality. It encompass a wide range of activities such as strategies to find or attract partners (mating and display behaviour), interactions between individuals, physical or emotional intimacy, and sexual contact" and it refers to acts involving at least two people (Sexual activity, 2009). Again starting with studies of Kinsey and colleagues (Kinsey, Pomeroy, & Martin, 1948; Kinsey, Pomeroy, Martin, & Gephard, 1953), many researchers also conducted studies in order to reveal the average frequency of sexual activity in married couples. Frequency of sexual activity is mostly dealt with in population surveys. In Kinsey et. al.'s surveys (Kinsey, Pomeroy, & Martin, 1948; Kinsey, Pomeroy, Martin, & Gephard, 1953), it has been shown that the frequency for marital sexual activity per week was 2.45 (median value) between ages 16-25 and 1.95 (median value) among individuals in the 26-35 age group. Almost 20 years later, Hunt (1974) showed that average frequency of sexual activity was 3.25 per week for the young 18-24 age group.

Sprecher and McKinney (1993) summarized various studies on frequency of sexual activity. In a national study, Blumstein and Schwartz (1983; as cited in Sprecher &

McKinney, 1993) found that frequency of marital sexual activity reached a peak among ages 25 and 29 and declined thereafter. For couples married for two years or less, average percentages were 45% (having sex three times per week of more) and 38% (between one and three times per week). These percentages reduced to 27% and 46% relatively for couples married two to ten years. Huston and Vangelisti (1991; as cited in Christopher & Sprecher, 2000) similarly found that a decrease in sexual activity and interest began in the first two years of marriage. However, other large-scale studies using national probability samples cited by Sprecher and McKinney (1993) showed slightly lower rates. Using the data from National Fertility Studies (NFS) in 1965, Westoff (1974) found that women under age 45 engaged in sexual activity 1.7 times per week (or 6.8 times monthly) and this rate increased to slightly more than two times per week when a different sample was interviewed five years later. Extending this study and including data from NFS in 1975, Trussell and Westoff (1980) again found a continued increase in frequency. Udry (1980), however, demonstrated a decline in the frequency of sexual activity over a four year period (10.01 in 1974, 8.45 in 1977, and 7.75 in 1978 for a monthly period). Finally, Greenblat (1983) found that for the first year of marriage, monthly intercourse frequency ranged between 1 and 45 for respondents among 80 individuals married five years or less.

National Opinion Research Center (NORC) survey in 1992 demonstrated that average frequency was seven times a month for 3,432 married individuals under sixty years of age and about 40 percent of those married individuals reported having sexual intercourse at least twice a week (Laumann et. al., 1994). Call, Sprecher, and Schwartz (1995) also examined sexual frequency using the National Survey of Families and Households data set and found that married individuals under age of twenty-five engaged in sexual activity about twelve times a month. In a 1998 survey of 10,000 people living in the United States, it was found that the average frequency of sexual activity was once per week and each episode lasted about half an hour on average (Robinson & Goldbey, 1998; as cited in Crooks & Baur, 2005). For individuals at midlife and beyond, AARP (American Association of Retired Persons) reports (2005) demonstrated that slightly more than one-third of both male and female participants reported having sexual intercourse once a week or more often in the last six months prior to interviews. Finally, in a Turkish sample, Durex's Global Sex Survey (2005) revealed that the average frequency of sexual activity was 111 times in a year; this frequency was slightly above the global average which is 103

times (for women: 101 times and for men, 104 times) in a year and similar to the frequency (113 times in a year) reported by individuals from the United States.

2.2.2. Frequency of Masturbation and Sexual Activity and Individual Variables

Frequency of masturbation was reported to be associated with certain individual variables. With regard to demographic and contextual variables, Kinsey et. al. (1948, 1953) found that incidence of masturbation was related to age, education level, and religious adherence. Specifically, it was shown that the highest incidence of masturbation was between 16 and 20 years of ages and individuals with a higher educational level masturbated more frequently than their low-education counterparts. In addition, as religious adherence increased, the frequency of masturbation decreased in Kinsey's samples. Laumann and colleagues (1994) demonstrated that higher education and more frequent masturbation were related. Das (2007) found that higher education level was associated with increased frequency of masturbation and higher age was associated with decreased frequency. In a stratified probability sample survey of the British general population, Geressu and colleagues (2008) demonstrated that for both men and women higher levels of education and social class were associated with higher incidence of masturbation and individuals reporting sexual problems had more frequent masturbation.

Apart from these findings, ethnic differences were found to influence masturbatory practices. Compared to African American women, European American women reported greater masturbation frequencies and higher rates of body dissatisfaction. Furthermore, the relationship between positive body image and masturbation frequency was assured only for European American women; for African American women, masturbation frequency was not higher among women with positive body image (Shulman and Horne, 2003). In addition, Das (2007) discussed that in the literature, decreased frequency of masturbation was observed among Black individuals (e.g., Laumann & Mahay, 2002) and Asian-American individuals (Okazaki, 2002).

Furthermore a gender difference seems to be ensured in the frequency of masturbation. Men tend to masturbate more frequently than women in general (Leitenberg et. al., 1993; Jones & Barlow; 1990; Arafat & Cotton, 1974; Sigusch & Schmidt, 1973) and even masturbating women engage in self-stimulation of genitals less frequently than masturbating men (Sigusch & Schmidt, 1973). In addition, Jones and Barlow (1990)

found that almost half of women in their sample (47%) and 16% of men reported never having masturbated, and only 15% of women compared to 45% of men reported having masturbated at least once in a week. In a Turkish sample of medical students, Ozan and colleagues (2005) found that 84.4% of men and 11.1% of women reported having masturbated. This difference in the incidence of masturbation was also granted by the work of Oliver and Hyde (1993) who reviewed 177 studies and demonstrated a large meta-analytic effect size ($d = 0.96$).

For women, increased frequency of masturbation was associated with vaginal intercourse in the last four weeks, a greater sexual repertoire, and an increased number of sexual partners in the last year. In contrast, frequency of masturbation was lower among men reporting more frequent vaginal intercourse, although some earlier findings revealed that frequency of masturbation and frequency of sexual activity were not significantly related to each other (Abramson, 1973). Ozan et. al. (2005) found that masturbation was associated with feelings of relaxation and happiness, especially for men. A recent study focusing on the correlates of masturbation in the United States showed that early sexual contact, more frequent thoughts with a sexual content, and "a greater potential appeal of sexual diverse practices" were strongly correlated with masturbation, and for women, having more stable partners over their life history and physical health was associated with the frequency of masturbation (Das, 2007, p. 312).

In terms of sexual activity, aging is found to have a negative influence on the experience of sexual activity. Greenblat (1983), Edwards and Booth (1976) and AARP (2005) showed that as age increased, frequency of sexual activity decreased. Call et. al. (1995) found that frequency of twelve times a month dropped to eight times a month at ages thirty through thirty-four, and to about six times a month at fifties. In a study of married individuals, Basat (2004) found that as age, and length of marriage increased, intercourse frequency decreased significantly. On the other hand, intercourse frequency and orgasm frequency were positively related to each other in this study; meaning that as frequency of intercourse increased, orgasm frequency also increased. There are studies which demonstrated in the literature that frequency of sexual activity tended to increase with age (112 times in a year for 35-44 ages, 108 times for 25-34 years, and 90 times for 16-20 years) (Durex, 2005); however, it is important to keep in mind that interpretation of this

finding as a positive influence on frequency of sexual activity may be biased because the probability that having a stable partner at 16-20 ages is low.

In regard to explaining this aging-reduced frequency connection, it has been also discussed that this link would be due to expectations of couples rather than physical aging only (Smith, 2003; as cited in Lamanna & Riedmann, 2006). However, there also exist findings suggesting that physical consequences of aging negatively influence the frequency of sexual activity. For instance, it was found that after menopause, testosterone level (while it declined significantly in this period) was significantly associated with a decline in intercourse frequency (McCoy & Davidson, 1985). In addition, aversive physical conditions such as vascular diseases, diabetes, prostate problems, history of surgical operations and also "body's withdrawal of energy from the sexual system in order to address any other serious illness" would contribute to the negative impact of aging on sexuality (Lamanna & Riedmann, 2006, p. 151). Greenblat (1991; as cited in Bird and Melville, 1994) suggested a more sociopsychological explanation and indicated that "after the first year of marriage, children, jobs, commuting, household chores, and finances all collectively conspired to decrease the level of sexual interaction" (p. 162).

Robinson and Goldbey's (1998; as cited in Crooks & Baur, 2005) study revealed a set of characteristics that are associated with high frequency of sexual activity: Having college education (however, having graduate school education was associated with low frequency), working at least 60 hours per week, watching more TV, loving jazz music, being married, defining oneself as "extremely liberal" or "extremely conservative", smoking and drinking. In relation to these findings, Sacks (1998; as cited in Crooks & Baur, 2005) discussed some of these characteristics (e.g., smoking and drinking, watching more TV, working long hours) were against the conventional wisdom.

Schneidewind-Skibbe, Hayes, Koochaki, Meyer, and Dennerstein (2008) reviewed community-based studies investigating frequency of sexual activity in women and concluded that age, parity, duration of relationship, pregnancy, time, relationship status, fertility intentions, and contraception were the factors related to frequency of sexual activity. In addition, continents in which women lived produced a variation in the sense that European and American women reported the highest frequency across all age groups. However, there was a reduction in frequency from age 50. Increased rates between ages

20 and 30 concluded with a decline at later years for Asian women and finally, age did not produce a difference for African and South-American women.

In relation to attachment processes, Aarestad (2000) studied sexual functioning in a sample of dating couples and demonstrated that attachment variables were strongly related to sexual functioning for both men and women. For men, avoidant attachment was associated with more frequent sexual acitivity, and anxious attachment was associated with less frequent sexual activity and also with diminished sexual satisfaction. In addition, for women, avoidant attachment was associated with a general poorer sexual functioning.

Role of personality factors in frequency of masturbation and sexual activity is also evident in the literature. Volsky Rushton (2002) summarized findings related to personality factors, especially extraversion: Giese and Schmidt (1968) showed that higher extraversion scores were associated with more masturbation, and more sexual activity. High extraversion was also related to more petting, sexual activity, and oral sex in Eysenck's studies (1971; 1972). This association was also replicated in Andersen and Cyranowski's (1995) study. In Eysenck's studies (1971; 1972), higher neuroticism was weakly related to engaging in less frequent sexual activity. It was suggested that the link between neuroticism and sexual functioning was not as evident as the link between extraversion and frequency of sexual conduct. Such kind of link was not established for sensation seeking (Zuckerman, Eysenck, & Eysenck, 1978).

2.2.3. Frequency of Masturbation and Sexual Activity and Relationship Variables

During the past decades, researchers in the sexuality field have attempted to reveal the relationship-related variables such as sexual satisfaction and frequency of sexual activity that are associated with frequency of masturbation. As mentioned in the previous sections, the word "masturbation" not only applies to auto- or self-masturbation, but it can be also partner-activated (Levin, 2007). According to the author, however, few studies qualifies its usage and it is unfortunate because "this may have a significant impact on the psychological/physiological intensity and subsequent sexual satisfaction of the arousal" (p. 137). In the literature, there has been a tendency to conceptualize masturbation as a compensation for a lack of partnered sex or low sexual satisfaction. In such compensatory cases, frequency of masturbation would inevitably increase (Langstrom & Hanson, 2006; as cited in Das, 2007). However, in time, this tendency has evolved into a complementary

one; younger cohorts practised masturbation as an autonomous source of sexual pleasure to complement an active sexual life. Indeed, even almost a decade before this argument, Laumann et. al. (1994) demonstrated that around 85% of men and 45% of women who were living with a sexual partner reported masturbating in the past year.

Das (2007) showed that men without a stable partner but who had sexual intercourse in the previous year and both men and women who practised masturbation merely to have sexual pleasure reported an increased frequency of masturbation, consistent with the complementary model mentioned in the previous paragraph. Furthermore, consistent with the compensatory model, women (and perhaps also men) without a partner and an experience of sexual intercourse and men with lower levels of sexual satisfaction in their intimate relationship reported more masturbation. However, it should be noted that a preference for masturbation over sexual intercourse might result in discord in marital relationships (Betchen, 1991). This is consistent with the finding that frequency of masturbation was inversely predictive of both satisfaction with sexual intercourse and sexual satisfaction of women (Bridges, 1999).

Similar to frequency of masturbation, several relationship variables were demonstrated to be associated with frequency of sexual activity. For instance, literature shows that frequency of sexual conduct and quality of the marriage and sexual relationship are indeed related. Frequency of sexual intercourse was found to decrease in the case of marital discord and marital discord was also associated with a tendency to experience extramarital affairs (Edwards & Booth, 1976). In terms of marital discord, the decrement in the frequency of sexual intercourse was found to be the highest when husbands or wives reported a decrement in love towards the partner. In addition, husband who felt alienated also reported lower incidence of sexual intercourse. Moreover, Barrientoz and Paez (2006) found a significant relationship between frequency of sexual activity and sexual satisfaction; and Stewart (2004) showed that frequency of sexual activity was the strongest single predictor of sexual satisfaction. In Call, Sprecher, and Schwartz's (1995) study, marital satisfaction was the second largest predictor of sexual frequency following age. Similarly, Soyer (2006) found that monthly frequency of sexual intercourse and monthly frequency of masturbation contributed to the prediction of marital satisfaction.

In a marriage relationship, frequency of sexual activity may show periodical changes, such as in the case of female partner getting pregnant. Elliott and Watson (1985) showed that

over the course of pregnancy, a reduction occurs in the frequency of sexual activity and sexual desire for women. After delivery, it was found that most couples resumed sexual activity in six weeks and almost all couples had resumed engaging in sexual intercourse by three months. However, the frequency of sexual activity at three to twelve months after delivery was shown to be lower than the frequency three months before pregnancy. Similarly, Call (1995) reported a decline in sexual activity by the third trimester (from sixth to ninth months) of gestational period.

There are several other variables that seem to be associated with frequency of sexual activity. For instance, lack of communication intimacy was shown to be an important factor which inhibits frequency of sexual activity (Gossman, Julien, Mathieu, & Chartrand, 2003). In addition, frequency of sexual activity is also related to premarital cohabitation. Couples who had lived together before marrying reported a higher number of sexual intercourse compared to couples who had not cohabitate before getting married (Colebrook Seymour, III, 1998).

2.3. Sexual Satisfaction

2.3.1. Definition and Dimensions of Sexual Satisfaction

In a general sense, sexual satisfaction refers to what couples feel about the sexual aspect of their relationship (Sprecher & McKinney, 1993). Sexual satisfaction is defined as "an affective response arising from one's subjective evaluation of the positive and negative dimensions associated with one's sexual relationship" (Lawrence & Byers, 1995; as cited in Timm, 1999, p. 17). It results from a complex blend of both physical and psychological stimulation with an individual's subjective evaluations regarding the sexual experience (Frank, Downard, & Lang, 1986). Therefore, sexual satisfaction is multidimensional, capturing the affective and physiological aspects of sexuality.

The multidimensional, complex nature of sexual satisfaction was demonstrated in three distinct levels of influences on sexual satisfaction by Carpenter, Nathanson, and Kim (2007). First level includes physiological and psychological sensations/reactions and an individual's attitudes towards sexuality. Second level relates to interpersonal dynamics of an intimate relationship; and finally, third and the last level reflects socio-cultural influences on sexuality. A broad range of factors seem to influence the experience and understanding of sexual satisfaction.

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Sexuality is a critical aspect of any marital relationship; it is even referred as "a microcosm" of marriages (Crowe, 1995). In addition, marital relationship appears to be the only type of relationship that society sanctions most forms of sexual encounters (Christopher & Kisler, 2004; Greenberg et. al., 2004). Therefore, its critical position should not be neglected within a marriage relationship. For instance, it has been shown to "enhance individuals' well-being as well as the stability of marriages and other intimate relationships" (Henderson-King & Veroff, 1994; Sprecher, 2002; as cited in Carpenter, et. al., 2007). Moreover, Barrientoz and Paez (2006) demonstrated a link between marital status and sexual satisfaction for women. Higher levels of sexual satisfaction were reported by those who lived with their partners, either cohabiting or married. Taken together the importance of sexuality in marital relationship (i.e.., Henderson-King & Veroff, 1994) and the multifactoral nature of it (Crowe, 1995), it is important to examine factors that are shown to influence sexual satisfaction.

2.3.2. Sexual Satisfaction and Individual Variables

Sexual satisfaction is associated with a number of individual variables such as demographic characteristics, personality traits, and sexual dysfunctions. In the literature, there are some demographic variables reported to have a relationship with sexual satisfaction. In general, men exhibit greater sexual satisfaction compared to women (Basat, 2004; Gökmen, 2001; Kabakçı & Daş, 2002; Lee, 1999). However, there are studies which reported higher levels of sexual satisfaction in women (Renaud & Byers, 1997) or no differences between men and women (Timm, 1999). The relationship between age and sexual satisfaction remains unclear due to inconsistent results. Some studies report that sexual satisfaction declines with age (Edwards & Booth, 1994; Laumann, Gagnon, Michael, & Michaels, 1994; AARP, 1999); however, some does not demonstrate a decline with regard to age, for instance Whitley and Poulsen (1975) and Adams and Turner (1985) found an increase in sexual satisfaction of women as they got older.

Several other demographic and sociocultural variables were also shown to be associated with changes in sexual satisfaction. Increase in education level had a positive effect on marital sex; however, very high educational attainments (college graduate or higher) did not have such effect (Call, 1995). In contrast, high education level was found to be associated with increased levels of sexual satisfaction by Barrientoz and Paez, 2006; Basat, 2004; Çetin, 1995; and Meadow, 1982. In Barrientoz and Paez's study, lower

socioeconomic level was associated with lower sexual satisfaction. Moreover, political views were also found to be associated with differences in sexual satisfaction. For instance, Liberals were found to be less sexually satisfied compared to Conservatives (Colebrook Seymour, III, 1998). It was also found that having children was associated with less orgasm problems and higher levels of sexual satisfaction in women, "suggesting that the problems during the postpartum period are, for the majority of women, temporary" (Witting et. al., 2008, p. 102). In addition, in this study, pregnancy was not necessarily related to an increased number of sexual problems.

Sprecher and McKinney (1993, p. 94) summarized some of important findings in the literature. These authors mentioned that various individual and personality factors were associated with sexual satisfaction. These factors included holding traditional attitudes toward women's roles (Kirkpatrick, 1980), having positive attitudes about one'e body (Perlman & Abramson, 1982), having positive attitudes about the partner's body, especially for men (Margolin & White, 1987), being both Irish and Catholic (Greeley, 1991), characterizing oneself as "living in the here and now" (Paxton & Turner, 1978; Waterman, Chiauzzi, & Greenbaum, 1979), being extroverted (Schenk et. al., 1983), and being sexually assertive, for women (Hurlbert, 1991).

Role of personality characteristics in the change of reports of sexual satisfaction was studied intensively. In a study with employed professional women, assertiveness (in contrast to passivity) was found to be associated with increased sexual satisfaction and an increased range of sexual activities (Whitley & Poulsen, 1975). Farley & Davis (1980) conducted a study with 102 married couples and found that for women, sexual satisfaction was at the highest level if man's and woman's personality were identical in terms of extraversion-introversion and neuroticism. Authors discussed that this finding relating to a required "personality fit" would have appeared due to women's increased sensitivity to personality. However, men's levels of sexual satisfaction were not affected by a similarity of such kind. Instead, men's sexual satisfaction was highest when men and women were essentially identical in the dimension of psychoticism. From a general viewpoint, all three personality dimensions (namely, extraversion-introversion, neuroticism, and psychoticism) were found to be related to sexual satisfaction. Similarly, Davis (1986) reported that extraversion was associated with higher levels of sexual satisfaction and on a couples-basis, sexual satisfaction was found to be the lowest if male partner is extroverted

and female partner is introverted. In addition, sexual satisfaction was shown to be positively related to self esteem for married women (Adabjian-Mozian, 2005).

Furthermore, in several studies, sexual satisfaction was shown to be in relation with gender roles. According to Tiefer (1995), sexuality emerges in interactions as a result of cultural and social expectations and negotiations, and it does not emerge from inside of an individual. This view is reflected in substantial number of gender studies in the literature. In early research, Kimlicka, Cross, and Tarnai (1983) and Obstfeld, Lupfer, and Lupfer (1985) found that adoption of feminine gender role was associated with lower sexual satisfaction. Kirkpatrick (1980) studied the relationship between gender role adoption and sexual satisfaction taking into account two aspects of gender role adoption (i.e., gender role orientation and one's beliefs about gender equality). In contrast to previous research findings, she did not find a relationship between femininity and sexual relationship. However, there was an association between the presence of liberal thoughts relating to gender equality and increased sexual satisfaction. Moreover, Rosenzweig and Dailey (1989) reported that the most sexually satisfied group was androgynous individuals. However, the results were inconsistent. Spencer and Zeiss (1987) did not find a difference between androgynous and non-androgynous individuals regarding their levels of sexual satisfaction. Frank, Downard, and Lang (1986) were other researchers who did not find an association between gender role adoption and sexual satisfaction.

Similarly, Marchese (1992) studied the interactive effects of masculine and feminine personality traits and attitudes upon both dyadic and individual sexual satisfaction. She presented findings in four categories: Sexual satisfaction was related to masculinity or femininity neither for women nor for men. Sexual satisfaction was found to be related to androgyny for men, but not for women. Couples consisting of two androgynous partners were more sexually satisfied than from couples were both partners were sex-typed (feminine female and masculine male), cross-typed (feminine male and masculine female), or having undifferentiated gender roles. Furthermore, there was a negative relationship between instrumentality and sexual satisfaction, particularly for women and a positive one for expressivity for both women and men. On an individual-basis, androgynous men and feminine women were the most sexually satisfied and among couples, androgynous couples reported the highest degree of sexual satisfaction. Silberbogen (2002) was another researcher who studied the relationship between gender

roles and sexual satisfaction. Based upon her preliminary finding that there was not direct relationship between gender role adoption and sexual satisfaction, she constructed the study so as to examine the indirect relationship between gender role adoption and sexual satisfaction through sexual attitudes and relationship satisfaction.

Attachment is another variable that is examined in the context of sexual satisfaction. Hazan and Shaver (1987; as cited in Aarestad, 2000) were the first ones to conceptualize adult romantic love as a process of attachment. According to this perspective, secure attachment style is associated with striving for mutual intimacy and pleasure. Individuals with avoidant attachment style tend to maintain emotional distance and have a tendency to engage in promiscuity. Finally, individuals with anxious/ambivalent attachment style attempt to satisfy needs for security and love through sexual contact. Given that attachment styles reflect on how individuals experience sexuality, it is also expected that these styles would have an influence on sexual satisfaction. Birnbaum (2007) showed that attachment anxiety was detrimental to sexual functioning and it was associated with relational and sexual satisfaction. Specifically, as attachment anxiety increased, sexual satisfaction was lowered and this lead to a decrease in the level of relationship satisfaction. Furthermore, it has been shown that higher levels of anxiety and avoidance were associated with lower levels of sexual satisfaction and individuals having an avoidant spouse exhibited lower sexual satisfaction (Butzer & Campbell, 2008).

Sexual dysfunctions are also shown to have an influence on sexual satisfaction. The results from the Global Better Sex Survey (Mulhall et. al., 2008) which was conducted in 27 countries (12,563 respondents; 6,272 women and 6,291 men) have shown that all aspects of sex including intercourse, foreplay, orgasm, and attraction to partner were important for both women and men. Nearly half of the male participants (48%) reported having some degree of erectile dysfunction (ED) and more than half of the men (65%) were not satisfied with their erection hardness (in addition, 63% of female participants were not satisfied with their partner's erection hardness). More importantly, satisfaction with erection hardness was found to be associated with sexual satisfaction. In a study of younger and older men suffering from ED, Gralla et. al. (2008) reported that severe ED was associated with higher levels of worry about sexual and relationship functioning, lower levels of sexual desire, and higher levels of sexual dissatisfaction. Furthermore, at

all levels of ED severity, younger men were more sexually satisfied compared to older men.

However, there are some researchers who believe sexual satisfaction may not be affected by present sexual problems. As an example, Ferenidou et. al. (2008) argued that sexual dysfunctions might not necessarily affect sexual satisfaction in women. To test this argument, they interviewed 164 women presenting to general hospitals because of symptoms which are not related to their sexual function and found that 48.8% of the participants had a sexual dysfunction according to Female Sexual Function Index. However, a significant proportion of these women (80.5%) reported that they are satisfied with their sexual lives despite that 69.5% of them declared having at least one sexual problem. Statistical analyses also revealed no association between sexual satisfaction and sexual dysfunctions.

Apart from sexual dysfunctions (one should note it is possible that sexual dysfunctions may be due to physical disorders and psychological problems), a wide variety of psychological problems may negatively influence sexual satisfaction. Depression, stress, and anxiety are shown to be associated with a decline in sexual satisfaction (Crowe, 1995; Hawton, 1985). Feelings of tension, as measured by irritability and arguments, were predictors of sexual maladjustment (Henderson-King & Veroff, 1994). In addition, state anxiety, such as performance anxiety during sexual encounters, would negatively influence sexual arousal and release and consequently, diminish the sensation of pleasure associated with them (Rowland, Cooper, & Slob, 1996).

Furthermore, physical disorders may have a negative effect on sexuality. Lower levels of sexual satisfaction was demonstrated in samples of married women with polycystic ovary syndrome (Drosdzol, Skrzypulec, Mazur, & Pawliñska-Chmara, 2007), more-amputation related pain (Walters & Williamson, 1998), asthma and chronic obstructive pulmonary disease (Kaptein et. al., 2008). Moreover, Basat (2004) mentioned that physical factors such as hormonal abnormalities, Parkinson's disease, spinal cord injury, multiple sclerosis, and thyroid disease are demonstrated as having a negative impact on sexual satifaction in the literature (Crowe, 1995; Kohn & Kaplan, 2000; as cited in Basat, 2004).

Researchers also investigated whether physiological changes in body would affect the level of sexual satisfaction. Davison et. al. (2008) examined the sexual function in 349

premenopausal (PreM) and postmenopausal (PM) community-based women with a focus on sexual satisfaction. It was found that nearly half of the premenopausal women (47%) were dissatisfied with their sexual life. Moreover, increased sexual satisfaction was associated with an increase in the frequencies of sexual thoughts, interests, events, and initiation of activity. Among PreM and PM women, PreM women who are satisfied with their sexual lives reported significantly higher frequencies of sexual thoughts, number of days with sexual activity and events per month compared to sexually satisfied PM women suggesting that although in small scales, menopause would have an adverse effect on sexual satisfaction. However, no differences were found in the sexual function of sexually dissatisfied PreM and PM women. Regarding the postmenopausal period, McCoy & Davidson (1985) showed that compared to women in premenopausal period, women who experienced menopause experienced fewer sexual thoughts and fantasies, suffered more from lack of vaginal lubrication during sex and had lower levels of sexual satisfaction.

2.3.3. Sexual Satisfaction and Relationship Variables

In a marital relationship, marital sexual life can be considered as a microcosm of the general marital relationship (Crowe, 1995). Hence, it is important not to compartmentalize sexual satisfaction from the marital relationship. Many researchers investigated the correlates of sexual satisfaction in marital life. For instance, Young, Denny, Luquis, and Young (1998) demonstrated that overall satisfaction with marriage, satisfaction with non-sexual aspects of the relationship, frequency of spouse/partner orgasm per sexual encounter, frequency of sexual activity, and sexual uninhibitedness were positively and significantly correlated with sexual satisfaction in a sample of 797 married women and men of diverse ages, suggesting the importance of non-sexual aspects of marriage. In addition, there was no gender differences in the level of sexual satisfaction reported. Other researchers also showed that sexual satisfaction was associated with overall relationship quality (Frank et. al., 1979) and a close emotional relationship with one's partner (Newcomb & Bentler, 1983; Rosenzweig & Dailey, 1989).

In a recent study, it was found that sexual satisfaction of men and women was positively associated with being in love with a partner, good sexual life in the past, a steady relationship, duration of partnership, a belief that the relationship would have a long-term temporal horizon, shared initiative in sexual intercourse (i.e., communication of intimate topics), and orgasms during the last intercourse (Barrientoz & Paez, 2006). Another study

demonstrated that higher levels of marital satisfaction, internal locus of control orientation, higher levels of self-esteem, shorter periods of marriage, and increased intercourse frequency and orgasm frequency were all found to be associated with higher levels of sexual satisfaction in married individuals (Basat, 2004). Sexual satisfaction was also shown to be positively correlated with sexual agreement (Purnine & Carey, 1997; 1999; as cited in Offman and Matheson, 2005), perceived sexual compatibility of self and partner (Offman and Matheson, 2005; Smith et. al., 1993; as cited in Offman and Matheson, 2005), and intimacy and orgasm likelihood (Haning, O'Keefe, Randall, Kommor, Baker, & Wilson, 2007). In addition, conflict in the relationship (Haning et. al., 2007) and high trait and state anger (Bélanger, Laughrea, & Lafontaine, 2001) were negatively associated with sexual satisfaction.

From an interpersonal perspective regarding predictors of sexual satisfaction, Lawrence and Byers (1995; as cited in Byers & Macneil, 2006) developed a conceptual framework, named Interpersonal Exchange Model of Sexual Satisfaction, in order to explain how sexual satisfaction might be predicted by behavior and affect in a relationship. This model asserts that sexual satisfaction is affected by four components. These are the balance of sexual rewards and costs in the relationship, the way sexual rewards and costs compare to the expected level of sexual rewards and costs, termed comparison level or relative sexual rewards and costs, the perceived equality of sexual rewards and costs between partners, and the quality of nonsexual aspects of the relationship (Lawrence & Byers, 1995; as cited in Byers & Macneil, 2006). Byers and Macneil (2006) explains that the model was validated in studies of individuals in dating and long-term relationships (Byers et. al., 1995; Lawrence & Byers, 1995) and as well as in marital relationships (Renaud, Byers, & Pan, 1997). With an effort to further validate the model, Byers and Macneil (2006) showed that sexual satisfaction was influenced by the history of sexual rewards and costs, sexual satisfaction tended to decrease in cases that sexual exchanges became less favorable, and sexual satisfaction was influenced by dyadic factors for both men and women.

Given that first years of marriage is an important period because these years seem to represent the period that married individuals engage in sexual activity more often than later periods (e.g., AARP, 2005; Basat, 2004; Greenblat, 1983) and "early years of marriage were viewed as sexually satisfying" (Frank & Anderson, 1991; as cited in Bird

& Melville, 1994, p. 161), sexuality researchers directed attention to sexual satisfaction in the first years of marriage. Henderson-King and Veroff (1994) found that husbands' and wives' feelings of affirmation and tension relate to their experience of sexual satisfaction in both first and third years of marriage. Larson, Anderson, Holman, and Niemann (1998) conducted a longitudinal study on the effects of premarital communication, relationship stability, and self-esteem on sexual satisfaction in the first-year of marriage. This study revealed that wives' self-esteem, wives' open communication, and wives' relationship stability were the best predictors for husband's sexual satisfaction. In addition, sexual satisfaction of wives was best predicted by their own self-esteem, their own open communication, and their husband's empathic communication. Therefore, although husbands and wives share their lives in a marriage relationship, they tend to have different expectations and perspectives regarding the same marital relationship. From a different viewpoint, authors also discussed these findings in the context of family systems theory (Gottman, 1994; as cited in Larson et. al., 1998) which argues for the reciprocity in a marital sexual relationship. Both husbands and wives perceptions and behaviors influence each other's perceptions, behaviors, and satisfaction in a reciprocal manner. Hence, it seems important to gain an understanding of both parties in order to fully comprehend the nature of sexual satisfaction in a marital relationship.

Critical role of communication in marital relationships was also shown in several studies. Effective communication about sexuality was shown to enhance sexual arousal and to be a vital part of any sexual relationship (Haavio-Mannila & Kontula, 1997; as cited in Bridges, 1999). Cupach and Comstock (1990) studied sexual communication in a sample of 402 married individuals and found that satisfaction from sexual communication was positively related to sexual satisfaction. In Bridges' study (1999), it was demonstrated that partner communication and initiation were predictive of measures of women's sexual satisfaction such as satisfaction with sustained genital stimulation or intercourse, satisfaction within the past three months, and overall sexual satisfaction. In couples lacking communication intimacy, sexual satisfaction was shown to be decreased and as differences between direct sex initiation strategies of partners became greater, likelihood of a lack of sexual desire and interest between partners increased (Gossman et. al., 2003). Similarly, partner initiation and communication predicted sexual satisfaction to the greatest extent in a community sample of women (Bridges, Lease, & Ellison, 2004). Analyzing the data from National Health and Social Life Survey (Laumann et. al., 1994),

Waite and Joyner (2001; as cited in Stewart, 2004) found that communicating likes and dislikes in a sexual relationship was associated with sexual satisfaction.

Besides early years, later years of marriage should also be considered given the knowledge that psychological needs for intimacy, excitement and pleasure do not diminish with aging (Masters et. al., 1995). Colebrook Seymour, III (1998) examined sexual satisfaction during the childbearing years. He demonstrated that increased marital and sexual satisfaction was related to increased frequency of sexual activity. Children's ages were other important predictors. Couples with children between the ages of 5 and 12 were more sexually satisfied than couples with children under the age of 4. Another finding was that as the length of marriage and number of children increased, sexual satisfaction decreased. The author concluded that as demands for child care and time increased, it would be hard for couples to spend time alone and to focus on a healthy sex life.

Beyond the years of childbearing, sexuality in late midlife is much less investigated. In one study by Carpenter et. al. (2007), several important results were obtained. The authors examined the popular assumption that heterosexual, middle-aged women exhibited lower levels of sexual satisfaction compared to heterosexual men at similar ages, using the data from the National Health and Social Life Survey in 1992 (Laumann et. al., 1994; as cited in Carpenter et. al., 2007). Findings revealed that for women, bodily sexual practices were better related to level of sexual satisfaction than relational factors; however, relational factors were the most associated factors with sexual satisfaction in men. With advancing age, women expressed less emotional and physical satisfaction, while men at older ages reported greater satisfaction. However, this age effect became non-significant when generational influences (i.e., Baby Boom cohorts versus World War II cohorts) were accounted for. In conclusion, these authors demonstrated that the patterns of sexual life of late midlife adults were contrary to expectations: They seemed to be highly satisfied with their experiences of sexuality and cultural influences were as important as physical and emotional influences.

As implicated in Larson et. al.'s (1998) study beforehand, expectations of women and men in a relationship are found to be an important variable in predicting sexual satisfaction. In a longitidunal study of 72 newlywed couples, McNulty & Fisher (2008) examined the role of expectations based on the previous evidence that women's sexual satisfaction is more contextually based and men's sexual satisfaction is more grounded on the physical aspects

of their sexual lives. Based on this knowledge, they hypothesized women's initial expentancies regarding sexual satisfaction and changes in sexual frequency in men's sexual lives would predict changes in the reports of sexual satisfaction. Both hypotheses were supported after controlling for women's and men's expectancies about their relationship in general, age, length of marriage, initial sexual frequency, and changes in sexual frequency. These findings also suggest the importance of the cognitive aspect of sexuality, as with sexual self-schemas.

2.4. Marital Adjustment

2.4.1. Definition and Characteristics Marital Adjustment

For many people living in the society, marriage is a highly and perhaps the most intimate type of relationship and it is defined as "a formal and dyrable sexual union of one or more men and one or more women, which is conducted within a set of designated rules and duties" (Lantz & Snyder, 1969, p. 16). These rules and duties are brought by the general social structure. It takes place within a historical context in which it is influenced by prevailing social norms. Therefore, expect from being a tool of personal commitment between partners, marriage is also about a commitment to social and legal constitutions of a larger community (Bird & Melville, 1994).

When marital relationship is satisfactory, it makes valuable contributions to any married individual's life. Marriage is shown to be associated with psychological health (Wood et. al., 1989) and it has been also stated that relationship with a partner acts a barrier between us and our problems (Bird & Melville, 1994). Satisfaction in marital life was also discussed in relation to its positive influence on physical health (Joung et. al., 1997). Similarly, Sweeney and Replogle (2002; as cited in Bir Aktürk, 2006) stated that a positive, ssatisfactory marital relationship contributes to economic well-being, physical and emotional health; and it is an important source of instrumental and emotional support for adults. Marriage produces a sense of belongingness and associated positive emotions in married individuals; and, this sense of belongingness is associated with better health and well-being in individuals (Baumeister & Leary, 1995).

The "marital adjustment" term is not clearly conceptualized in the literature. This lack of clarification is criticized in the literature because of marked confusion surrounding the label and idiosyncratic definitions (Fışıloğlu & Demir, 2000). It has been differently

labeled as marital satisfaction, as marital stability, as marital quality or as marital happiness (Bird & Melville, 1994). Although they seem to refer to similar concepts with related definitions, White (2003) postulated that these concepts actually are different from each other: Marital happiness is more emotional- and marital satisfaction is more cognitive-based; in addition, both marital adjustment and marital quality include happiness and satisfaction and it is possible that these two concepts are either individual- or dyadic-based. However, using them interchangeably is not seriously a mistake because they are highly related to each other (White, 2003). Marital adjustment is defined by Spanier (1976) as "a process of movement along a continuum which can be evaluated in terms of proximity to good or poor adjustment" (p. 17). The outcome of this process was hypothesized to be determined the degree of five distinct variables: troublesome dyadic differences, interpersonal tensions and personal anxiety, dyadic satisfaction, dyadic cohesion, and consensus on matters of importance to dyadic functioning.

A number of characteristics of marital adjustment seem to be apparent in the literature. Halford, Markman, and Kelly (1997) distinguished four basic characteristics: The first one among these characteristics is the increasingly positive marital interaction. It has been suggested that compared to dissatisfied couples, satisfied couples spend more time together and engage in shared activities, their interactions tend to be more positive (Weiss, Hops, & Peterson, 1973; as cited in Halford et. al., 1997). Another characteristic is effective communication and successful management of arising conflicts. The third characteristic is holding a positive regard for the partner, individuals with high levels of marital adjustment tend to think about their partners in a more positive light. The final characteristic is about relationship schemata. Relationship schemata refer to generalized beliefs and perceptions about partners and relationships that individuals develop in time. Partners in a satisfying relationship have a shared, positive perception about their relationship and its history (Osgarby & Halford, 1996a; as cited in Halford et. al., 1997).

2.4.2. Marital Adjustment and Individual Variables

Previous studies have demonstrated the relationship between marital adjustment and several individual variables. In the context of demographic characteristics, gender differences were demonstrated. However, there are opposing findings in the sense that some studies reported that husbands exhibited greater marital adjustment than wives (Gökmen, 2001; Lee, 1999) and some reported similar levels of marital adjustment for

women and men (Çelik, 1997; Dökmen & Tokgöz, 2002). Apart from gender, Jose and Alfons (2007) showed that middle-aged adults (between ages 41 and 50) had greater adjustment problems than younger (between ages 23 and 30) or elderly adults (over fifties), and authors discussed these findings as being consistent with the previous findings in the literature (e.g., Anderson et. al., 1983; Rhyne, 1981; as cited in Jose & Alfons, 2007). However, in another study, higher levels of stability in marriages were associated with greater age at the time of marriage (Lindahl, Malik, & Bradbury, 1997). Higher level of education (college graduate or graduate studies) was found to be associated with decreased level of marital satisfaction (Colebrook Seymour, III, 1998). However, an association was also demonstrated between higher levels of education and better marital satisfaction (Aydınlı & Tutarel Kışlak, 2009; Dökmen & Tokgöz, 2002).

In addition to demographic characteristics such as gender and age, marital satisfaction was shown to be related with contextual factors such as number of children and length of marriage (Kurdek, 1991; Bradbury, Fincham & Beach, 2000). In relation to length of marriage, Jose and Alfons (2007) found that in the late years or almost thirty years of marriage, a decline was apparent in marital and general life-adjustment problems, indicating an increase in marital satisfaction. Indeed, the period that couples experienced the most marital satisfaction was found to be 8-10 years of marriage for a Turkish sample (Ulu, 2009). In a study of married Turkish individuals, Aydınlı and Tutarel Kışlak (2009) reported that greater age at time of marriage were associated with increased marital adjustment. Another finding in this study was that individuals having no child or one child reported increased levels of marital adjustment compared to individuals with three of more children. In addition, Bir Aktürk (2006) concluded that low levels of marital satisfaction in first married families was associated with low levels of income. Moreover, it was also reported that increases in length of marriage was found to be related to better marital adjustment. Lower education levels and lower income was found to be associated with poorer marital adjustment and a greater risk for divorce (Dökmen & Tokgöz, 2002; Kurdek, 1993).

Number of children was also shown to be associated with higher levels of marital adjustment of wives and emotional quality of home environments (Abbott & Brody, 1985). Specifically, these researchers demonstrated that wives with male children and wives with two children had poorer marital adjustment compared to wives with female

children who have similar levels of marital adjustment with childless wives. This findings suggested that certain types of children would be indeed more influential for predicting marital adjustment. However, in another study, it was found that absence of children had a positive impact on marital satisfaction, particularly for the sexual adjustment of women (Jose & Alfons, 2007) as consistent with the findings of White and Edwards (1990; as cited in Jose & Alfons, 2007) suggesting that overall an "empty nest" has a positive impact on marital satisfaction.

The link between marital adjustment and personality characteristics has been investigated in several studies. For instance, Gattis and colleagues (2004) found that although effect sizes were small, decreased levels of marital adjustment were associated with higher neuroticism, lower agreebleness, lower constientiousness, and less positive expressivity. A study by Chen, Tanaka, Uji, Hiramura, & Shikai (2007) demonstrated that only husband's neuroticism predicted wife's marital satisfaction and wife's extraversion was related to husband's marital satisfaction. This reciprocity has also been shown by Watson et. al. (2004; as cited in Chen et. al., 2007) who found that the effects of marital adjustment were greater for spouses' personality compared to partners'. Rogge and colleagues (2006) investigated hostility, neuroticism, and communication as predictors of marital functioning after five years of marriage and found that only the first two variables predicted marital satisfaction after 18 months of marriage. Reseachers also investigated other personality characteristics such as assertiveness and found no relationship with marital relationship (Reath, Piercy, Hovestadt, & Oliver, 1980). In a study, regarding the interpersonal dimension of assumed similarity, Möller and van der Merwe (1997) found that women having higher levels of marital adjustment beter predicted their spouses' awfulizing (e.g., "I did a terrible thing"), low frustration tolerance, and beliefs of self-worth compared to women in the lower adjustment group. High level of positive humor characteristics were also found to have a positive effect on marital adjustment, while absence of these characteristics were not negatively related to marital adjustment (Fidanoğlu, 2009).

The association between psychopathological traits and marital adjustment was also studied in the literature. Shek (1994) showed that lower levels of marital adjustment were associated with more general psychiatric symptoms. Likewise, it was shown that presence of any mood disorder, any anxiety disorder, and any substance-abuse disorder was related

to decreased adjustment in marriage (Whisman, 1999). In a study by Heene, Buysse, and Van Oost (2007), it was found that depressed patients and partners reported lower levels of marital adjustment associated with more negative perceptions regarding couple communication, causal attributions, and insecure attachment. Moreover, for both depressed men and women, depressive symptoms negatively influenced conflict communication and causal attributions which in turn affected marital adjustment. In another study, it was found that empathic accuracy, i.e. accuracy of understanding between spouses, explained the relationship between marital adjustment and depression in pain patients (Leonard et. al., 2008). Dehle and Weiss (2002) studied the role of anxiety on marital adjustment. The findings revealed that the husbands', but not the wives' state anxiety predicted decreases in their own and wives' reports regarding marital adjustment. This finding was discussed as being consistent with Gottman and Levenson's (1986; as cited in Dehle and Weiss, 2002) assertion that men might "be more reactive to physiological arousal, especially during marital interactions" (p. 336). McLeod (1994) also showed that poor marital adjustment was associated with psychopatological anxiety, namely phobias, panic, and generalized anxiety. In a recent study, Fidanoğlu (2009) demonstrated that somatization was negatively associated with relationship satisfaction, consensus, emotional expression, and overall marital adjustment in a sample of Turkish married individuals.

Marital adjustment was also shown to be related to individual partner's emotional traits and accompanying irrational beliefs. In an effort to determine factors which differantiate couples attending to marriage counselling and couples not attending to any such counselling program, Addis and Bernard (2002) studied aspects of Ellis's (1986) irrational beliefs (for which he argued that marital problems would arise from partners' emotional problems and attendant irrational beliefs), emotional traits, and marital satisfaction. It has been found that on an individual basis, two dimensions of irrational thinking, self-downing (e.g., "I am a bad person") and need for comfort (i.e., decreased capacity to tolerate discomfort), were strongly related to decrements in the level of marital adjustment. In addition, anger and anxiety were the traits differantiating individuals in terms of experiencing marital problems.

2.4.3. Marital Adjustment and Relationship Variables

Researchers have long been studied factors contributing to healthy marriages and higher levels of marital adjustment. Sprecher et. al. (1995; as cited in Crooks & Baur, 2005) have found that supportive communication, companionship, and sexual expression (in terms of spontaneity, variety, and attraction) was reflective of a high-quality relationship. Karney and Bradbury (1995) also mentioned factors which lead to successful and lasting marital relationships: if parents of both spouses had successful marriages; if spouses had similar attitudes, interests, and personality styles; if both spouses were satisfied with their level of sexual sharing; if the couple had an adequate and steady income; and finally, if woman was not pregnant at the time of marriage, then the probability of a happy and long-lasting marriage is increased (Crooks & Baur, 2005). Firestone and Catlett (1999) mentioned that a satisfying marital relationship includes open, honest, and direct communication between partners, having empathy, not being defensive, having an emotionally close and spontaneous sexual relationship, showing physical affection to each other, and showing respect to boundaries of partner.

In an early study of marital prediction based on courtship, parental influence, feelings during periods of difficulty, sex behavior, personality traits, sociability, conventionality, equality of spouses, common activities, the leader in activities, impersonal things of the household, and attitudes toward economic activities, Locke and Snowbarger (1954) found that marital adjustment and marital prediction scores were significantly related, corresponding to a rank order with happily married couples at one end, followed by general population, unhappily married, and seperated couples. These relationships were also significant when analyzed seperately for men and women. In addition, in a marital relationship, a higher discrepancy between men's and women's number of previous intercourse partners was shown to be associated with lower levels of love, satisfaction, and commitment (Garcia & Markey, 2007).

Couples' relationship skills are also important predictors of marital adjustment. Lawrence and colleagues (2008) studied couples' skills across multiple dyadic behaviors at the beginning of their marriages predicted the longitidunal courses of their marital satisfaction over the early, high risk periods as indicated by (Cherlin, 1992; as cited in Lawrence et al., 2008). Results revealed that functioning in three domains namely sex, decision-making and control, and communication/conflict management as well as quality of sexual

relationships was uniquely related to rates of change in husbands' marital satisfaction. However, rates of change in wives' level of satisfaction were only found to be associated with only communication and conflict management.

It has been also investigated whether marital adjustment displays a change over family life cycle stages. Spanier, Lewis, and Cole (1975) reanalyzed the data from probability samples of married couples in three different regions of United States of America. In this study, authors found only a limited support for the interpretation of curvilinearity (U-shaped pattern), as proposed by Rollins and Feldman (1970; as cited in Spanier et. al., 1975) and Rollins and Cannon (1974; as cited in Spanier et. al., 1975) beforehand. Although the evidence was not settled by this study (due to cross-sectional nature of data), findings suggesting a tendency toward a U-shaped pattern were replicated. Authors concluded that "couples report lower marital adjustment scores following the birth of their first child, and continuing through the early childhood years, current evidence does not yet warrant concluding that there is a levelling of followed by an increase in adjustment or satisfaction into the later years" (p. 271). Jose and Alfons (2007) mentioned that many researchers in literature (e.g., Gilford & Bengston, 1979; Rhyne, 1981) reported a decline in middle years compared to early years. Indeed, later evidence suggested promising results regarding laters years of marriage. In their study, Jose and Alfons (2007) also found that in the middle years of marriage, lower levels of marital adjustment were reported compared to early or late years.

Fışıloğlu and Demir (1999) found that higher levels of marital adjustment was associated with lower levels of loneliness. In addition, in self-selected marriages, marital adjustment of couples was higher compared to couples in arranged marriages. Another finding was that marital adjustment increased as parallel to increases in degree of acquaitance between partners before marriage. The finding that marital adjustment tend to be higher in couples married by acquitance was also replicated by Ulu (2009). In addition, it has been shown that higher levels of marital adjustment was associated with a high level of family cohesion (Fışıloğlu & Lorenzetti 1994).

In regard to physical health, Peyrot, McMurry, Jr., and Hedges (1988) demonstrated that in couples including a spouse having insulin-treated diabetes, marital adjustment of spouses was negatively associated with their knowledge regarding the illness, perception of patient secretiveness, illness severity and difficulty, and discrepancies with patient

attitudes. In another study focusing on the effects of general chronic illness, Carter and Carter (1994) showed that scores on levels of cohesion subscale of Dyadic Adjustment Scale were significantly higher and scores on levels of consensus subscale were significantly lower than reported norms (Spanier, 1989; as cited in Carter & Carter, 1994). Authors concluded that this pattern might be "a configuration of marital interaction that is typical of marriages in which there is serious illness" (p. 323).

2.4.4. Relationship between Marital Adjustment and Sexual Satisfaction

The close relationship between sexual satisfaction and marital adjustment is granted by the work of many theorists and researchers such as Renaud et. al. (1997), Young et. al. (1998), Brezsnyak (2001), Fielder (2001) and Guo & Huang (2005). Based on the suggestion that demographic variables such as income and education would effect marital satisfaction (Pimentel, 2000; Trudel, 2002; as cited in Guo & Huang, 2005), it was found that a number of variables such as gender, educational attainment, and number of children added to the explanation of the relationship between sexual satisfaction and marital satisfaction. In other words, every unit of increase in sexual satisfaction resulted in a faster increase for women than men and for who are better educated than with lower levels of education (Guo & Huang, 2005). In Witting et. al.'s (2008) study, increased overall relationship satisfaction was related to higher levels of sexual satisfaction and less sexual function problems.

Litzinger and Gordon (2005) also found an independent relationship between marital satisfaction and sexual satifaction. However, in their study, communication and sexual satisfaction had an independent relationship, too; leading to the findings that with successful communication in a marital relationship, sexual relationship no longer contributed to marital satisfaction. In addition, without successful communication but with a satisfying sexual relationship between partners, marital adjustment was greater compared to levels of marital adjustment for sexually dissatisfied couples; suggesting that sexual satisfaction may at least partially compensate for the negative effects of unsuccessful communication on marital satisfaction.

Fisher and McNulty (2008) reported that for newly-wed couples, partner's own neuroticism predicted lower levels of sexual satisfaction, a decline in sexual and marital satisfaction one year later for both men and women, and finally, a decline in marital

satisfaction for women. Moreover, partner's neuroticism was found to be associated with lower levels of marital satisfaction for both men and women, with lower levels of sexual satisfaction for men, and a decline in sexual satisfaction among men. More importantly, sexual satisfaction was shown to mediate the effects of both own and partner's neuroticism on marital satisfaction suggesting the critical role of sexual satisfaction in marital life.

The relationship between sexual satisfaction and marital adjustment is also granted by researchers mentioning that sexual problems brought into the therapy process are often associated with marital discord to a certain degree. Uçman (1982) discussed that in the case that sexual problems seem to affect the outcome of therapy negatively, marital problems would be treated first. In addition, in unsatisfactory marriages, sexual dysfunctions are more common. In regard to this connection, Kabakçı and Batur (2002) discussed that focusing on sexual problems might help to increase the level of marital satisfaction in a given couple.

In the literature, however, there seems to be a lack of agreement between researchers regarding the quality and existence of the relationship between sexual satisfaction and marital satisfaction. Some researchers proposed that these two concepts were related to each other only for individuals with certain characteristics, but not for others. For instance, Butzer and Campbell (2008) proposed that the link between marital satisfaction and sexual satisfaction existed; however, the strength of this link actually varied when other factors such as attachment were accounted for. Specifically, marital satisfaction and sexual satisfaction were closely linked for anxious individuals, but not for avoidant individuals. On the other hand, some researchers denied the existence of a connection between two concepts. For instance, Colebrook Seymour III (1998) argued that although frequency of sexual activity was found to be related to both sexual satisfaction and marital adjustment, these two concepts, namely sexual satisfaction and marital adjustment, were unrelated. Other researchers who suggested a lack of relationship between sexual satisfaction and marital adjustment were Samelson and Hannon (1999) and Berg-Cross (2001). According to these authors, being sexual satisfied might not result in a satisfactory marital relationship and having a troublesome marriage might not determine the existence of lowered sexual function for a given couple. In addition, women were considered to be

more tolerating in the case of a sexual dysfunction and they might not take the problem as a source of an unhappy marital relationship (Samelson & Hannon, 1999).

5.5. The Connection between Literature Review and Purpose of the Study

A review of the literature demonstrates that sexual self-schemas of women and men are associated with multiple individual, relationship, and sociocultural variables. However, there are still variables that were not investigated in previous studies. For instance, frequency of masturbation in married individuals and marital adjustment did not attract the attention of researchers studying sexual self-schemas. Sexual satisfaction and frequency of sexual activity were studied topics in the context of sexual self-schemas; however, studies came with inconsistent results preventing us from drawing inferences about the interrelationships between these variables. In addition, clinical populations widely attracted the attention of researchers and only a few number of studies investigated sexual self-schemas in presumably healthy and functional samples. Similarly, previous studies largely focused on unmarried populations and researchers tended to ignore the influence of sexual self-schemas on sexual and relationship aspects of the marital relationship such as sexual satisfaction and marital adjustment. Therefore, as a result, the present study aimed to investigate the interrelationship between sexual self-schemas of women and men and a number of mentioned sexual and relationship variables in the context of marriage.

CHAPTER 3

METHOD

The present study was conducted to investigate the relationship among sexual self-schemas, frequency of masturbation and sexual activity, sexual satisfaction, and marital adjustment. For the purpose of testing this relationship, different scales and forms were delivered to married individuals. Moreover, it was also attempted to test the psychometric quality of the Sexual Self-Schema Scale in a Turkish sample. In this section, characteristics of participating individuals and of the scales and forms that were used in the study were mentioned. In addition, information regarding procedures of data collection, and a general outline of data analysis were given.

3.1. Participants

In the present study, two different samples were used because the study was conducted in two distinct steps. As the first step, psychometric quality (reliability and validity) of the Sexual Self-Schema Scale (Hill, 2007) was tested on university students. For this reason, 306 undergraduate Middle East Technical University students participated voluntarily. No inclusion criteria regarding students' department and grade existed for study participation. All instruments were delivered by hand and 309 of 350 instruments were returned (return rate = 88.3%). Three cases were excluded from statistical analysis due to high number of missing values. In conclusion, 306 cases were established as study participants and statistical analyses were conducted.

The second sample was used for the purpose of testing the research question. 204 married individuals living in various regions of Turkey participated in the present study. Inclusion criterions for the study were being married for at least one year. On the other hand, individuals who were re-married and individuals who did not have children were excluded. Of 450 instruments delivered, only 216 returned (return rate = 48%). 12 of the returned instruments were not included in the study because either participants were married for less than one year or they did not have any children.

3.1.1. Demographic Characteristics of the Participants Used for the Purpose of Testing the Psychometric Quality of the Sexual Self-Schema Scale: Sample of Undergraduate University Students

139 (45.4%) of the participants were females and 167 (54.6%) of the participants were males. The mean for the age of participants was 21.03, and standard deviation was 2.08. Specifically, the mean age for female participants was 20.49, and standard deviation was 1.80. In addition, male participants' mean age was 21.49, and standard deviation was 2.20. Most participants were freshmen at the university (28.4%), followed by seniors (20.9%), sophomores (18.3%), prep school students (15.7%), and juniors (14.1%). They were mainly coming from metropol cities (57.5%) in Turkey, followed by cities (31.4%), towns (10.1%), and villages (1.0%).

Participants were also asked about their sexual experience. Of the respondents, 206 participants (67.3%) had an experience of masturbation at that time. However, the remaining 93 participants (30.4%) reported not having engaged in self-stimulation at any time. Furthermore, almost half of the participants (n=158) reported having experienced sexual intercourse (51.6%) and 145 participants (47.4%) did not have such kind of experience. Of the 299 participants who responded to questions relating to sexual experience, 145 (70.39%) had an experience of both masturbation and sexual intercourse, and 13 (4.35%) participants experienced masturbation but not sexual intercourse. 61 (20.40%) participants reported having an experience of sexual intercourse; however, these participants did not have a history of masturbation. In addition, a total of 80 (26.76%) participants reported neither engaging in self-stimulation nor having an experience of sexual intercourse.

Table 1. Demographic representation of the participants from the sample of undergraduate university students (*N* = 306)

Variable	Mean	SD	Range	f	%
Gender					
Female				139	45.4
Male				167	54.6
Age	21.03	2.08	17-30		
Female	20.49	1.80	17-25		
Male	21.49	2.20	18-30		
Grade level					
Prep school				48	15.7

Freshmen	87	28.4
Sophomore	56	18.3
Junior	43	14.1
Senior	64	20.9
Non-respondent	8	2.6
Residence		
Villages	3	1.0
Towns	31	10.1
Cities	96	31.4
Metropol cities	176	57.5
Masturbation		
Experienced	206	67.3
Did not experience	93	30.4
Non-respondent	7	2.3
Sexual activity		
Experienced	158	51.6
Did not experience	145	47.4
Non-respondent	3	1.0

3.1.2. Demographic Characteristics of the Participants Used for the Purpose of Testing the Research Question: Sample of Married Individuals

In the sample of married individuals, 93 (45.6%) of the participants were females and 111 (54.4%) of the participants were males. The mean for the age of participants was 36.22, and standard deviation was 8.69. Specifically, the mean age for female participants was 33.79, and standard deviation was 8.24. In addition, male participants' mean age was 38.27, and standard deviation was 8.56. Most participants were university graduates (34.3%), followed by high school graduates (33.3%), primary school graduates (15.2%), secondary school graduates (10.3%), and 6.9% of participants had graduate level or higher education. They were mainly coming from cities (47.5%) in Turkey, followed by metropol cities (31.4%), towns (11.3%), and villages (9.8%).

All participants were in their first marriages and they were married for at least one year of duration. The mean for the length of marriage was 11.71, and standard deviation was 9.56. Specifically, the mean length of marriage for female participants was 10.99, and standard deviation was 9.39. In addition, for male participants, the mean length of marriage was 12.31, and standard deviation was 9.70. Furthermore, all participants had at least one child. The range for the number of children was from 1 to 6; 105 of participants had one child (51.5%), 70 of participants had two children (34.3%), 19 of participants had three children (9.3%), seven participants had four children (3.4%), one participant had five

children (0.5%), and two participants had six children (1.0%). Overall, the mean number of children was 1.70, and standard deviation was .93.

Participants were also asked about their sexual experience. Of the 200 respondents, only 42 participants reported practising masturbation at least once a week (20.5%). The remaining 158 participants (81 females, 77 males) reported not engaging in self-stimulation (77.5%). For participants engaging in masturbation, the mean for the number of weekly masturbation was 1.90, and standard deviation was 1.08. For participants reporting masturbation, the range of number of masturbation was from 1 to 5. Specifically, 18 participants (4 females, 14 males) masturbated once a week (8.8%), 16 participants (5 females, 11 males) masturbated twice a week (7.8%), 4 participants (no females, 4 males) masturbated three times a week (2.0%), 2 participants (no females, 2 males) reported masturbating four times a week (1.0%), and 2 participants (2 females, no males) reported masturbating five times a week (1.0%).

Of the 202 participants who responded to question relating to sexual activity, 188 participants (85 females, 103 males) reported engaging in sexual activity at least once a week (92.1%) and 14 participants (7 females, 7 males) reported not having sexual activity (6.9%) in their marriages. For participants reported engaging in sexual activity at least once a week, the mean for the number of weekly sexual activity was 2.62, and standard deviation was 1.21. The range of number of sexual activity was from 1 to 6. Specifically, 37 participants (19 females, 18 males) reported having sexual activity once a week (18.1%), 56 participants (26 females, 30 males) had sexual activity twice a week (27.5%), 51 participants (18 females, 33 males) reported having sexual activity three times a week (25.0%), 32 participants (19 females, 13 males) reported having sexual activity four times a week (15.7%), 9 participants (3 females, 6 males) had sexual activity five times a week (4.4%), and 3 participants (no females, 3 males) reported having sexual activity six times a week (1.5%).

Table 2. Demographic representation of the participants from the married individuals' sample ($N = 204$)

Variable	Mean	SD	Range	f	%
Gender					
Female				93	45.6
Male				111	54.4

Age	36.22	8.69	20-70		
Female	33.79	8.24	20-60		
Male	38.27	8.56	23-70		
Education level					
Primary school				31	15.2
Secondary school				21	10.3
High school				68	33.3
University (2-4 years)				70	34.3
Graduate				14	6.9
Residence					
Villages				20	9.8
Towns				23	11.3
Cities				97	47.5
Metropol cities				64	31.4
Length of marriage (years)	11.71	9.56	1-52		
Spouse is (not) the first partner					
The first				204	100
Not the first				0	0
Number of children	1.70	0.93	1-6		
Masturbation					
Engages in				42	20.5
Weekly frequency of masturbation	1.90	1.08	1-5		
Does not engage in				158	77.5
Non-respondent				4	2.0
Sexual activity					
Engages in				188	92.1
Weekly frequency of sexual activity	2.62	1.21	1-6		
Does not engage in				14	6.9
Non-respondent				2	1.0

3.2. Instruments

3.2.1. Instruments Used in the Sample of Undergraduate University Students for the Purpose of Testing the Psychometric Quality of the Sexual Self-Schema Scale

For the purpose of testing the psychometric quality of the Sexual Self-Schema Scale, two additional self-report scales, Extraversion Subscale of the Eysenck Personality Questionnaire Revised-Abbreviated Form (Francis et. al., 1992; adapted into Turkish culture by Karancı, Dirik, & Yorulmaz, 2007) and Rosenberg's Self-Esteem Scale (Rosenberg, 1965; as cited in Çuhadaroğlu, 1985; adapted into Turkish culture by Çuhadaroğlu, 1985) were given to undergraduate university students. In addition to

these scales, a demographic data sheet was also administered in order to to assess whether participants experienced masturbation and sexual activity and to collect information related to demographic variables. Participants reported their experiences of masturbation and sexual activity by answering the close-ended questions "Have you ever masturbated?" and "Have you ever engaged in sexual activity?". Responses were given as "Yes" or "No". Scales and forms used in the sample of university students are given in Appendices G-J.

3.2.1.1. The Sexual Self-Schema Scale

The Sexual Self-Schema Scale was designed by Hill (2007) prompted by the original creative work of Andersen and Cyranowski's Women's Sexual Self-Schema Scale (1994) and Men's Sexual Self-Schema Scale (1999). This combined version of the original sexual self-schema scales includes 36 adjectives rated on a 7-point Likert-type scale. Both men and women rate themselves on these adjectives considering the extent to which it is descriptive of that particular individual as a sexual person. Response options in the scale ranges from "not at all descriptive of me" to "very much descriptive of me".

In an effort for creating a combined version of Andersen et. al.'s (1994; 1999) women and men scales, Hill (2007) emphasized a number of important points regarding the development and utilization of the scales. Firstly, he discussed that those scales used vague instructions in order to assess sexual self-schemas; therefore, it is not possible to know what dimensions of self-concept respondents considered at the time of assessment. Hill (2007) discussed that individuals would rate themselves primarily in a sexual manner and not in a general sense because ratings would differ when individuals considered themselves as sexual persons or for instance, as students. Secondly, for him, those scales were strongly related to gender stereotypes and respondents could rate their sense of themselves as a gendered person. Hill (2007) gives the example of a man who is agressive in general but submissive in sexual relationships. A further problem is that self-rating were not anchored. He proposed that it would be important to provide comparison points (e.g., "compared to others with same gender and age") so that participants would not be left the imagine the basis of comparison. Finally, the items of men's and women's scales were indeed very similar and Andersen and colleagues (1999) pointed out that both scales shared about half of the same items, and the

passionate/romantic dimension was primary for both genders. Hence, Hill (2007) suggested that using a combined scale with all items from those scales would permit a comparison of how men and women respond to identical items.

Validity of the combined version was obtained through factor analysis and Hill (2007) suggested that although a nine factor solution seemed a strong model of sexual selves, a three-factor solution is preferable for a mixed female-male sample. Factors of the scale are indicated as loving/warm, direct/outspoken, and reserved/conservative. Reliability of the scale was obtained through inspection of Cronbach's alpha values. Cronbach's alpha for these factors are .89, .85, and .77, respectively. Cronbach's alpha for the total scale is .82 which is similar to previous findings of Andersen and Cyranowski (1994; 1999) on the original women and men scales. First two factors are used to constitute a positive subscale and the last factor is used to constitute a negative subscale. Based on the ratings of participants on two subscales, each participant is categorized into one of the following four groups using a median split: Schematic (positive and negative), aschematic, and co-schematic. Participants scored below the median on both subscales were categorized as aschematic, participants who rated themselves above the median on both subscale are categorized as co-schematic, if participants rated themselves below the median on negative subscale and above on positive subscale the category is positive schematic and finally, participants who rated themselves above the median on negative subscale and below the median on positive subscale are categorized as negative schematic.

In the present study, the SSSS was translated into Turkish and also its validity and reliability was established in Turkey by using appropriate statistical techniques. The permission to use the scale was obtained from Mr. Darryl Hill via e-mail in personal. The scale was translated into Turkish using the basic approach "control and evaluation in one directional translation" (Hambleton & Bollwark, 1991; as cited in Savaşır, 1994). The reason for choosing this approach was that comparison being in the translated language and that it is likely produce accurate results (Savaşır, 1994). In addition, using this approach, translated items are generally easy to apprehend. Hence, the scale was translated into Turkish independently by three graduate psychology students in Middle East Technical University whose mastering of English was at advanced level and then, researcher compared the translations in order to correct discrepancies between

translations (for a list of original and translated items, see Appendix A). After translation was over, psychometric quality of the scale was tested.

3.2.1.2. Rosenberg's Self-Esteem Scale

Rosenberg's Self-Esteem Scale (Rosenberg, 1965; as cited in Çuhadaroğlu, 1985) is a self-report scale originally developed to assess self-esteem by asking respondents to reflect on their current feelings. The scale has 12 subscales and in the present study, the first 10-items subscale for assessing the global self-esteem was used. In the scale, items are rated on a 4-point Likert-type scale. Responses range from "1 = completely agree" to "4 = completely disagree". Five of the items are worded positively, and five of the items are worded negatively. Scores range from 10 to 40 and higher scores indicate higher levels of self-esteem.

The psychometric quality of the original scale was tested in a number of studies. Fleming and Courtney (1984) reported a high test-retest reliability for the scale (.84). Moreover, internal reliability of the scale was found to be .87, .86, and .83 for samples of American individuals, Canadian individuals, and individuals from New Zealand, respectively (Rusticus, Hubley, & Zumbo, 2004). Kahle (1976; as cited in Basat, 2004) reported the validity of the scale as .75. The reliability and validity of the scale was also granted by the work of other researchers (e.g., Toker, 2003; Tuğrul, 1994; as cited in Karancı et. al., 2007).

The scale was translated and adapted into Turkish by Çuhadaroğlu (1985). Criterion validity of the scale was investigated through testing the scale's relationship with three subscale Symptom Checklist-90 and results were found to be satisfactory. Test-retest reliability of the scale was reported to be .75. Moreover, psychiatric interviews were conducted to test the validity of the scale and validity of the scale was reported to be .71. The scale is a valid and reliable instrument for assessing the level of self-esteem in Turkish populations.

3.2.1.3. Extraversion subscale of the Eysenck Personality Questionnaire Revised-Abbreviated Form

The Eysenck Personality Questionnaire Revised-Abbreviated Form (EPQR-A; Francis et. al., 1992) consists of 24 self-report items which assess neuroticism, extraversion,

psychoticism, and lying. The scale is the 24-items form of the Eysenck Personality Questionnaire Revised-Short Form (Eysenck et. al., 1985; as cited in Karancı et. al., 2007) which includes 48 items. All four factors are assessed with six questions and participants are asked to rate items as "Yes (1)" or "No (0)". The range of possible scores is from 0 to 6 for each personality measure.

Francis et. al. (1992) tested the scale in the United States, Autralia, England, and Canada with university students. In these four countries, internal reliability coefficients were found to be between .70 and .77 for neuroticism, .74 and .84 for extraversion, .33 and .52 for psychoticism, and . 59 and .65 for lie scale. Validity was obtained through investigating the correlations between the subscales of EPQR-A and EPQR-A-48. For neuroticism, extraversion, and lie scale, correlation coefficients were found to range between .84 and .90. However, correlation coefficients were shown to be low for the psychoticism subscale (between .44 and .52).

The Eysenck Personality Questionnaire Revised-Abbreviated Form was translated and adapted into Turkish culture by Karancı, Dirik, and Yorulmaz (2007). Factorial structure of the translated scale similarly revealed four factors in a Turkish sample of 756 university students from four different universities. Kuder-Richardson alpha coefficients for the extraversion, neuroticism, psychoticism, and lie scales were .78, .65, .42, and .64, respectively. Test-retest reliability of the scales were .84, .82, .69, and .69, respectively. In order to investigate the construct validity of the scale, its relationship with the EPQR-A-48, Fear Survey Inventory-III, Egna Minnen Betraffande Uppfostran, Rosenberg's Self-Esteem Scale was examined and it was found that the scale had reasonable construct validity.

In the present study, extraversion subscale of the scale is used because extraversion is consistently shown to be associated with the sexual self-schema measure in previous studies (Andersen et. al., 1994; 1999). Extraversion subscale of the scale consists of questions 2, 4, 13, 15, 20, and 24.

3.2.2. Instruments Used in the Sample of Married Individuals for the Purpose of Testing the Research Question

In the present study, three self-report scales were given to married participants. The Sexual Self-Schema Scale (SSSS; Hill, 2007; adapted into Turkish culture in the present

study) was administered in order to assess participants' sexual self-schemas, Golombok Rust Inventory of Sexual Satisfaction (GRISS; Golombok and Rust, 1986; adapted into Turkish culture by Tuğrul et. al., 1993) to assess the level of sexual satisfaction, and finally, Dyadic Adjustment Scale (DAS; Spanier, 1976; adapted into Turkish culture by Fışıloğlu & Demir, 2000) was given for assessing marital adjustment. In addition to these scales, a demographic data sheet was also administered in order to to assess the frequency of masturbation and sexual activity and to collect information related to demographic variables.

In demographic data sheet, additional questions were included in order to assess the frequency of masturbation and sexual activity. For this reason, participants were directly asked about their sexual experience. Participants reported their frequency of masturbation and sexual activity by answering the open-ended questions "On average, how often do you masturbate per week when you consider the last six months period?" and "On average, how often do you engage in sexual activity per week when you consider the last six months period?". Responses were given in numbers, higher numbers indicating more frequent masturbation and sexual activity. Scales and forms used in the sample of married individuals are given in Appendices B-F.

3.2.2.1. The Sexual Self-Schema Scale

For information regarding the Sexual Self-Schema Scale, see 3.2.1.1. The Sexual Self-Schema Scale on page 63.

3.2.2.2 The Golombok Rust Inventory of Sexual Satisfaction

The Golombok Rust Inventory of Sexual Satisfaction (GRISS) is a multidimensional instrument originally developed by Rust and Golombok (1983; as cited in Tuğrul, et al., 1993) in order to assess quality of sexual life and the existence and severity of both male and female sexual problems. It consists of 28 self-report items with two different forms for each sex. Each item is rated on a 5-point Likert-type scale and response options range from "never" to "always". Completion of the test requires 5-10 minutes. Through summation of raw scores, standard scores are obtained ranging from 1 to 9; scores below 5 (1-4) indicates normal sexual functioning and ratings above 5 (5-9) indicates increasing levels of dysfunctions. Besides the total score, scores for discrete subscales can be also obtained depending on the aims of a particular research.

Specifically, subscale scores can be used as diagnostic tools whereas total score gives a perspective related to general sexual functioning. Higher scores indicate increased levels of sexual dysfunctions and lowered levels of quality of sexual life. The subscales of GRISS are sensuality (male and female), avoidance (male and female), satisfaction (male and female), communication, frequency, premature ejaculation, impotence, vaginimus, and anorgasmia. Frequency and communication subscales include 2 items and other subscales include 4 items.

Reliability analyses revealed that split-half reliability values for the scale are .94 for males and .87 for women and internal consistency reliability for subscales ranged between .61 and .83. In an attempt to establish the scale's validity, it was found that the original scale discriminated between patients having sexual dysfunctions and sexually healthy individuals except for sensuality, avoidance, and communication subscales of male version and communication subscale of female version. To conclude, Golombok and Rust (1986) have shown that original GRISS is a reliable and valid instrument.

The Golombok Rust Inventory of Sexual Satisfaction was translated and adapted into Turkish by Tuğrul, Öztan, & Kabakçı (1993). Participants were 73 female and 66 male clinical subjects (diagnosed as having a sexual dysfunction) and 51 male and 53 female nonclinical subjects. In this study, authors reported that Cronbach's alpha value was .92 for males and .91 for females for the total scale indicating high internal consistency for the adapted version and for subscales; in addition, Cronbach's alpha values ranged between .51 and .88 for females and between .63 and .91. The split-half reliability coefficients for the scales were found .90 ($p<.001$) for males and .91 ($p<.001$) in females. Moreover, in patients groups diagnosed as premature ejaculation or vaginismus, the split-half reliability coefficients were calculated as .59 and .77, respectively, indicating high internal consistency for the adapted version.

The validity of the Turkish GRISS was obtained by means of comparing total scale and subscales scores of both sexually functional and dysfunctional groups through t-test. It was shown that those groups scored significantly different on total scale and subscales except the communication subscale in the women's form. Apart from discriminant validity, construct validity was obtained through exploration of factorial structure. Factor analysis revealed 7 factors for both male and females. Identified factors were vaginismus, communication, avoidance, quality, anorgasmia, sensuality and satisfaction

for women and premature ejaculation, communication, avoidance, erectile dysfuntion, frequency of sexual activity, sexual intercourse, and quality for men. Although these factors were different from findings of the original study by Rust & Golombok (1983; as cited in Tuğrul, et al., 1993; Wolsky, 1998), items assessing sexual dysfunctions gathered under different factors and this was a similar finding as indicated by Tuğrul, Öztan, & Kabakçı (1993). In conclusion, this adaption study has shown that GRISS is a highly reliable and valid instrument that can be utilized in order to assess the quality of sexual relationship in Turkish samples. Consistent with the purpose of this study, only total score of the scale will be used for assessing the level of sexual satisfaction.

3.2.2.3. Dyadic Adjustment Scale

Dyadic Adjustment Scale (DAS) is a 32-item instrument developed by Spanier (1976). It aims to assess the perceived quality of the relationship with its four subscales: Dyadic cohesion, dyadic consensus, dyadic affectional expressions, and dyadic satisfaction. It has both 5-point, 6-point and 7-point Likert-type response formats in addition to two questions answered as either yes or no. Most questions in DAS uses a 6-point Likert-type response format and response options range from "all the time" to "never" or from "always agree" to "always disagree". When scoring DAS, scores are summed together (possible range from 0 to 151) and higher scores indicate higher perceived dyadic adjustment and a greater perceived quality of the relationship.

DAS is shown to be a valid and reliable instrument. More specifically, its validity was obtained by means of obtaining content, criterion-related, and construct validity. Criterion-validity of the scale was obtained through applying the scale to both married and divorced individual groups and showing that the scale distinguished those groups. Spanier (1976) demonstrated the construct validity through correlating DAS with another instrument measuring marital adjustment, Locke-Wallace Marital Adjustment Scale (Locke & Wallace, 1959; as cited in Spanier, 1976) and through the factor analysis of final 32 items. Reliability of the scale was calculated as .96 for total scale, and .90, .94, .86, .73 for subscales dyadic consensus, dyadic satisfaction, dyadic cohesion, and affectional expression, respectively. It can be utilized for various types of committed relationships as indicated by Spanier (1976).

In Turkey, adaption study of Dyadic Adjustment Scale is conducted by Fışıloğlu and Demir (2000) and they reported that Turkish version of DAS is a reliable instrument with a Cronbach's alpha value of .92 for the total scale indicating high internal consistency and Cronbach's alpha values ranged from .75 to .83 for subscales. In addition, its criterion validity was granted in the form of correlation with Turkish version of Locke-Wallace Marital Adjustment Test ($r = .82$) and the four-factor solution was replicated granting the construct validity of the translated scale.

3.3. Procedures

The present study was conducted in two seperate steps. Firstly, translated version of the Sexual Self-Schema Scale (Hill, 2007) was given to Middle East Technical University students in order to test the psychometric quality of the SSSS and secondly, all scales and forms were delivered to married individuals for testing hypotheses. For application of all procedures, permission was granted from The Applied Ethics Research Center of Middle East Technical University for research with human participants.

The reliability and validity studies of SSSS were conducted before the investigation of hypotheses. For this reason, 306 undergraduate students in METU participated and they were applied the translated Sexual Self-Schema Scale and relevant scales. Scales were delivered through accidental sampling procedure (Kerlinger, 1986); specifically, students attending to basic psychology courses from several departments at the university were contacted in formal class hours in collaboration with the lecturer of a particular course, providing extra credit to participating students. Participants were informed about the purpose and they were be assured of confidentiality and anonymity in a written information form. Total administration time of scales was approximately 15 minutes.

Next to testing the psychometric quality of the SSSS, research question was tested through applying self-report scales to married individuals. The object of analysis was married individuals. In order to overcome the problems related to both sample size and a heterogenous sample such as "nonresponse" (Turner, 1999; as cited in Crooks & Baur, 2005) or refusal to participate, "self-selection" or "volunteer bias" and "demographic bias" which are are well-recognized barriers that sex survey researchers often come across in the field (Crooks & Baur, 2005), two kinds of sampling procedures were utilized. Firstly,

purposive sampling was utilized (Kerlinger, 1986) in order to obtain a representative sample of individuals who are married for at least one year, who are not re-married and who are having at least one child. The second sampling procedure was snowball sampling (Kumar, 1996). This procedure was used in order to reach participants. Additional participants were reached through the social networks of previously recruited participants. Study information form, demographic information form, SSSS, GRISS and DAS were delivered to married individuals. Because GRISS has two different forms for women and men, participants were warned about filling out the correct form with a warning written at the top of the pages. Researcher contacted participants face-to-face or on the phone and provided forms and scales to participants. Forms and scales were etiher delivered by hand in envelopes or posted via mail in envelopes with stamp. In each instance, participants were expected to return the filled scales to the researcher by hand or via researcher-paid mail. Participants were assured of confidentiality and anonymity and they were required to read and sign the written information form for study participation. Furthermore, they were given contact information so as to give them the opportunity to take information about the study results. Total administration time of the scales was approximately 30 minutes.

3.4. Data Analysis

Data analyses were conducted using different functions of SPSS program v.16.0. Data were screened prior to analysis and in addition, descriptive characteristics were obtained seperately for the undergraduate sample and for the sample consisting of married individuals through descriptive commands of SPSS. Data from undergraduate students were used in order to examine the psychometric quality of the Turkish version of the Sexual Self-Schema Scale (Hill, 2007). In order to test construct validity, principal components analysis was used for revealing factors associated with the scale. Moreover, hierarchical regression analyses and correlation analyses were conducted for obtaining discriminant and incremental validity. Reliability was tested through internal consistency procedure and Cronbach's alpha coefficients for the scale and its factors were calculated.

For testing the research question, each participant was categorized into one of four groups of sexual self-schemas (positive sexual self-schematics, negative sexual self-schematics, co-schematics, and aschematics) depending on their position relative to the median of positive and negative schema scores. Independent variable for the main analysis were

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gender and categories of sexual self-schemas, and dependent variables were weekly frequency of masturbation, weekly frequency of sexual activity, level of sexual satisfaction, and level of marital adjustment. Firstly, factorial structure of the Sexual Self-Schema Scale for the sample of married individuals was re-assessed in order to compare the patterns of factors obtained for both samples, and to calculate factor scores accordingly. A correlation analysis was conducted to investigate to which extent the study variables were correlated with each other, and variables were checked against multicollinearity. In the main analysis, level of education and length of marriage were taken as covariates because these variables were shown in the literature and discussed in the present study to have an influence on study variables. Study variables were tested in four seperate univariate analyses of covariance.

CHAPTER 4

RESULTS

In this study, it was investigated whether there were differences in (a) weekly frequency of masturbation, (b) weekly frequency of sexual activity, (c) level of sexual satisfaction, and (d) level of marital adjustment associated with gender (females and males) and categories of sexual self-schemas (i.e., positive schematics, negative schematics, aschematics, and co-schematics). Therefore, the major issue addressed in the present study is the group differences on main variables. Group differences which are associated with main variables, (a) weekly frequency of masturbation, (b) weekly frequency of sexual activity, (c) level of sexual satisfaction, and (d) level of marital adjustment, were investigated through seperate univariate analyses of covariance. In order to determine whether sociodemographic and contextual variables differed in categories of sexual self-schemas, an analysis of variance or a chi-square test was conducted for each variable.

In the current study, data from 306 METU undergraduate students and 204 married individuals from different regions of Turkey were examined. The data from the first group of participants were used in order to test the psychometric quality of the Turkish version of Sexual Self-Schema Scale (Hill, 2007). Sample characteristics and reliability and validity analyses are mentioned in the next section. The data from the second group of individuals were used in order to test the research question and to investigate aforementioned group differences.

4.1. Testing the Psychometric Quality of the Sexual Self-Schema Scale

In order to test the psychometric quality (reliability and validity) of the Sexual Self-Schema Scale in a Turkish sample, the data from the sample of undergraduate university students were analyzed. Two types of validity (Hudson, 1982) was attempted to be obtained in the present study. Firstly, face validity was obtained through evaluation and consensus of three judges that were highly competent in both English and Turkish languages. Secondly, in order to assess construct validity of the translated

scale, the scale's factorial structure, and discriminant and incremental validity were examined. In terms of reliability, internal consistency procedure was utilized and coefficient alpha values was calculated for each item and the total scale. Results of reliability analysis are given within the results of factor analysis.

4.1.1. Investigation of the Factorial Structure of the Sexual Self-Schema Scale

Principal axis factoring with direct oblimin rotation was performed through SPSS DATA REDUCTION on 36 items from the Sexual Self-Schema Scale (Hill, 2007) for a sample of 306 Middle East Technical University undergraduate students (for characteristics of the sample, see 3.1.1. Demographic Characteristics of the Participants Used for the Purpose of Testing the Psychometric Quality of the Sexual Self-Schema Scale: Sample of Undergraduate University Students in Method section). Prior to the analysis, 109 missing values scattered through the items of the scale were replaced with the median of all values for that item. Also, the results of both Kaiser-Meyer-Olkin measure of sampling adequacy and Barttlet's test of sphericity yielded that the measure included in the analysis was factorable.

Initially, oblique rotation, specifically, direct oblimin rotation was conducted to investigate the correlations between factors and the results of this analysis revealed that factors were lowly correlated with each other. Therefore, the decision for the main analysis was an orthogonal rotation with varimax rotation. Through the investigation of scree plots, three factors were extracted. All factors had reasonable internal reliability. Alpha values for the total scale was .86 and alpha values for factors were .85, .82, and .77, respectively. This factor solution well defined most of the variables because communality values tended to be moderate. Three items with communalities under .15 ("Cautious", "Direct", and "Reserved") were deleted from the analysis and analysis was run again without these items. The factor scores and communalities of deleted items are given in Table 4 in italic font. With a cut of .30 for inclusion of a variable in interpretation of a factor, all variables loaded on any of the factors.

Extracted factors were labeled as "Loving/Compassionate", "Sensual/Stimulating", and "Direct/Outspoken". Factor scores were calculated by summing up the factor scores because all factors were positive. The correlational analysis of factor scores revealed that

all factors were correlated significantly with each other and with the total score (see Table 3). Eleven items clustered under the label of "Loving/Compassionate", twelve items were under the label of "Sensual/Stimulating" and ten items were under the label of "Direct/Outspoken". However, ten items ("Loving", "Warm", "Warm-hearted", "Experienced", "Passionate", "Domineering", "Inexperienced", "Timid", "Embarrassed" and "Frank") were complex and they crossloaded on two factors with loadings over .30.

Table 3. Means (M), standard deviations (SD) and extracted factor and total score intercorrelations for the sample of undergraduate university students (*N* = 306)

	M	SD	1	2	3
1. Loving/ Compassionate	46.64	9.47	-		
2. Sensual/Stimulating	41.90	11.08	.26**	-	
3. Direct/Outspoken	39.66	8.10	.16**	.35**	-
Total score	128.20	20.52	.66**	.80**	.66 **

** Correlation is significant at .01 level (two-tailed).

Communalities, percents of explained variance, eigenvalues, item loadings, and alpha values for factors are shown in Table 4. Variables are ordered and grouped by size of loading to facilitate interpretation. Loadings under .30 are replaced with dashes. Interpretive labels are suggested for each factor on the table.

Table 4. Factor loadings, communalities (*h²*), alpha values, percents of variance for principal axis factoring and varimax rotation on SSSS items in the sample of university students (*N* = 306)

Items	Loving/ Compassionate	Sensual/ Stimulating	Direct/ Outspoken	*h²*
Soft-hearted	.77	-	-	.60
Feeling	.76	-	-	.59
Loving	.70	-	.32	.60
Romantic	.68	-	-	.49
Compassionate	.64	-	-	.41

Sensitive	.63	-	-	.43
Warm	.55	-	.35	.46
Unromantic	-.53	-	-	.28
Warm-hearted	.52	-	.45	.47
Prudent	.48	-	-	.24
Sympathetic	.45	-	-	.35
Sensual	-	.79	-	.65
Stimulating	-	.76	-	.59
Exciting	-	.67	-	.59
Experienced	-	.63	.35	.52
Passionate	.39	.60	-	.53
Aggressive	-	.51	-	.28
Arousable	-	.50	-	.26
Domineering	-	.46	.34	.33
Inexperienced	-	-.44	-.36	.33
Individualistic	-	.42	-	.18
Self-conscious	-	.41	-	.19
Powerful	-	.39	-	.28
Uninhibited	-	-	.63	.49
Outspoken	-	-	.62	.42
Spontaneous	-	-	.59	.43
Timid	.30	-	-.58	.43
Embarrassed	.33	-	-.57	.44
Revealing	-	-	.56	.41
Independent	-	-	.55	.35
Straightforward	-	-	.54	.31
Conservative	-	-	-.43	.23

Frank	.38	-	.40	.31
Direct	*.23*	*.15*	*.17*	*.13*
Reserved	-	*.21*	*.22*	*.14*
Cautious	-	*.25*	*.25*	*.14*
Percent of variance	20.695	12.064	8.033	
Eigenvalue	6.829	3.981	2.651	
Alpha values	.85	.82	.77	

4.1.2. Investigation of the Discriminant and Incremental Validity of the Sexual Self-Schema Scale

Two potentially relevant personality domains, self-esteem and extraversion, were assessed in order to test discriminant and incremental validity. These two personality measures were chosen because they were shown to be associated with sexuality indicators. Specifically, Andersen and Cyranowski (1994; 1997) have shown that for both women and men, sexual self-schema accounted for significant increments in the explained variance in the prediction of the range of lifetime sexual activities, the participants' global rating of herself/himself as a sexual person, and sexual arousability beyond that explained by personality constructs. Therefore, these measures were used in the validity analysis of the Sexual Self-Schema Scale (Hill, 2007) in a Turkish sample to understand whether sexual self-schema accounted for increments in the explained variance beyond that explained by self-esteem and extraversion. For this analysis, the Rosenberg Self-Esteem Scale (Rosenberg, 1965; as cited in Çuhadaroğlu, 1985; adapted into Turkish culture by Çuhadaroğlu, 1985) and Extraversion subscale of the Eysenck Personality Questionnaire Revised-Abbreviated Form (Francis et. al., 1992; adapted into Turkish culture by Karancı et. al., 2007) were administered to 306 undergraduate students. Extraversion and self-esteem were significantly correlated with three factors. Self-esteem was significantly correlated with Factor 1 ($r = -.11$, $p<.05$), with Factor 2 ($r = -.22$, $p<.001$), and with Factor 3 ($r = -.27$, $p<.001$). Similarly, extraversion was also significantly correlated with all three factors; correlation coefficients were .22, .24, and .45, respectively; and all were significant at $p<.001$ level.

Table 5. Summary of hierarchical regression analyses for sexual self-schemas, self-esteem and extraversion for predicting the experience of masturbation and sexual activity

Variables	Experience of masturbation		Experience of sexual activity	
	Model 1 (β)	Model 2 (β)	Model 1 (β)	Model 2 (β)
Self-esteem	.036	-.005	.077	.010
Sexual self-schemas		-.152*		-.245***
R^2	.001	.023	.006	.061
F for change in R^2	.385	6.471*	1.804	17.729***
Extraversion	.040	.121	-.099	.002
Sexual self-schemas		-.200**		-.249***
R^2	.002	.035	.010	.061
F for change in R^2	.481	10.209*	2.998	16.449***

* $p<.05$, ** $p<.01$, *** $p<.001$.

In a series of hierarchical regression analyses, one of two discriminant measures were entered into the analyses as the first independent variable and total sexual self-schema score as the second. Experience of masturbation and sexual intercourse were used as to-be-predicted dependent variables. Table 5 displays the standardized regression coefficients (β), R^2, and *F* for change in R^2. Results of regression analyses indicated that sexual self-schema accounted for significant increments in explained variance in the prediction of experiencing masturbation and of experiencing sexual intercourse beyond that explained by self-esteem: For reports of masturbation, incremental variance = 2%, $R^2 = .02$, F_{inc} (1, 296) = 6.471, $p<.05$; and for reports of sexual intercourse, incremental variance = 6%, $R^2 = .06$, F_{inc} (1, 300) = 17.73, $p<.001$. This was also the case with extraversion: For reports of masturbation, incremental variance = 3%, $R^2 = .04$, F_{inc} (1, 296) = 10.21, $p<.05$; and for reports of sexual intercourse, incremental variance = 5%, $R^2 = .06$, F_{inc} (1, 300) = 16.45, $p<.001$. Therefore, these increments in variance support the discriminant and incremental validity of the sexual self-schema measure for use in the prediction of sexual behaviors beyond the contribution of other constructs, specifically personality measures.

4.2. Testing the Research Question

The research question was tested in three steps. Firstly, factorial structure of the Sexual Self-Schema Scale was re-assessed in order to determine whether pattern of factors was different in the sample of married individuals, and to calculate factor scores for the purpose of categorization of participants into sexual self-schema categories. Secondly, a correlation analysis was conducted among study variables; and finally, research question was tested using univariate analyses of covariance on study variables.

4.2.1. Screening Data Prior to the Analyses

Before the main analyses, all variables were examined through SPSS programs for accuracy of data entry, existing missing values, and fit between the distributions of values and assumptions of analysis, namely normality, linearity, homogeneity of variance, and homogeneity of regression. Missing value analysis revealed that 163 missing values were randomly scattered through the cases. Because the count of missing values was less than 5% of all cases, those missing values were substituted with the median of the variable they were included in. Eight cases were identified as univariate outliers having extremely high z scores on measures of age, length of marriage, weekly frequency of masturbation, sexual self-schema, sexual satisfaction, marital adjustment; and four of these cases were also found to be multivariate outliers investigating Mahalanobis distance with $p<.001$. Four multivariate outliers were deleted and remaining 200 cases (91 female and 109 male participants) were included in the main analysis. All variables were tested for normality through investigation of skewness and kurtosis and histograms and for linearity through investigation of normal and detrended probability plots. High skewness and kurtosis values obtained for some variables (i.e., weekly frequency of masturbation, number of child, and length of marriage) was ignored because if the sample size is large (>200), the impact of departure from zero kurtosis and skewness is known to diminish (Tabachnick & Fidell, 2001).

4.2.2. Descriptive Characteristics of the Sample of Married Individuals

Prior to the main analyses, descriptive statistics of the sample used for testing the research question were investigated through SPSS DESCRIPTIVES. Descriptive statistics for the final 200 participants are given in Table 6 and Table 7. Table 6 represents frequencies and

percentages of categorical variables; and, Table 7 presents means, standart deviations, and ranges of continuous variables.

Table 6. Frequencies (f) and percentages (%) of categorical variables (*N* = 200)

Variables	F	%
Gender		
Female	91	45.5
Male	109	54.5
Education level		
Primary school	31	15.5
Secondary school	21	10.5
High school	67	33.5
University (2-4 years)	68	34.0
Graduate	13	6.5
Residence		
Villages	20	10.0
Towns	23	11.5
Cities	96	48.0
Metropol cities	61	30.5
Masturbation		
Engages in	39	19.5
Does not engage in	157	78.5
Sexual activity		
Engages in	184	93.0
Does not engage in	12	6.0

Table 7. Means (M), standard deviations (SD), and ranges of continuous variables (*N* = 200)

Variables	M	SD	Range
Age	36.21	8.56	20-70
Female	33.97	8.25	20-60
Male	38.10	8.51	23-70
Length of marriage (years)	11.71	9.53	1-52
Number of children	1.71	.93	1-6
Weekly frequency of masturbation	1.74	.85	0-4
Weekly frequency of sexual activity	2.60	1.20	0-6
SSSS score	128.63	20.61	63-183
GRISS score	30.43	15.59	5-96
DAS score	106.85	22.31	40-146

As can be seen in Table 6 and Table 7, analysis of the data from the final sample revealed that average age of participants was 36.21 (*SD* = 8.56). Most of the participants were university (34.0%) or high school graduates (33.5%). Participants reported spending the most of their lives in cities (48.0%), followed by metropol cities (30.5%), towns (11.5%), and villages (10.0%). All participants were in their first marriages and they all had at least one child. Average length of marriage was 11.71 (*SD* = 9.53), and average number of children was 1.71 (*SD* = .93).

Regarding the main variables of the study, it was revealed that minority of participants (19.5%) reported engaging in masturbation at least once a week. For these participants, average weekly frequency of masturbation was 1.74 (*SD* = .85). In addition, most participants (93%) reported engaging in sexual activity at least once a week. For these participants, average weekly frequency of sexual activity was 2.60 (*SD* = 1.20). Average scores on measures of sexual self-schemas, sexual satisfaction, and marital adjustment were 128.63, 30.43, 106.85, respectively.

4.2.3. Assessing the Factorial Structure of the Sexual Self Schema-Scale in the Sample of Married Individuals

Because the object of main analysis was married individuals, factorial structure of the Sexual Self-Schema Scale (Hill, 2007) was also investigated in the sample. Principal axis factoring with direct oblimin rotation was performed through SPSS DATA REDUCTION on 33 items from the SSSS for the final sample of 200 married individuals. Factorability of the measure was granted through the investigation of both Kaiser-Meyer-Olkin measure of sampling adequacy and Barttlet's test of spherecity.

Initially, oblique rotation, specifically, direct oblimin rotation was conducted to investigate the correlations between factors and the results of this analysis revealed that although the first and the second factors were moderately correlated with each other, other correlations between factors were low. Therefore, the decision for the main analysis was an orthogonal rotation with varimax rotation as in the sample of undergraduate university students. Through the investigation of scree plots, three factors were extracted. Alpha values for the total scale was .85 and alpha values for factors were .82, .83, and .62, respectively. This factor solution well defined most of the variables because communality values tended to be moderate. None of the items had a communality value under .15. With

a cut of .30 for inclusion of a variable in interpretation of a factor, all variables loaded on any of the factors.

Table 8. Means (M), standard deviations (SD) and extracted factor and total score intercorrelations for the sample of married individuals ($N = 200$)

	M	SD	1	2	3
1. Loving/Warm	61.09	10.08	-		
2. Direct/Outspoken	51.07	11.81	.51**	-	
3. Reserved/ Conservative	16.68	6.27	.18**	.004	-
Total score	95.47	19.42	.77**	.87**	-.23**

** Correlation is significant at .01 level (two-tailed).

Extracted factors were again labeled as "Loving/Warm", "Direct/Outspoken", and "Reserved/Conservative". The correlational analysis of factor scores revealed that all factors were correlated significantly with each other, except the second and the third factors. Total scale score was calculated through adding Factor 1 and Factor 2 scores and subtracting Factor 3 score. All of the factors correlated significantly with the total score (see Table 8). Fourteen items clustered under the label of "Loving/Warm", thirteen items were under "Direct/Outspoken" and six items were under the label of "Reserved/Conservative". However, eleven items ("Frank", "Spontaneous", "Sympathetic", "Unromantic", "Revealing", "Aggressive", "Powerful", "Outspoken", "Straightforward", "Timid", "Individualistic", and "Self-conscious") were complex and they crossloaded on two factors with loadings over .30. Among these crossloading items, two of them, "Unromantic" and "Self-conscious" were sought to replace under the other factor they crossloaded with smaller factor loadings; it was interpreted that loading under the other factor was more suitable for these items because of prior theoretical knowledge (Andersen, et. al., 1994; Hill, 2007). Specifically, the item "Unromantic" was placed under the label of "Loving/Warm" instead of "Reserved/Conservative", and the item "Self-conscious" was placed under the label of "Reserved/Conservative" instead of "Direct/Outspoken".

Communalities, percents of explained variance, eigenvalues, item loadings, and alpha values for factors are shown in Table 9. Variables are ordered and grouped by size of

loading to facilitate interpretation. Loadings under .30 are replaced with dashes. Interpretive labels are suggested for each factor on the table.

Table 9. Factor loadings, communalities (h^2), alpha values, percents of variance for principal axis factoring and varimax rotation on SSSS items in the sample of married individuals ($N = 200$)

Items	Loving/Warm	Direct/Outspoken	Reserved/Conservative	h^2
Soft-hearted	.72	-	-	.53
Loving	.72	-	-	.52
Compassionate	.71	-	-	.51
Warm	.62	-	-	.46
Warm-hearted	.61	-	-	.46
Feeling	.61	-	-	.39
Romantic	.58	-	-	.34
Frank	.57	.30	-	.41
Passionate	.56	-	-	.38
Sensitive	.55	-	-	.39
Spontaneous	.53	.33	-	.41
Sympathetic	.48	.32	-	.36
Prudent	.46	-	-	.31
Unromantic	-.36	-	.39	.33
Uninhibited	-	.72	-	.53
Domineering	-	.67	-	.45
Exciting	-	.63	-	.46
Sensual	-	.60	-	.41
Experienced	-	.58	-	.39
Revealing	.34	.55	-	.45
Aggressive	-.33	.53	.32	.49

Powerful	.34	.53	-	.43
Stimulating	-	.52	-	.30
Independent	-	.48	-	.27
Arousable	-	.43	-	.26
Outspoken	.49	.39	-	.45
Straightforward	.34	.37	-	.28
Conservative	-	-	.69	.49
Embarrassed	-	-	.69	.51
Inexperienced	-	-	.62	.45
Timid	-	-.42	.47	.39
Individualistic	-	.36	.43	.32
Self-conscious	-	.44	.38	.34
Percent of variance	23.642	9.500	7.708	
Eigenvalue	7.802	3.135	2.544	
Alpha values	.82	.83	.62	

Compared to factor structure obtained through the analysis of the data from university students' sample, it was revealed that results of the factorial analysis in the data from the sample of married individuals were much more alike the results reported by Hill (2007) in terms of number of items under each factor, and item labels under each factor. In addition, it was observed that this solution explained 41% variance in sexual self ratings and internal consistency of the scale seemed to be in consistency with the finding of Hill (2007) and previous reports of Andersen et. al. (1994; 1999). Although the third factor, "Reserved/Conservative", did not seem to have a good internal consistency, this factor was retained because of its increased similarity, and even equivalence with the corresponding factor in previous studies (Andersen et. al., 1994; Hill, 2007). Thus, the statistical decision was to use this factor solution from the sample of married individuals for the purpose of testing the research question and to calculate factor scores accordingly.

4.2.4. Categorization of Married Individuals into Sexual Self-Schema Categories

In order to investigate the research question, scores for each factor were computed and each participant was categorized into one of the four sexual self-schema categories using a median split. As mentioned in the "Methods" section (see 3.2.1.1. The Sexual Self-Schema Scale), first two factors were used to constitute a positive subscale and the last factor was used to constitute a negative subscale. Median for the positive subscale was calculated as 115 and median for the negative scale was 17. Participants scored below the median on both subscales were categorized as aschematic, participants who rated themselves above the median on both subscale were categorized as co-schematic, if participants rated themselves below the median on negative subscale and above on positive subscale the category was positive schematic and finally, participants who rated themselves above the median on negative subscale and below the median on positive scale were categorized as negative schematic.

44 of the participants were in the positive schematic category, there were 54 participants in the negative schematic category, 44 participants in the aschematic category, and 58 participants were in the co-schematic category. As implied in these numbers, the number of participants in each category was very similar. Tables 10 and 11 demonstrate a statistical summary of continuous and categorical variables for each of the sexual self-schema categories.

Table 10. Frequencies (f) and percentages (%) of categorical variables for sexual self-schema categories

Variables	Positive schematics (N = 44)		Co-schematics (N = 58)		Aschematics (N = 44)		Negative schematics (N = 54)	
	f	%	f	%	f	%	f	%
Gender								
Female	20	45.5	23	39.7	21	47.7	27	50.0
Male	24	54.5	35	60.3	23	52.3	27	50.0
Education level								
Primary school	6	13.6	15	25.9	6	13.6	4	7.4
Secondary school	5	11.4	5	8.6	3	6.8	8	14.8
High school	9	20.5	24	41.4	15	34.1	19	35.2
University (2-4 years)	20	45.5	12	20.7	16	36.4	20	37.0
Graduate	4	9.1	2	3.4	4	9.1	3	5.6

Residence							
Villages	3	6.8	8	13.8	5	11.4	4	7.4
Towns	8	18.2	6	10.3	2	4.5	7	13.0
Cities	16	36.4	31	59.4	24	54.5	25	46.3
Metropol cities	17	38.6	13	22.4	13	29.5	18	33.3
Masturbation							
Engages in	6	13.6	14	24.1	10	22.7	9	16.7
Does not engage in	38	86.4	44	75.9	34	77.3	45	83.3
Sexual activity							
Engages in	42	95.5	58	100.0	39	88.6	49	90.7
Does not engage in	2	4.5	0	0.0	5	11.4	5	9.3

4.2.5. Correlation Coefficients among Study Variables

Prior to main analyses, Pearson's correlation coefficients r were computed for all of the variables that are used in the present study. Correlations were computed for female participants and for male participants seperately. Correlations are given in Table 12. Correlations for female participants are displayed above diagonal and correlations for male participants are given displayed below diagonal.

For both women and men, age was found to be negatively correlated with weekly frequency of sexual activity (women: $r = -.46$, $p<.01$; men: $r = -.32$, $p<.01$) and with marital adjustment (women: $r = -.25$, $p<.01$; men: $r = -25$, $p<.01$). Therefore, as age increased, length of marriage and number of children increased; however, weekly frequency of sexual activity and level of marital adjustment decreased in all participants. Moreover, in men, age correlated with sexual satisfaction ($r = .34$, $p<.01$), meaning that as age increased, sexual satisfaction of men decreased (note that higher scores in sexual satisfaction measure indicates lower sexual satisfaction).

In addition, level of education was correlated with place where participants spent most of their lives (women: $r = .46$, $p<.01$; men: $r = .42$, $p<.01$), length of marriage (women: $r = -.40$, $p<.01$; men: $r = -.35$, $p <.01$), and number of children (women: $r = -.59$, $p<.01$; men: $r = -.45$, $p <.01$) for all participants. Thus, as level of education increased, participants tended to live in more urban areas of Turkey, reported fewer years of marriage and tended to have fewer children. For female participants, level of education was also correlated with sexual satisfaction ($r = -.45$, $p<.01$), marital adjustment ($r = .47$, $p<.01$), and the total sexual self-schema score; as women had higher education, they reported less sexual

Table 11. Means (M), standard deviations (SD), and ranges of continuous variables for sexual self-schema categories

Variables	Positive schematics (N = 44)			Co-schematics (N = 58)			Aschematics (N = 44)			Negative schematics (N = 54)		
	M	SD	Range	M	SD	Range	M	SD	Range	M	SD	Range
Age	36.74	8.97	23-63	36.41	8.31	21-58	36.91	7.88	24-54	35.00	9.10	20-70
Female	35.74	8.28	27-60	34.13	8.78	21-58	36.38	8.87	24-54	30.70	6.44	20-47
Male	37.61	9.97	23-63	37.91	7.75	25-55	37.39	7.02	28-52	39.42	9.60	29-70
Length of marriage (years)	11.57	9.89	2-45	12.62	9.16	1-40	11.20	9.44	1-33	11.26	9.88	1-52
Number of children	1.64	1.14	1-6	1.86	.98	1-5	1.73	.82	1-4	1.59	.77	1-4
Weekly frequency of masturbation	.23	.63	0-3	.40	.81	0-4	.41	.90	0-4	.31	.77	0-3
Weekly frequency of sexual activity	2.91	1.41	0-6	2.78	1.30	1-6	1.98	1.23	0-4	2.09	1.12	0-4
SSSS score	115.07	10.27	99-141	105.19	9.23	89-132	84.66	17.18	35-108	77.87	12.85	32-95
GRISS score	21.61	10.68	5-50	28.04	14.40	8-79	32.98	15.24	6-65	38.09	34.50	11-99
DAS score	117.43	19.73	59-146	107.31	22.55	49-145	107.25	21.03	64-141	97.41	21.55	40-134

satisfaction and higher marital adjustment. Moreover, level of education was negatively correlated with reports of weekly frequency of sexual activity for men ($r = -.25$, $p<.01$) meaning that as level of education increased, men reported engaging in sexual activity less frequently.

Other sociodemograhic variables also showed correlation with demographic and study variables. Place where participants spent most of their lives correlated with number of children (women: $r = -.28$, $p<.01$; men: $r = -.21$, $p<.05$) and marital adjustment (women: $r = .21$, $p<.05$; men: $r = -.27$, $p<.01$). As participants reported living in more urban areas, they tended to have fewer children. The relationship with marital adjustment differed as a function of gender; women living in more urban areas and men who spent most of their lives in more rural areas reported higher levels of marital adjustment. Additionally, men who spent most of their lives in more urban areas reported engaging in more frequent masturbatory activity ($r = .30$, $p<.05$), engaged in less frequent sexual activity ($r = -.21$, $p<.05$) and reported less sexual satisfaction ($r = .24$, $p<.05$). Length of marriage (years) correlated significantly with weekly frequency of sexual activity (women: $r = -.35$, $p<.01$; men: $r = -.19$, $p<.01$), and with sexual satisfaction (women: $r = .31$, $p<.01$; men: $r = .29$, $p<.01$). In other words, as length of marriage increased, participants tended to engage in less frequent sexual activity, and to report less sexual satisfaction. In addition, for women, length of marriage showed a relationship with marital adjustment ($r = -.35$, $p<.01$) meaning that as length of marriage increased, women tended report lower levels of marital adjustment. Finally, for women, number of children correlated significantly with weekly frequency of masturbation ($r =.25$, $p<.05$), weekly frequency of sexual activity ($r =-.25$, $p<.05$), sexual satisfaction ($r =.34$, $p<.01$), and marital adjustment ($r =.38$, $p<.01$); as women had more children, they tended to engage in masturbation more frequently; however, they reported engaging in sexual activity less frequently. In addition, as number of children increased, they tended to report lower levels of sexual satisfaction but higher levels of marital adjustment.

Study variables showed some significant correlations with each other. Weekly frequency of masturbation was negatively correlated with marital adjustment for men ($r = -.25$, $p<.01$). Men who report more frequent masturbation tended to report less marital adjustment; however, such association was not significant for female participants. Weekly frequency of sexual activity was correlated with sexual satisfaction (women: $r = -.61$,

p<.01; men: $r = -.66$, *p*<.01), marital adjustment (women: $r = .55$, *p*<.01; men: $r = .41$, *p*<.01), and the total sexual self-schema score (women: $r = .26$, *p*<.01; men: $r = .42$, *p*<.01). Moreover, sexual satisfaction was in significant correlation with marital adjustment (women: $r = -.72$, *p*<.01; men: $r = -.55$, *p*<.01) and with the total sexual self-schema score (women: $r = .40$, *p*<.01; men: $r = -.55$, *p*<.01). In other words, as weekly frequency of sexual activity increased, so did sexual satisfaction and marital adjustment; in addition, sexual satisfaction tended to increase as marital adjustment increased. Finally, marital adjustment was significantly and positively correlated with the total sexual self-schema score (women: $r = .30$, *p*<.01; men: $r = .34$, *p*<.01).

4.2.6. Testing Group Differences

4.2.6.1. Testing Group Differences: Sociodemographic Variables

It was investigated whether there were differences in sociodemographic variables associated with categories of sexual self-schemas in seperate one-way analyses of variance (for continuous variables) and chi-square analyses (for categorical variables). Continuous variables were age (years), length of marriage (years), and number of children. Categorical variables were level of education and place where individuals spent most of their lives.

These two categorical sociodemographic variables were grouped for chi-square analyses in order to facilitate interpretation of findings. Primary school, secondary school, and high school education were together grouped as "low education level" and university and higher level of education were grouped as "high education level". Moreover, in the case that participants reported spending most of their lives in villages and towns, they were grouped under "the rural category", and cities and metropol cities were grouped as "the urban category".

When analyzed seperately, it was found that similar number of women and men replaced under categories of sexual self-schemas. In the present study, there were 17 (18.7%) positive schematic women, 23 (25.3%) co-schematic women, 28 (30.8%) aschematic women, and 23 (25.3%) negative schematic women. In addition, there were 32 (29.4%) positive schematic men, 24 (22.0%) co-schematic men, 26 (33.9%) aschematic men, and 27 (24.8%) negative schematic men.

Table 12. Intercorrelations among variables for married individuals ($N = 200$)

	1	2	3	4	5	6	7	8	9	10
Age (years) (1)		-.20	.50	.90**	.53**	.09	-.46**	.18	-.25*	.08
Education level (2)	-.16		.46**	-.40**	-.59**	-.07	.13	-.45**	.47**	.27**
Place where participants spent most of their lives (3)	.15	.42**		-.12	-.28**	-.03	-.05	-.18	.21*	.10
Length of marriage (4)	.82**	-.35**	-.03		.68**	.12	-.44**	.31**	-.35**	-.02
Number of children (5)	.36**	-.45**	-.21*	.51**		.25*	-.25*	.34**	.38**	-.16
Weekly frequency of masturbation (6)	.09	.10	.30**	-.05	-.14		.03	-.08	-.05	.09
Weekly frequency of sexual activity (7)	-.32**	-.25*	-.21*	-.19*	-.01	.03		-.61**	.55**	.26*
Sexual satisfaction (8)	.34**	.04	.24*	.29**	.02	.09	-.66**		-.72**	-.40**
Marital adjustment (9)	-.25*	-.12	-.27**	-.17	-.10	-.25**	.41**	-.55**		.30**
Sexual self-schema score (10)	-.13	-.08	-.01	-.12	.03	-.05	.42**	-.55**	.34**	

Note: Correlations for female participants are displayed above diagonal, correlations for male participants are displayed below diagonal.

  * Correlation is significant at the $p < .05$ level (two-tailed)

 ** Correlation is significant at the $p < .01$ level (two-tailed).

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For women, it was found that there were no differences among categories of sexual self-schemas for age, $F(3,87) = 1.291$, $p>.05$, for length of marriage, $F(3,87) = .475$, $p>.05$, and for number of children, $F(3,87) = .058$, $p>.05$. For men, same results for obtained for age, length of marriage and number of children: $F(3,105) = .599$, $p>.05$, $F(3,105) = .011$, $p>.05$, and $F(3,105) = .719$, $p>.05$, respectively.

Next, chi-square analyses were conducted for female participants and for male participants seperately. For both women and men, there were no differences among categories of sexual self-schemas between rural and urban categories, $\chi^2(3) = 1.205$, $p>.05$, and $\chi^2(3) = 3.400$, $p>.05$, respectively. For women, there were again no differences between high and low education groups, $\chi^2(3) = 3.988$, $p>.05$. However, for men, a difference was reported between high and low education groups among categories of sexual self-schemas, $\chi^2(3) = 12.994$, $p<.01$. For co-schematic men, there were far less cases in high education group and far more cases in low education group than expected; for positive and negative schematics, there were more cases in high education group and less cases in low education group than expected; and for aschematic men, there were less cases in low education group and more cases in high education group than expected.

4.2.6.2. Testing Group Differences: Categories of Sexual Self-Schemas, Weekly Frequency of Masturbation, Weekly Frequency of Sexual Activity, Sexual Satisfaction, and Marital Adjustment

Four 2x4 between-subjects univariate analyses of covariance were performed on four independent variables seperately: Weekly frequency of masturbation, weekly frequency of sexual activity, sexual satisfaction, and marital adjustment. Adjustments were made for two covariates: Level of education and length of marriage. Independent variables were gender (females and males), and categories of sexual self-schemas (aschematics, negative schematics, co-schematics, and positive schematics). Analyses were performed by SPSS GLM, weighting cells by their sample sizes to adjust for unequal n. Table 13 represents a summary table for the analyses of covariance.

There were neither missing values nor univariate or multivariate within-cell outliers at $\alpha = .001$. A total of 200 married individuals were used in the analyses. Results of evaluation of assumptions of normality, homogeneity of variance-covariance matrices, linearity, and multicollinearity were satisfactory. Covariates were judged to be adequately reliable for

covariance analysis.

A unique contribution to predicting differences among categories of sexual self-schemas was provided by weekly frequency of sexual activity, $F(3, 190) = 7.76$, $p<.001$, $\eta^2 = .11$. Positive schematic individuals and co-schematic individuals (adjusted mean = 2.78, *SE* =.17) engaged in more frequent sexual activity (in a week) (adjusted mean = 2.93, *SE* = .18) compared to aschematic individuals (adjusted mean = 2.06, *SE* = .16), and to negative schematic individuals (adjusted mean = 2.03, *SE* = .17). All differences except the ones between positive schematics and co-schematics, and negative schematics and aschematics were statistically significant. Neither a main effect for gender nor an interaction between gender and sexual self-schema categories were obtained for weekly frequency of sexual activity. It was found that both length of marriage, $F(1, 190) = 30.00$, $p<.001$, and level of education, $F(1, 190) = 6.95$, $p<.01$, provided unique adjustment for weekly frequency of sexual activity.

Sexual satisfaction also made a unique contribution, $F(3, 190) = 14.20$, $p<.001$, $\eta^2 = .18$, to the dependent variable. Negative schematic individuals reported the lowest level of sexual satisfaction among categories of sexual self-schemas (adjusted mean = 39.03, *SE* = 1.88) (note that higher scores indicate lower sexual satisfaction). This was followed by aschematic individuals (adjusted mean = 33.10, *SE* = 1.80), co-schematic individuals (adjusted mean = 28.01, *SE* = 1.95), and positive schematic individuals (adjusted mean = 22.03, *SE* = 1.99). However, only differences between positive schematics and negative schematics, positive schematics and aschematics, co-schematics and negative schematics were statistically significant. Moreover, a gender difference was demonstrated for sexual satisfaction. Married women and married men differed in the level of sexual satisfaction, after adjustment for covariates, $F(3, 190) = 18.45$, $p<.001$, $\eta^2 = .09$. Women were found to have lower levels of sexual satisfaction (adjusted mean = 34.66, *SE* = 1.41) than men (adjusted mean = 26.42, *SE* = 1.28). However, no interaction between gender and sexual self-schema categories was found. Both length of marriage, $F(1, 190) = 14.14$, $p<.001$, and level of education, $F(1, 190) = 4.30$, $p<.05$, provided unique adjustment for sexual satisfaction.

Univariate analysis revealed that a reliable difference was also present on the measure of marital adjustment, $F(3, 190) = 8.56$, $p<.001$. Post hoc comparisons using a Bonferroni type adjustment demonstrated that positive schematic individuals (adjusted mean =

Table 13. Summary of the analyses of covariance of weekly frequency of masturbation, weekly frequency of sexual activity, sexual satisfaction, and marital adjustment (N = 200)

Source of variance	Weekly frequency of masturbation			Weekly frequency of sexual activity			Sexual satisfaction			Marital adjustment		
	Adjusted SS	df, MS	F	Adjusted SS	df, MS	F	Adjusted SS	df, MS	F	Adjusted SS	df, MS	F
Gender	5.74	1, 5.74	9.51**	1.32	1, 1.32	0.97	3207.36	1, 3207.36	18.45***	567.64	1, 567.64	1.34
Sexual self-schema categories (adjusted for gender)	0.29	3, 0.10	0.16	31.89	3, 10.63	7.76***	7403.66	3, 2467.89	14.20***	10906.26	3, 3635.42	8.56***
Interaction	1.66	3, 0.55	0.92	0.84	3, 0.28	0.21	345.73	3, 115.24	0.66	770.91	3, 256.97	0.61
Covariates (adjusted for all effects)												
Education level	0.15	1, 0.15	0.24	9.53	1, 9.53	6.95**	747.83	1, 747.83	4.30*	611.48	1, 611.48	1.44
Length of marriage	0.01	1, 0.01	0.02	41.12	1, 41.12	30.00***	2457.55	1, 2457.55	14.14***	4649.09	1, 4649.09	10.95***
Error	114.72	190, 0.60		260.38	190, 1.37		33024.88	190, 173.82		80672.71	190, 424.59	

* $p < .05$, ** $p < .01$, *** $p \leq .001$.

116.29, *SE* = 3.10) had more marital adjustment than negative schematics (adjusted mean = 95.45, *SE* = 2.94). Co-schematic individuals (adjusted mean = 110.20, *SE* = 3.05) also reported higher marital adjustment than negative schematics; however, positive schematic and co-schematic ndividuals were not different in terms of marital adjustment. Aschematic individuals (adjusted mean = 106.24, *SE* = 2.81) reported slightly lower levels of marital adjustment than co-schematic individuals and higher levels than negative schematics. However, these differences were also not significant. For marital adjustment, neither statistically significant main effect for gender nor a significant interaction between gender and sexual sel-schema categories were obtained. It was also found that only length of marriage, $F(1, 190) = 10.95$, $p<.001$, provided unique adjustment for marital adjustment.

After adjustment by covariates, weekly frequency of masturbation varied significantly with gender, as summarized in Table 13, with $F(1, 190) = 9.51$, $p<.01$. The strength of the relationship between adjusted frequencies of masturbation and gender was weak, however, with $\eta^2 = .05$. It was found that women (adjusted mean = .15, *SE* = .08) reported engaging in masturbation less frequently than men (adjusted mean = .50, *SE* = .08). No statistically significant main effect of sexual self-schema categories was found. Nor was there a significant interaction between gender and sexual self-schema categories after adjustment for covariates. None of the covariates provided reliable unique adjustment for weekly frequency of masturbation.

Positive schematic and co-schematic individuals, then, reported engaging in more frequent sexual activity than aschematic and negative schematic individuals. Moreover, these two groups experienced greater sexual satisfaction than negative schematic individuals, and they had higher levels of marital adjustment compared to individuals having negative sexual self-schemas. Moreover, married women reported lower levels of sexual satisfaction and less frequent self-stimulation than married men.

CHAPTER 5

DISCUSSION

The present study was an attempt to investigate sexual self-schemas in the context of Turkish married individuals. It was studied whether there existed a difference among categories of sexual self-schemas of men and women in terms of a number of sexually-relevant and marital variables. In this section, findings obtained through statistical analyses were evaluated in the light of the previous findings reported in the literature. In addition, implications of these findings for the clinicians working in the field were discussed and limitations of the study were mentioned with an emphasis on recommendations for future research.

5.1. Evaluation of the Findings

5.1.1. Factorial Structure of the Sexual Self-Schema Scale

In the present study, the Sexual Self-Schema Scale by Hill (2007) was translated in Turkish language and used in two different Turkish samples for the purpose of testing the research question, and reliability and validity studies of the scale were conducted through utilizing appropriate statistical methods. It was shown that the scale had reasonable construct validity; in addition, it reliably measured what it aimed to measure in a Turkish sample.

The factor analyses conducted in the present study revealed multiple factors for the SSSS in samples of Turkish university students and Turkish married individuals. Through investigation of results from factor analyses, a three factor solution deemed appropriate for both samples. However, factors obtained in the reliability and validity study of SSSS were different across samples of university students and married individuals. For the sample of undergraduate university students, three factors were labeled as following: Loving/Compassionate, Sensual/Stimulating, and Direct/Outspoken; all factors had a positive valence. Indeed, factors obtained from the data of university students seemed like a mixture of positive factors from women's and men's sexual self-schemas in Andersen et.

al.'s (1994; 1999) studies. It is important to note that samples in those studies were also constituted by university students. Factors/dimensions of sexual self-schemas for the sample of married individuals were similar except that a negative factor emerged. In this sample, factors were labeled as Loving/Warm, Direct/Outspoken, and Reserved/Conservative. The first two factors were considered as reflecting positive sexual self views, and the last factor was considered as a negative one. The finding that Turkish university students did not hold negative sexual self views of themselves may be reflecting differences between a sample of university students and a community sample; university students may be holding more positive sexual self views of themselves compared to individuals in the general community. Moreover, the fact that university students tended to be younger and more educated than individuals from a community sample may possibly caused for such finding to appear. In the literature, it has been discussed that older age and lower levels of education were associated with increasing number of sexual dysfunctions, and with lower sexual desire (e.g., Laumann et. al., 1999). Therefore, these differences in sociodemographic characteristics and associated variables may actually be reflected in such negative self views observed in the sample of married individuals.

As Hill (2007) demonstrated similarly using the same composite scale, both married women and married men in the present study endorsed both positive and negative sexual views of themselves, a finding which contrasted the previous findings of Andersen et. al. (1994; 1999) for men and women differently. According to these researchers, women held both positive and negative sexual self-schemas; however, men did not report having negative sexual self-schemas. With an emphasis on the deficiencies of Andersen et. al.'s (1994; 1999) instructions which they provided on their scales, Hill (2007) developed a composite scale in order to enable a measurement of both women's and men's sexual self-schemas with the same scale, and he found that men also endorsed negative sexual views of themselves. The present study replicated these findings in a Turkish sample of married individuals. It has been found that a (married) sexual person is an individual who is loving and warm, who sees herself/himself as being direct and outspoken in her/his sexual relationships, and who does not view herself/himself sexually reserved or conservative.

Although Hill (2007), as contrast to Andersen et. al.'s (1999) findings, demonstrated that men endorsed similar characteristics to women when considering the same broad

dimensions, ratings of men were in fact slightly, but significantly, lower on the loving/warmth dimension and reserved/conservative factors. In other words, men were found to "see themselves as marginally less loving and warm and less reserved/conservative" (p. 142). Such finding was not obtained in the present study. Proportion of men in the positive schematic category was higher than proportion of women in the same category; however, proportions of men and women in the aschematic and negative schematic categories were indeed very similar. Therefore, married Turkish men in the present study reported being more reserved and more conservative as much as women compared with men in Hill's (2007), and definitely with Andersen et. al.'s (1999) study sample. In addition, they were almost equally loving and warm and equally direct and spoken with women in the present study, as in contrast to Hill's (2007) study sample.

The difference regarding men's sexual self-schemas may be due to a number of factors. As mentioned above, Andersen, Cyranowski, and Espindle (1999) discussed the absence of a negative factor for men as being associated with the concept of self-esteem, and as a result of conforming to gender role expectations and of their reluctancy to endorse negative trait when describing themselves. It has been discussed that "…it may be less damaging to their self-esteem to admit that positive traits are less descriptive of themselves than it is to admit that negative traits are more self-descriptive" (p. 657). Although the initial sample in their study consisted of both young (undergraduate students) and older (older students and their additional friends with their ages ranging from 27 to 77) men residing in the United States, following trials in which correlates of sexual self-schemas were examined were only conducted with undergraduate students. Moreover, Hill (2007) also used a sample consisting of American and Canadian undergraduate university students in his study to test a composite scale. In contrast to Andersen et. al. (1999), he found that men also rated their sexual selves negatively. Therefore, because the samples used in those studies are very similar, it seems probable that the differences between their findings may be due to measurement instead of sample characteristics. Moreover, the consistency between the findings of the present study obtained for married individuals and Hill's (2007) also increases the probability that the measure indeed created a difference, not the samples included.

However, a cultural consideration may still be necessary because the findings obtained for university students tend to be still different from what was obtained by Andersen et. al.

(1994) for women and by Hill (2007) for university students from both genders. In the literature, it is well recognized that the construction of self and socialization of sexuality tend to vary across cultures (Markus & Kitayama, 1991; Singelis, 1994; as cited in Karakitapoğlu-Aygün, 2004; Laumann et. al., 1994). Therefore, it is probable that there may also be cultural influences on the sexuality component of self, such as the possibility that social roles are internalized into the sexual self-concepts (Hill, 2007). However, the similarity between the findings obtained in the present study and another study utilizing an American/Canadian sample (Hill, 2007) gives the impression that with consistent measurements, sexual self-schemas may be indeed a global construct which is similar for both genders across cultures. Moreover, some researchers mention that Turkey is a country experiencing a rapid social change from traditionalism to increased individualism since 1980s as reflected in changing self-perceptions and self-descriptions of Turkish people (Karakitapoğlu-Aygün, 2004) and urban families in Turkey are adopting more modern socialization practices and marital relations (Sunar & Fişek, 2005), and in this sense, it is becoming to share much common with Western individualistic nations such as the well-known example of American nation (Hofstede, 1984). If this is the case, then obtaining similar findings in Turkish and Western populations as in the present study may also be reflecting such kind of increasing cultural similarity.

5.1.2. Differences among Categories of Sexual Self-Schemas

In the present study, the research question concerned about differences among categories of sexual self-schemas of women and men in terms of weekly frequency of masturbation, weekly frequency of sexual activity, level of sexual satisfaction, and level of marital adjustment. Prior to investigation of differences in these study variables, sociodemographic and contextual differences among sexual self-schemas categories were also examined. Herein, differences among categories of sexual self-schemas for women and men in terms of study variables will be mentioned.

As mentioned above, firstly category differences in terms of sociodemographic and contextual variables were investigated through a series of statistical analyses. As Andersen and Cyranowski (1994) mentioned earlier, sociodemographic differences have been historically correlated with sexual variables and "…might serve to confound the relationship between sexual self-schema and sexuality measures" (p. 1089). Findings revealed that groups, namely co-schematic, aschematic, negative schematic, and positive

schematic categories, were not different in terms of sociodemographic and contextual variables. In addition, almost equal number of married individuals did replace under these categories for both women and men, showing that the sample used in the present study was good enough and suitable to warrant reliable statistical measurements. For both women and men, no differences were found among categories in terms of age, length of marriage (in years), number of children, place where participants spent most of their lives. The only difference among categories was obtained for level of education of male participants. Male groups were generally more educated than expected. This was controlled in main analysis.

Ststistical analyses revealed that both gender and categories of sexual self-schemas were associated with differences in study variables; however, no interaction between gender and sexual self-schema categories was found for any of the variables. One of the variables that was found to be different among categories of sexual self-schemas was frequency of sexual activity. After controlling for the effects of level of education and length of marriage, a significant difference was demonstrated. Specifically, positive schematic and co-schematic individuals reported engaging in more frequent sexual activity in a given week than aschematic and negative schematic individuals. Average frequency of sexual activity for these individuals was 2.93, 2.78, 2.06, and 2.03, respectively.

Andersen et. al. (1994; 1999) found that women and men holding positive sexual self-schemas experienced greater sexual repertoire, increased number of sexual relationships, and these individuals were more willing to engage in sexual encounters and they anticipated more sexual relationships in the future. In a general sense, they viewed themselves as more sexual compared to individuals who did not have positive self views. Moreover, positive schematic men experienced greater relationship quality and both women and men with positive sexual self-schemas had more intense love experiences (Aarestad, 2000). In studies with samples of women, it was also found that positive schematics were more sexually arousable and less anxious in sexually relevant situations compared to individuals with negative sexual self-schemas (Davidov, 2006; Volsky Rushton, 2002), and they tended to be more comfortable related to sexual matters (Pornchaikate, 2003). In addition, it was also found in the present study that frequency of sexual activity was positively associated with sexual satisfaction and marital adjustment, which are also associated with general relationship quality. Therefore, the findings

obtained here seem to be in good consistency with Andersen et. al.'s (1994; 1999) and also as general relationship quality was shown to be associated with frequency of sexual activity (e.g., Edwards & Booth, 1976), with Aarestad's (2000) findings.

Another finding obtained in the analyses was that positive schematic and co-schematic individuals reported higher level of sexual satisfaction in their relationships compared to aschematic and negative schematic individuals, respectively. In the literature, the knowledge regarding the relationship between sexual satisfaction and sexual self-schemas is relatively limited. Previous to the present study, only a small number of studies investigated such relationship. These studies demonstrated that a moderate degree of sexual satisfaction was experienced by both negative and positive schematic women (Andersen & Cyranowski, 1998), that relationship between sexual satisfaction and sexual self-schemas was mediated by sexual arousability in a sample of spinal cord injured women (Davidov, 2006). Although in an indirect investigation, Aarestad (2000) found that sexual self-schemas of women were associated with better sexual functioning across domains of sexual behavior, sexual satisfaction, and sexual response. Another finding obtained in Aarestad's (2000) study was that sexual self-schemas were not associated with sexual satisfaction in a sample of male university students. In the present study, categories of sexual self-schemas of married individuals differed in the level of sexual satisfaction.

The findings obtained in the present study are inconsistent with the findings of Andersen and Cyranowski (1998) because in the present study, positive schematic individuals were found to have higher levels of sexual satisfaction compared to negative schematic individuals. These findings are also inconsistent with Aarestad's (2000) finding obtained for men. However, the finding that individuals with positive sexual self-schemas had higher levels of sexual satisfaction seems more consistent with the previous findings when literature on sexual self-schemas and sexual satisfaction are evaluated together. In the literature, it was clearly demonstrated that sexual self-schemas were associated with differences in the experience and perception of sexuality and romantic relationships. As mentioned previously, Andersen et. al. (1994; 1999) showed that women and men with positive sexual self-schemas were more willing to experience sexual relationships, had a greater sexual repertoire, reported more positive feelings towards sexual experiences and during sexual activity, and anticipated more positive sexual relationships in the future compared to negative schematic counterparts. In subsequent studies, positive schematic

individuals were also found to endorse higher sexual arousability, less sexual anxiety, more positive attitudes toward sexual matters, higher body and sexual esteem, and higher ability to have orgasms (Davidov, 2006; Volsky Rushton, 2002). In contrast, negative schematics reported being cold, unromantic, and sexually inhibited as sexual persons. They had low levels of sexual arousal, and high levels of behavioral inhibition and negativity (Andersen, Woods, & Copeland, 1997).

At this point, an evaluation of the definition and correlates of sexual satisfaction would help us to understand the findings obtained in the present study. Sexual satisfaction was previously defined in the present study as "an affective response arising from one's subjective evaluation of the positive and negative dimensions associated with one's sexual relationship" (Lawrence & Byers, 1995; as cited in Timm, 1999, p. 17). This concept has been consistently shown to be positively associated with certain individual and relationship characteristics such as assertiveness (Whitney & Poulsen, 1975) and shared initiative regarding sexual intercourse (Barrientoz & Paez, 2006), intimacy and orgasm likelihood (Haning et. al., 2007), self esteem in marriage (Adabjian-Mozian, 2005) and expectations in a relationship (Larson et. al., 1998), frequency of sexual activity (Barrientoz & Paez, 2006; Stewart, 2004).

Therefore, the finding that individuals with positive sexual self-schemas reported high sexual satisfaction seems to be in line with what literature says about getting high satisfaction from sexual relationships. In studies with samples of women, individuals with positive sexual self-schemas are consistently shown to be more able to express sexual needs, more sexually intimate (showing approach behaviors), more sexually arousable, more open to sexual experiences, and more confident in sexual relationship (e.g., Andersen & Cyranowski, 1994; Volsky Rushton, 2002; Yurek, 1997). Similarly, compared to aschematic men (corresponding to negative schematic and aschematic men in the present study), it was found that schematic men tended to see themselves as "more sexual" with "emotions of passion and love" and with "more open-minded and liberal" sexual attitudes (Andersen et. al., 1999, p. 656). Positive sexual self-schemas were also associated with better sexual functioning, increased sexual desire and arousability, and greater sexual responsivity (Aarestad, 2000). Therefore, it would be expected for them to show higher levels of sexual satisfaction compared to negative schematic individuals who tend to be distant, cold and unromantic in terms of sexual encounters. It is also another

finding of the present study that weekly frequency of sexual activity increases as a function of sexual satisfaction for both women and men. When considered with the finding that positive schematic women and schematic men were more willing to experience sexual relationships (Andersen et. al., 1994; 1999) and with the finding that sexual satisfaction is positively associated with frequent sexual activity (e.g. Barrientoz & Paez, 2006), it would be better understood why these individuals reported high levels of sexual satisfaction in their relationships.

For sexual satisfaction, univariate analysis also demonstrated a difference between married men and married women. It was shown that women endorsed lower levels of sexual satisfaction compared to men in the present study. In previous studies, inconsistent results were obtained. It has been reported that women experienced higher levels of sexual satisfaction (Renaud & Byers, 1997) or there were no differences between men and women in terms of sexual satisfaction (Timm, 1999). However, in general, men were found to exhibit greater sexual satisfaction than women (e.g., Basat, 2004; Gökmen, 2001; Kabakçı & Daş, 2002). The finding obtained in the present study is consistent with latter studies conducted in Turkish samples. The reason for obtaining such finding may be due to characteristics of culture and its influence on individuals because studies which were conducted with Turkish samples also demonstrated similar findings. Moreover, characteristics of women and men may be relevant factors. For instance, feminine gender role (Kimlicka et. al.,1983; Obstfeld et. al., 1985) and aging in women (but not in men) (Carpenter et. al., 2007) were shown to be associated with low levels of sexual satisfaction.

Similar to findings obtained for the differences in frequency of sexual acitivty and level of sexual satisfaction among categories of sexual self-schemas, it was shown that positive schematic and co-schematic individuals in the present study reported higher levels of marital adjustment in their marriages compared to aschematics and negative schematics. Although the differences between aschematic and negative schematic individuals, and similarly between positive schematic and co-schematic individuals were not statistically significant, the pattern was exactly the same as for frequency of sexual activity and sexual satisfaction. As mentioned in the previous sections, no other studies which investigated the relationship between the level of marital adjustment and categories of sexual self-schemas are available in the literature. Therefore, it is not possible to discuss these

findings regarding marital adjustment in married individuals under the light of findings from previous studies. Nonetheless, a discussion about sexuality-related positive outcomes or various characteristics associated with positive sexual self-schemas reflected in better marital adjustment seems plausible.

As discussed in the previous paragraphs, positive schematic and co-schematic individuals reported higher levels of sexual satisfaction than aschematic and negative schematic individuals. One reason that these individuals also endorsed higher level of marital adjustment may be due to that they reported to be more satisfied with their sexual relationships in their marriages. In the literature, although there have been some studies showing no connection (e.g., Berg-Cross, 2001; Colebrook Seymour III, 1998), sexual satisfaction and marital adjustment were generally found to be closely related with each other (e.g., Fisher & McNulty, 2008; Litzinger & Gordon, 2005; Young et. al., 1998). Therefore, a sexually satisfied individual may also be satisfied with his/her marriage relationship and vice versa; in other words, a negative schematic individual with low sexual satisfaction may also report low marital adjustment. This relationship, indeed, is also reflected by from moderate to high positive correlations between these two variables found in the present study. On the other hand, having positive sexual self-schemas may directly relate to experiencing high levels of marital adjustment. The relationship between relationship satisfaction and women's and men's sexual self-schemas were previously investigated by Aarestad (2000). In this study, the author demonstrated a relationship only between men's positive sexual self-schemas and greater intimacy, passion, and commitment; however, sample of this study only constituted of dating university students. It is possible that positive personality characteristics of these married individuals would reflect in the marital relationship as a buffer against any discord or conflict between spouses or as a tool for enhancing marital quality through probably good communication and more positive attitudes.

As mentioned previously, although some differences between sexual self-schema categories were found to be statistically insignificant, a pattern was emerged in the analyses showing that co-schematic and aschematic individuals were in between positive and negative schematic individuals in terms of frequency of sexual activity, sexual satisfaction, and marital adjustment. This may also be attributed to what is known about sexual self-schemas. As Andersen and Cyranowski (1994) mentioned earlier, these groups

"...have a 'middling' level of behavior – not as low as the negative schema group, yet as not high as that for the positive schema group" (p. 1095). For instance, in their study, co-schematic women have found to endorse high levels of sexual desire and sexual arousal, to have strong feelings of passionate love similar to positive schematics; however, they tend to report a restricted pattern of sexual activities. Cyranowski and Andersen (2000) explained "as a result of their conflicting responses, they display a moderately restricted pattern of sexual activity, falling between behavioral levels reported by the Positive and Negative schema groups" (p. 521). Aschematic individuals also evaluated themselves as being neutral similar to co-schematics; however, this neutrality was viewed as a result of lacking strong self-schemas (Andersen & Cyranowski, 1998). Aschematics had low levels of sexual desire, could not recognize sexual cues, reported fewer erotic experiences; however, still, reported number and variety of sexual partners and experiences was greater than negative schematic counterparts (Andersen & Cyranowski, 1998; Pornchaikate, 2003). Therefore, in a continuum going from less frequent to more frequent sexual activity, and from low levels to high levels of sexual satisfaction and marital adjustment, this standing perfectly fits with the knowledge mentioned in the literature regarding those individuals.

Another variable used in the present study was reported weekly frequency of masturbation. For this variable, a gender difference was demonstrated: Married men engaged in more frequent sexual self-stimulation compared to married women in the present study. Among married individuals, only 27.5% of married men and only 9.9% of married women reported engaging in sexual self-stimulation at least once a week. After adjustment for level of education and length of marriage, the average frequency of masturbation for men who reported engaging in it was 0.50 times weekly, and this number was found to be 0.15 times each week for women. The gender difference is consistent with previous findings in the literature (e.g., AARP, 2005; Geressu et. al., 2008; Hunt, 1974; Soyer, 2006).

Frequency of masturbation, however, showed no differences among categories of sexual self-schemas. In fact, reported frequencies were too low to warrant a powerful and reliable statistical analysis on this variable. Although previous studies from Western societies reported that masturbation has been indeed common (Lipsith, McCann, and Goldmeier, 2003; as cited in Soyer, 2006), it has been also reported that masturbatory experience is

associated with negative attitudes (Halpern et. al., 2000; Laqueur, 2004; as cited in Hock, 2007), especially for women (Leitenberg, Detzer, and Srebnik, 1993). These negative attitudes, coupled with the obstacles regarding data collection in sexuality studies (Crooks & Baur, 2005), may have prevented individuals to report their experiences of self-stimulation. Therefore, low frequencies may be due to such negative attitudes about masturbation and individuals may be reluctant to report their masturbatory experiences, or they may actually not engage in masturbation frequently, as the results showed in the present study. For instance, it has been also mentioned in the literature that in a marriage relationship, a preference for masturbation over sexual intercourse would result in discord in relationship (Betchen, 1991). Either way, the findings reflect an infrequency of sexual self-stimulation for both genders in Turkey.

5.2. Limitations of the Study and Recommendations for Future Research

The present study was the first in the literature to study sexual self-schemas in the context of marital relationships and in a Turkish sample. It demonstrated a link between sexual frequency, sexual satisfaction, and marital adjustment and categories of sexual self-schemas for married women and men. Nevertheless, there are some limitations of the present study that require elaboration.

First limitation concerns the selection of the study sample and generalizability of the findings obtained. Although the above mentioned link seems ensured for the sample included in the study, the extent to which the findings generalize to the broader population is unknown. In the present study, obtaining a heterogeneous sample of married individuals was carefully attempted, still, most of the participants were between 30 and 40 years of age, had higher levels of education (i.e., high school or university graduates), and lived mostly in cities and metropol cities in Turkey (i.e., Bolu, İzmit, Adapazarı, Ankara, İstanbul, and İzmir). Therefore, whether these findings apply to populations with different characteristics is not clear and it is probable that these findings are only generalizable to populations having similar characteristics. Future studies would include younger or older adults, individuals with lower levels of education, and individuals living in more rural areas in order to increase the generalizability of the findings to be obtained.

There is another limitation regarding sampling. No random selection was included in the present study; instead, a snowball technique was utilized to recruit married participants

and participation in the study was on voluntary basis. More than half of the contacted individuals refused to participate in the study. Although participants were assured about confidentiality, it is possible that individuals having more liberal and more positive attitudes both about sexuality and about declaring confidential information constituted the sample of the present study. Such kind of a limitation may have resulted in the generation of a lack of homogeneity in the sample regarding attitudes and additionally, it may have helped to produce higher sexual satisfaction and marital adjustment scores in the sample. In the present study, sample size was adequate in order to reliably run statistical analyses and it compared favorably with other studies of sexuality. However, future studies would investigate marital sexuality in larger sample sizes to ensure generalizability to the broader population, and to obtain greater statistical power to reveal more detailed findings.

Regarding the sampling in the present study, the attempt to reveal the factorial structure of the Sexual Self-Schema Scale (Hill, 2007) in a Turkish sample remains limited in several ways. A sample of university students was included in the present study in order to obtain information about factorial structure of the sexual self-schema construct. This was done for a number of reasons. Previous studies in which the sexual self-schema scales were developed (Andersen et. al., 1994; 1999; Hill, 2007) were conducted with samples of university students; therefore, the present study used a similar sample in order to be consistent with those studies. In addition, sampling university students was more practical and easier than constituting a heterogeneous and large enough sample of married individuals. Psychometric quality of the Sexual Self-Schema Scale (Hill, 2007) was tested in the sample of university students. Limitations lay in this point; construct validity of the scale could be partially obtained due to practical reasons and time-related limitations. However, convergent validity is critically required to obtain in order to adapt this scale to Turkish culture. Therefore, future studies would try to fill this gap by obtaining convergent validity in different populations (e.g., clinical versus normal populations) and construct validity should be studied more extensively with larger sample sizes.

In line with the possible interference caused by the lack of heterogeneity of sexual attitudes, self-report measures used in the present study may have also produced a decrement in the reliability of measurements. In addition, this limited range of measurement methods may have been reflected in observed relationships in the present study; in other words, some of those relationships may have been observed due to shared

variance between variables. Therefore, other studies that aim to investigate sexuality would use additional measurement methods such as diaries, behavioral observations, spouse or observer ratings. Moreover, qualitative measurements may be utilized in order to obtain differential information regarding marital sexuality. Such kind of broadening in the range of measurement methods would help to increase our understanding of virtually all aspects of sexuality in the marital relationships.

A fourth limitation is caused by the cross-sectional nature of data in the present study. As mentioned in previous section, most of the literature on sexuality and on marital relationships are based on cross-sectional data; however, a little is known about whether sexual self-schemas and marital sexual life experience a change over time and about what kind of change they go through, if they do so. Therefore, future studies would focus on studying marital sexual life with longitudinal research designs and even cross-cultural designs would be helpful to produce informative findings regarding differences in the constitution of sexual self-schemas of individuals residing in different regions (e.g., countries) in the world.

A final limitation that requires mentioning concerns the unit of analysis. The present study investigated sexual self-schemas in married individuals and analyses were conducted accordingly. However, a marriage relationship includes both spouses and it would be important to include a couple together and to run dyadic analyses on the data collected from both spouses. This was beyond the scope of the present study and individuals were taken as the unit of analysis. It is important that researchers include both spouses while investigating sexual self-schemas in the context of marital relationships in the future.

5.3. Implications for Clinical Psychology

During the past decade, sexual self-schemas began to be recognized by mental health professionals as important factors that influence the sexuality experience as a whole. Starting with Andersen et. al.'s (1994; 1998; 1999) investigations on women's and men's sexual self views, a number of researchers demonstrated correlates of these cognitive generalizations on sexual life. Because these schemas are thought to have influences on individuals' sexual and romantic lives, it seems critical for clinical professionals working in the field to increase the knowledge and awareness related to the relative importance of the sexual self-schemas in sexual and romantic relationships.

In addition to aforementioned theoretical contributions to the literature, there are some implications of the present study for the field of clinical psychology. Most importantly, because there have been no previous studies on sexual self-schemas in Turkey, the present study would enable clinicians in Turkey to gain knowledge on those schemas and to broaden their knowledge on general sexuality. Moreover, through the findings obtained in the present study regarding the associations between sexually relevant and marital variables, clinicians may have better information about how specific sexual self-schema categories are associated with marital sexual life and may better understand the context of marriage in general.

Individuals with negative and weak sexual views of themselves may be more vulnerable to develop sexual difficulties and even dysfunctions because negative schematic and aschematic individuals were found in the present study to experience lower levels of sexual satisfaction and marital adjustment in their marriages than men and women with stronger and more positive sexual self views. This has been also stated by Andersen et. al. (1999); negative, weak, and conflicting sexual self-schemas were viewed as a potential vulnerability factor for dysfunctions. Therefore, it would be reasonable to provide psychological care for those individuals in order to treat any sexual difficulties, and even preventive approaches can be attempted. Researchers such as Andersen et. al. (1997) have proposed that health care providers would use the scale that attempts to assess sexual self-schemas and women with weak sexual self-concepts might be targeted for treatment. It would be important to provide psychotherapy for vulnerable (or may be affected) individuals with an emphasis on enhancing sexual communication skills between partners and increasing assertiveness regarding sexual needs and desires, dealing with negative emotions and avoidance experienced during sexually-relevant situations, and finally challenging faulty cognitions and negative sexual self views.

Apart from sexual difficulties, sexual self-schemas may also be associated with relationship difficulties between partners in marriages. In the present study, it has been shown that for both married men and married women, sexual satisfaction was associated with differences among categories of sexual self-schemas; in addition, it was positively associated with the level of marital adjustment. In addition, women's level of marital adjustment was found to be directly associated with differences among sexual self-schema categories. The link between sexual satisfaction and marital adjustment is also granted by

the work of researchers who found that a high percentage of couples seeking marital therapy had sexual problems (Hahlweg et. al., 1982; as cited in Spencer, 1997).

Hence, negative sexual self views held by married women with low levels of marital adjustment may directly result in difficulties and conflict in marital relationship; moreover, individuals may experience low levels of marital adjustment due to experiencing low levels of sexual satisfaction in their relationships. For mental health professionals working with married individuals, it would be important to consider the possible influence of sexual self views on the quality of marital relationship. Marital therapists may wish to consider including sexuality component in marital therapies, e.g. through sexual communication skills training, sexual exercise assignments, and referring a partner for individual psychotherapy when a negative influence of her/his sexual self view on couple's relationship is suspected. In the era of trend towards an integration of marital and sexual therapies (Spence, 1997), the recognition of the critical importance of sexual self-schemas would enable clinicians to better assist individuals seeking help for their sexual and/or marital difficulties.

REFERENCES

Aarestad, S. L. (2000). The role of attachment style and sexual self-schemas in romantic and sexual relationships: A study of dating couples. *Unpublished Doctoral Dissertation, Ohio State University.*

Abbott, D. A., & Brody, G. H. (1985). The relation of child age, gender, and number of children to the marital adjustment of wives. *Journal of Marriage and the Family, 47(1),* 77-84.

Abramson, P. R. (1973). The relationship of the frequency of masturbation to several aspects of personality and behavior. *Journal of Sex Research, 9,* 132-142.

Ackerman, M. D. (1995). Introduction to the special section on contemporary issues in human sexuality: Research and Practice. *Journal of Consulting and Clinical Psychology, 63(6),* 859-861.

Adabjian-Mozian, L. R. (2005). Sexual satisfaction and self-esteem of married women. *Unpublished Doctoral Dissertation, Wright Institute Gradual School of Psychology.*

Adams, C. G., & Turner, B. F. (1985). Reported change in sexuality from young adulthood to old age. *Journal of Sex Research, 21(2),* 126-141.

Addis, J., & Bernard, M. E. (2002). Marital adjustment and irrational beliefs. *Journal of Rational-Emotive & Cognitive-Behavior Therapy, 20(1),* 3-13.

American Association of Retired Persons. (1999). *AARP & Modern Maturity Sexuality Study.* Washington, DC: AARP.

American Association of Retired Persons. (2005). *Sexuality in Midlife and Beyond: 2004 Update of Attitudes and Behaviors.* Washington, DC: AARP.

Andersen, B. L. & Cyranowski, J. M. (1994). Women's sexual self-schema. *Journal of Personality and Social Psychology, 67(6),* 1079-1100.

Andersen, B. L. & Cyranowski, J. M. (1998). Schemas, sexuality, and romantic attachment. *Journal of Personality and Social Psychology, 74(5),* 1364-1379.

Andersen, B. L., Cyranowski, J. M., & Espindle, D. (1999). Men's sexual self-schema. *Journal of Personality and Social Psychology, 76(4),* 645-661.

Andersen, B. L., Woods, X. A., & Copeland, L. J. (1997). Sexual self-schema and sexual morbidity among gynecologic cancer survivors. *Journal of Consulting and Clinical Psychology, 65(2),* 221.

Arafat, I. S. & Cotton, W. L. (1974). Masturbation practices of males and females. *Journal of Sex Research, 10,* 293-307.

Aydınlı, E., & Tutarel Kışlak, Ş. (2009, March). *An investigation into relationship between marital adjustment and some variables like sex, number of children, educational background, income level, place of residence and early and late marriage determined by age of marriage.* Presented at the annual meeting of the National Congress of Family and Marriage Therapies, İstanbul, Turkey.

Barash, D. P., & Lipton, J. E. (2002). *Gender gap: The biology of male-female differences.* London: Transaction Publishers.

Barnett, L. R. & Nietzel, M. T. (1979). Relationship of instrumental and affectional behaviors and self-esteem to marital satisfaction in distressed and non-distressed couples. *Journal of Counsulting and Clinical Psychology, 47,* 946-957.

Barrientoz, J. E., & Paez, D. (2006). Psychosocial variables of sexual satisfaction in Chile. *Journal of Sex & Marital Therapy, 32,* 351-368.

Basat, Ç. (2004). An exploration of marital satisfaction, locus of control, and self-esteem as predictors of sexual satisfaction. *Unpublised Master's Thesis, Middle East Technical University, Ankara.*

Baumeister, R.F., & Leary, M.R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497-529.

Bélanger, C., Laughrea, K., & Lafontaine, M. (2001). The impact of anger on sexual satisfaction in marriage. *The Canadian Journal of Human Sexuality, 10(3-4),* 91-99.

Berg-Cross, L (2001). *Couples therapy.* Binghamton: The Haworth Press, Inc.

Berger, P., & Luckmann, T. (1967). *The Social Construction of Reality: A Treatise in the Sociology of Knowledge.* New York: Anchor.

Betchen, S. J. (1991). Male masturbation as a vehicle for the pursuer/distancer relationship in marriage. *Journal of Sex and Marital Therapy, 17,* 296-278.

Bir Aktürk, E. (2006). Marital satisfaction in Turkish remarried families: comparison among marital status, effect of stepchildren and contributing factors. *Unpublished Master's Thesis, Middle East Technical University, Ankara.*

Bird, G., & Melville, K. (1994). *Families and Intimate Relationships.* New York: McGraw-Hill Inc.

Birnbaum, G. E. (2007). Attachment orientations, sexual functioning, and relationship satisfaction in a community sample of women. *Journal of Social and Personal Relationships, 24(1),* 21-35.

Bradbury, T. N., Fincham, F. D., & Beach, S. R. H. (2000). Research on the nature and determinants of marital satisfaction: A decade in review. *Journal of Marriage and the Family, 62,* 964-980.

Brezsnyak, M. (2001). Sexual desire and relationship functioning: The effects of marital satisfaction and power. *Unpublished Doctoral Dissertation, University of Colorado.*

Bridges, S. P. K. (1999). Predicting and describing sexual satisfaction in women: Physical affection in family of origin, sexual initiation and communication, and masturbatory practices. *Unpublished Doctoral Dissertation, University of Memphis.*

Bridges, S. K., Lease, S. H., & Ellison, C. R. (2004). Predicting sexual satisfaction of women. *Journal of Counseling & Development, 82,* 158-166.

Bruch, M. A., Kaflowitz, N. G., & Berger, P. (1988). Self-schema for assertiveness: Extending the validity of the self-schema construct. *Journal of Research in Personality, 22*(4), 424-444.

Butzer, B., & Campbell, L. (2008). Adult attachment, sexual satisfaction, and relationship satisfaction: A study of married couples. *Personal Relationships, 15,* 141-154.

Byers, E. S., & Macneil, S. (2006). Further validation of the Interpersonal Exhange Model of Sexual Satisfaction. *Journal of Sex & Marital Therapy, 32,* 53-69.

Call, V., Sprecher, S., & Schwartz, P. (1995). The incidence and frequency of marital sex in a national sample. *Journal of Marriage and the Family, 57(3),* 639-652.

Canary, D. J. & Stafford, L. (1994). Maintaining relationships through strategic and routine interaction. In D. J. Canary & L. Stafford (Eds.), *Communication and Relational Maintenance* (pp. 3-22). San Diego: Academic Press.

Carpenter, L. M., Nathanson, C. A., & Kim, Y. J. (2007). Physical women, emotional men: Gender and sexual satisfaction in midlife. *Archives of Sexual Behavior, DOI: 10. 1007/s10508-007-9215-y.*

Carter, R. E., & Carter, C. A. (1994). Marital adjustment and effects of illness in married pairs with one or both spouses chronically ill. *The American Journal of Family Therapy, 22(4),* 315-326.

Cinsel Eğitim Tedavi ve Araştırma Derneği. (2006). *Cinsel Sağlık ve Üreme Sağlığı Araştırması: Cinsel Yaşam ve Sorunları.* CETAD Yayınları, İstanbul.

Chen, Z., Tanaka, N., Uji, M., Hiramura, H., Shikai, N., Fujihara, S., & Kitamura, T. (2007). The role of personalities in the marital adjustment of Japanese couples. *Social Behavior and Personality, 35(4),* 561-572.

Christopher, F. S., & Kisler, T. S. (2004). Exploring marital sexuality. In J. Harvey, A. Wenzel, & S. Sprecher (eds.). *Handbook of sexuality in close relationships.* Mahwah, NJ: Erlbaum.

Christopher, F. S., & Sprecher, S. (2000). Sexuality in marriage, dating, and other relationships: A decade review. *Journal of Marriage and the Family, 62,* 999-1017.

Clement, U. (1990). Surveys of heterosexual behavior. *Annual Review of Sex Research, 1,* 45-74.

Colebrook Seymour, III, J. (1998). Sexual satisfaction in marriage during the childbearing years. *Unpublished Master's Thesis, University of California.*

Cronbach, L. J. & Meehl, P. E. (1955). Construct validity in psychological tests. *Psychological Bulletin, 52,* 281-302.

Crooks, R. & Baur, K. (2005). *Our Sexuality.* (9th ed.). Belmont, CA: Thomson/Wadsworth Learning.

Crowe, M. (1995). Couple therapy and sexual dysfunction. *International Review of Psychiatry, 7,* 195-205.

Curran, M. C. (1999). Sexual self-schema and sexual functioning in women diagnosed with breast cancer. *Unpublished Master's Thesis, York University, Toronto.*

Cyranowski, J., & Andersen, B. (2000). Evidence of self-schematic cognitive processing in women with differing sexual self-views. *Journal of Social and Clinical Psychology, 19(4),* 519-543.

Çelik, M. (1997). Marital satisfaction, parental agreement on child rearing and parental perception of child's adjustment. *Unpublished Master's Thesis, Middle East Technical University, Ankara.*

Çetin, S. (1995). Farklı yaş gruplarındaki erkeklerde andropoza ilişkin belirtilerin, cinsel doyumun ve yaşama bakış açısının incelenmesi. *Unpublished Master's Thesis, Hacettepe University, Ankara.*

Çuhadaroğlu, F. (1986). Adolesanlarda benlik saygısı (Self-esteem in adolescents). *Unpublished Doctoral Dissertation, Hacettepe University, Ankara.*

Çuhadaroğlu, F. (1985). Gençlerde benlik saygısı ile ilgili bir araştırma. XXI. Ulusal Psikiyatri ve Nörolojik Bilimler Kongresi. Adana: Çukurova Üniversitesi Tıp Fakültesi Yayınları.

Darling, C. A. & Davidson, J. K. (1987). Guilt: A factor in sexual satisfaction. *Sociological Inquiry, 57(3),* 251-271.

Das, A. (2007). Masturbation in the United States. *Journal of Sex & Marital Therapy, 33(4),* 301-317.

Davidov, B. J. (2006). Exploring the role of sexual self-schemas in the sexual adjustment of spinal cord injured women. *Unpublished Doctoral Dissertation, University of Miami.*

Davies, J., Zhu, H., & Brantley, B. (2007). Sex appeals that appeal: Negative sexual self-schema as a moderator of the priming effects of sexual ads on accessibility. *Journal of Current Issues and Research in Advertising, 29(2),* 79-89.

Davis, S. A. (1986). Personality and psychophysiological factors in marital adjustment and sexual satisfaction. *Unpublished Doctoral Dissertation, University of Wisconsin.*

Davison, S. L., Bell, D. J., LaChina, M., Holden, S. L., & Davis, S. R. (2008). Sexual function in well women: Stratification by sexual satisfaction, hormone use, and menopause status. *The Journal of Sexual Medicine, 5(5),* 1214-1222.

Dehle, C., & Weiss. R. L. (2002) Associations between anxiety and marital adjustment. *The Journal of Psychology, 136(3),* 328-338.

Dökmen, Z. Y., & Tokgöz, Ö. (2002). *Cinsiyet, eğitim, cinsiyet rolü ile evlilik doyumu, eşle algılanan benzerlik arasındaki ilişkiler.* XII. Ulusal Psikoloji Kongresi. Ankara: Türk Psikologlar Derneği Yayınları.

Drosdzol, A., Skrzypulec, V., Mazur, B., & Pawliñska-Chmara, R. (2007). Quality of life and marital sexual satisfaction in women with polycystic ovary syndrome. *Folia Histochemica et Cytobiologica, 45(1),* 93-97.

Durex. (2005). *Global Sex Survey.* Retrieved in Octorber 16, 2005 from http://www.durex.com/gss.

Edwards, J. N., & Booth, A. (1976). Sexual behavior in and out of marriage: An assessment of correlates. *Journal of Marriage and the Family, 38,* 73-81.

Edwards, J. N., & Booth, A. (1994). Sexuality, marriage, and well-being: The middle years. In Rossi, A. S. (Ed.). *Sexuality across the life course* (pp. 233-259). Chicago: The University of Chicago Press.

Elliott, S. A., & Watson, J. P. (1985). Sex during pregnancy and the first postnatal year. *Journal of Psychosomatic Research, 29,* 541-548.

Farley, F. H., & Davis, S. A. (1980). Personality and sexual satisfaction in marriage. Journal of Sex & Marital Therapy, 6(1), 56-62.

Ferenidou, F., Kapoteli, V., Mosidis, K., Koutsogiannis, I., Giakoumelos, A., & Hatzichristou, D. (2008). Presence of a sexual problem may not affect women's satisfaction from their sexual function. *The Journal of Sexual Medicine, 5(3),* 631-639.

Fışıloğlu, H. & Demir, A. (1999). Loneliness and marital adjustment of Turkish couples. *The Journal of Psychology, 133(2),* 230-240.

Fışıloğlu, H. & Demir, A. (2000). Applicability of the Dyadic Adjustment Scale for measurement of marital quality with Turkish couples. *European Journal of Psychological Assessment, 16(3),* 214-218.

Fışıloğlu, H., & Lorenzetti, A. F. (1994). The relation of family cohesion to marital adjustment. *Contemporary Family Therapy, 16(6),* 539-552.

Fidanoğlu, O. (2009, March). *The relationship among marital adjustment, humor style, and anxiety.* Presented at the annual meeting of the National Congress of Family and Marriage Therapies, İstanbul, Turkey.

Fidanoğlu, O. (2009, March). *The relationship of marital adjustment with somatization level and comparison of the study variables with other socio-demographic factors.* Presented at the annual meeting of the National Congress of Family and Marriage Therapies, İstanbul, Turkey.

Fielder, K. V. (2001). Stress, marital quality, and menopausal symptomatology in midlife women. *Unpublished Doctoral Dissertation, Arizona State University.*

Firestone, R. W., & Catlett, J. (1999). *Fear of Intimacy.* Washington, DC: American Psychological Association.

Fisher, T. D., & McNulty, J. K. (2008). Neuroticism and marital satisfaction: The mediating role played by the sexual relationship. *Journal of Family Psychology, 22(1),* 112-122.

Fleming, J. S., & Courtney, B. E. (1984). Dimensionality of self-esteem: II. Hierachical facet model for revised measurement scales. *Journal of Personality and Social Psychology, 46,* 404-421.

Francis, L. J., Brown, L. B., & Philipchalk, R. (1992). The development of an abbreviated form of the Revised Eysenck Personality Questionnaire (EPQR-A): Its use among students in England, Canada, the USA and Australia. *Personality and Individual Differences, 13, 443-449.*

Frank, E., Anderson, C., & Rubinstein, D. (1979). Marital role strain and sexual satisfaction. *Journal of Consulting and Clinical Psychology, 47(6),* 1096-1103.

Frank, D. I., Downard, E., & Lang, A. R. (1986). Androgyny, sexual satisfaction, and women. *Journal of Psychological Nursing, 24,* 10-15.

Garcia, L. T., & Carrigan, D. (1998). Individual and gender differences in sexual self-perceptions. *Journal of Psychology and Human Sexuality, 10(2),* 59-70.

Garcia, L. T. & Markey, C. (2007). Matching in sexual experience for married, cohabitating, and dating couples. *Journal of Sex Research, 44(3),* 250-255.

Gates, E. A. (2000). Sexual behaviors and sexual self-schema in women with vulvar vestibulitis. *Unpublished Doctoral Dissertation, University of Iowa, United States.*

Gattis, K. S., Berns, S., Simpson, L. E., & Christensen, A. (2004). Birds of a feather or strange birds? Ties among personality dimensions, similarity, and marital quality. *Journal of Family Psychology, 18,* 564-574.

Gaynor, P. A., & Underwood, J. K. (1995). Conceptualizing and measuring sexual self-esteem. In P. E. Shrout & S. T. Fiske (eds.). *Personality Research, Methods, and Theory: A Festschrift Honoring Donald W. Fiske* (pp. 333-347). Hillsdale, NJ: Erlbaum.

Geressu, M., Mercer, C. H., Graham, C. A., Wellings, K., & Johnson, A. M. (2008). Prevalence of masturbation and associated factors in a British national probability survey. *Archives of Sexual Behavior, 37,* 266-278.

Gossman, I., Julien, D., Mathieu, M., & Chartrand, E. (2003). Determinants of sex initiation frequencies and sexual satisfaction in long-term couples' relationships. *The Canadian Journal of Human Sexuality, 12(3-4),* 169-181.

Gottman, J. M. (1993). A theory of marital dissolution and stability. *Journal of Family Psychology, 7(1),* 57-75.

Gökmen, A. (2001). Evli eşlerin birbirlerine yönelik kontrolcülük ve bağımlılık algılarının evlilik doyumu üzerindeki etkisi. *Unpublished Master's Thesis, Hacettepe University, Ankara.*

Gralla, O., Knoll, N., Fenske, S., Spivak, N., Hoffmann, M., Rönnebeck, C., Lenk, S., Hoschke, B., & May, M. (2008). Worry, desire, and sexual satisfaction and their association with severity of ED and age. (in press). *Journal of Sexual Medicine.*

Greenblat, C. S. (1983). The salience of sexuality in the early years of marriage. *Journal of Marriage and the Family, 45,* 289-299.

Greenberg, J. S., Bruess, C. E., & Haffner, D. W. (2004). *Exploring the dimensions of human sexuality* (2nd ed). Sudbury, Massachusetts: Jones and Bartlett.

Guo, B. & Huang, J. (2005). Marital and sexual satisfaction in Chinese families: Exploring the moderating effects. *Journal of Sex & Marital Therapy, 31,* 21-29.

Halford, W. K., Kelly, A. & Markman, H. J. (1997). Concept of a healthy marriage. In W. K. Halford & H. J. Markman (eds.). *Clinical Handbook of Marriage and Ccouples Interventions* (pp. 3-12). New York: John Wiley & Sons.

Haning, R. V., O'Keefe, S. L., Randall, E. J., Kommor, M. J., Baker, E., & Wilson, R. (2007). Intimacy, orgasm likelihood, and conflict predict sexual satisfaction in heterosexual male and female respondents. *Journal of Sex & Marital Therapy, 33,* 93-113.

Hayden, R. L. (1999). Women's orgasm inconsistency in heterosexual marriage. *Unpublished Doctoral Dissertation, Indiana University.*

Hawton, K. (1985). Sex therapy: A practical guide. New York: Oxford University Press.

Heene, E., Buysse A., & Van Oost, P. (2007). An interpersonal perspective on depression: The role of marital adjustment, conflict communication, attributions, and attachment within a clinical sample. *Family Process, 46(4),* 499-514.

Henderson-King, D. H., & Veroff, J. (1994). Sexual Satisfaction and Marital Well-Being in the First Years of Marriage. *Journal of Social and Personal Relationships, 11(4),* 509-534.

Hill, D. B. (2007). Differences and similarities in men's and women's sexual self-schemas. *Journal of Sex Research, 44(2),* 135-144.

Hock, R. R. (2007). *Human Sexuality.* New Jersey: Pearson Education.

Hofstede, G. (1984). The cultural relativity of the quality of life concept. *Academy of Management Review, 9,* 389–398.

Hudson, W. W. (1982). *The Clinical Measurement Package: A Field Manual.* Homewood, Illinois: Dorsey Press.

Hunt, M. (1974). *Sexual Behavior in the Late 1970s.* Chicago: Playboy Press.

Jackson, S. (2007). The sexual self in late modernity. In M. S. Kimmel (Ed.), *The Sexual Self: The Construction of Sexual Scripts* (pp. 3-15). Nashville: Vanderbilt University Press.

Jones, J. C. & Barlow, D. H. (1990). Self-reported frequency of sexual urges, fantasies, and masturbatory fantasies in heterosexual males and females. *Archives of Sexual Behavior, 19,* 269-279.

Jose, O., & Alfons, V. (2007). Do demographics affect marital satisfaction? *Journal of Sex & Marital Therapy, 33,* 73-85.

Joung, I. M. A., Stronks, K., Mheen, V. D., Poppel, F. W. A., Meer, J. B. W., & Mackenbach, J. P. (1997). The contribution of intermediary factors to marital status differences in self-reported health. *Journal of Marriage and the Family, 59,* 467-490.

Kabakçı, E. & Batur, S. (2002). *Vaginismus tanısı ile izlenen bir grup hastanın bilişsel-davranışçı yönelimli tedavisi ve sonuçları.* XII. Ulusal Psikoloji Kongresi. Ankara: Türk Psikologlar Derneği Yayınları.

Kabakçı, E. & Daş, C. T. (2002). *Vaginismus: Kadınlar ve eşlerinin özellikleri.* XII. Ulusal Psikoloji Kongresi. Ankara: Türk Psikologlar Derneği Yayınları.

Kaptein, A. D., van Klink, R. C. J., de Kok, F., Scharloo, M., Snoei, L., Broadbent, E., Bel, E. H. D., & Rabe, K. F. (2008). Sexuality in patients with asthma and COPD. *Respiratory Medicine, 102,* 198-204.

Karakitapoğlu-Aygün, Z. (2004). Self, identity, and emotional well-being among Turkish university students. *The Journal of Psychology, 138(5),* 457-478.

Karancı, N., Dirik, G., & Yorulmaz, O. (2007). Eysenck Kişilik Anketi-Gözden Geçirilmiş Kısaltılmış Formu'nun (EKA-GGK) Türkiye'de geçerlik ve güvenilirlik çalışması. *Türk Psikiyatri Dergisi, 18(3), 254-261.*

Karney, B. R. & Bradbury, T. N. (1995). The longitidunal course of marital quality and stability: A review of theory, method, and research. *Psychological Bulletin, 118(1),* 3-34.

Kayır, A., Yüksel, Ş., & Tükel, R.M. (1987). Vaginismus nedenlerinin tartışılması. *Psikoloji Dergisi, 6(21),* 107-111.

Kerlinger, F. (1986). *Foundation of Behavioral Research.* (3rd ed.). New York: Holt, Rinehart & Winston.

Kholifah, D. R. (2005). Contesting discourses on sexuality and sexual subjectivities among single young women in Pesantren (Muslin boarding school) in West Java, Indonesia. *Unpublished Master's Thesis, Mahidol University, Thailand.*

Kimlicka, T., Cross, H., & Tarnai, J. (1983). A comparison of androgynous, feminine, masculine, and undifferentiated women on self-esteem, body satisfaction, and sexual satisfaction. *Psychology of Women Quarterly, 7(3),* 291-294.

Kinsey, A. C., Pomeroy, W. B., & Martin, C. E. (1948). *Sexual behavior in the human male.* Philadelphia: Saunders.

Kinsey, A. C., Pomeroy, W. B., Martin, C. E., & Gebhard, P. (1953). *Sexual behavior in the human female.* Philadelphia: W. B. Saunders.

Kirkpatrick, C. (1980). Sex roles and sexual satisfaction in women. *Psychology of Women Quarterly, 4,* 444-459.

Kurdek, L. A. (1991). Sexuality in homosexual and heterosexual couples. In K. McKinney & S. Sprecher (Eds.), *Sexuality in Close Relationships* (pp. 177-191). Hillsdale, NJ: Lawrence Erlbaum.

Kurdek, L. A. (1993). Predicting marital dissolution: A 5-year prospective longitudinal study of newlywed couples. *Journal of Personality and Social Psychology, 64*, 221-242.

Kumar, R. (1996). *Research Methodology: A Step-By-Step Guide for Beginners*. Malaysia: Sage Productions.

Lamanna, M. A., & Riedmann, A. (2006). *Marriages & Families: Making Choices in a Diverse Society*. (9th ed.). Thomson Wadsworth: Belmont, CA.

Lantz, H. R. & Snyder, E. C. (1969). *Marriage: An examination of the man-woman relationship.* England: John Wiley & Sons.

Larson, J. H., Anderson, S. M., Holman, T. B., & Niemann, B. K. (1998). A longitudinal study of the effects of premarital communication, relationship stability, and self-esteem on sexual satisfaction in the first year of marriage. *Journal of Sex & Marital Therapy, 24(3),* 193-206.

Laumann, E. O., Gagnon, J. H., Michael, R. T., & Michaels, S. (1994). *The social organization of sexuality: Sexual practices in the United States.* Chicago: The University of Chicago Press.

Laumann, E. O., Paik, A., & Rosen, R. C. (1999). Sexual dysfunction in the United States: Prevalence and predictors. *Journal of the American Medical Association, 281,* 537–544.

Lawrence, E., Pederson, A., Bunde, M., Barry, R. A., Brock, R. L., Fazio, E., Mulryan, L., Hunt, S., Madsen, L., & Dzankovic, S. (2008). Objective ratings of relationship skills across multiple domains as predictors of marital satisfaction trajectories. *Journal of Social and Personal Relationships, 25(3),* 445-466.

Lee, S. C. (1999). Marital satisfaction factors for Korean-Americans. *Unpublished Doctoral Dissertation, Andrews University.*

Leitenberg, H., Detzer, M. J., & Srebnik, D. (1993). Gender differences in masturbation and the relation of masturbation experience in preadolescence and/or early adolescence to sexual behavior and sexual adjustment in young adulthood. *Archives of Sexual Behavior, 22,* 87-98.

Leonard, M., Heller, J., & Cano, A. (2008). Marital satisfaction and depression: Preliminary results of the role of empathic accuracy. *American Pain Society Conference, 27th Annual Scientific Meeting*.

Levin, R. J. (2007). Sexual activity, health, and well-being – the beneficial roles of coitus and masturbation. *Sexual and Relationship Therapy, 22(1),* 135-148.

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Lindahl, K. M., Malik, N. M., & Bradbury, T. N. (1997). The developmental course of couples' relationships. In W. K. Halford & H. J. Markman (Eds.). *Clinical Handbook of Marriage and Couples Intervention* (pp. 203-223). New York: John Wiley & Sons.

Litzinger, S., & Gordon, K. C. (2005). Exploring relationships among communication, sexual satisfaction, and marital satisfaction. *Journal of Sex & Marital Therapy, 31,* 409-424.

Liu, C. (2003) Does Quality of Marital Sex Decline with Duration? *Archives of Sexual Behavior*, 32, 55-60.

Locke, H. J., & Snowbarger, V. A. (1954). Marital adjustment and prediction in Sweden. *The American Journal of Sociology, 60(1),* 51-53.

Marchese, S. (1992). The relationship between gender roles and sexual satisfaction in heterosexual relationships. *Unpublished Master's Thesis, McGill University.*

Markus, H. (1977). Self-schemata and processing information about the self. *Journal of Personality and Social Psychology, 42,* 63-78.

Masters, W. H., Johnsons, V. E., & Kolodny, R. C. (1995). *Human Sexuality. (5th ed).* London: Harper Collins.

McCoy, N. L., & Davidson, J. M. (1985). A longitudinal study of the effects of menopause on sexuality. *Maturitas, 7,* 203-210.

McLeod, J. D. (1994). Anxiety Disorders and Marital Quality. *Journal of Abnormal Psychology, 103, 767-776.*

McNulty, J. K., & Fisher, T. D. (2008). Gender differences in response to sexual expectancies and changes in sexual frequency: A short-term longitudinal study of sexual satisfaction in newly married couples. *Archives of Sexual Behavior, 37,* 229-240**.**

Meadow, R. M. (1982). Factors contributing to the sexual satisfaction of married women: A multiple regression analysis. *Unpublished Doctoral Dissertation, Arizona State University.*

Means, M. C. (2000). An integrative approach to what women really want: Sexual satisfaction. *Unpublished Doctoral Dissertation, University of Detroit Mercy.*

Meston, C. M., Hellini, A. H., & Heiman, J. R. (2006). Women's history of sexual abuse, their sexuality, and sexual self-schemas. *Journal of Consulting and Clinical Psychology, 74(2),* 229-236.

Möller, A. T., & van der Merwe, J. D. (1997). Irrational beliefs, interpersonal perception and marital adjustment. *Journal of Rational-Emotive & Cognitive-Behavior Therapy, 15(4),* 269-279.

Mulhall, J., King, R., Glina, S., & Hvidsten, K. (2008). Importance of and satisfaction with sex among men and women worldwide: Results of the Global Beter Sex Survey. *Journal of Sexual Medicine, 5(4),* 788-795.

Murstein, B. I. (1974). *Love, sex, and marriage through the ages.* New York: Springer Pub. Co.

National Center for Health Statistics. (2007). *National vital statistics report, 56(21).* U.S. Department of Health and Human Services. Retrieved in July 18, 2008 from http://www.cdc.gov/nchs/data/nvsr/nvsr56/nvsr56_21.htm.

Newcomb, M. D., & Bentler, P. M. (1983). Dimension of subjective female orgasmic responsiveness. *Journal of Personal and Social Psychology, 44(4),* 862-873.

Obstfeld, L. S., Lupfer, M. B., & Lupfer, S. L. (1985). Exploring the relationship between gender identity and sexual functioning. *Journal of Sex & Marital Therapy, 11(4),* 248-258.

Offman; A., & Matheson, K. (2005). Sexual compatibility and sexual functioning in intimate relationships. The Canadian Journal of Human Sexuality, 14 (1-2), 31-39.

Oliver, M. B., & Hyde, J. S. (1993). Gender differences in sexuality: A meta-analysis. *Psychological Bulletin, 114*, 29–51.

Ozan, S., Aras, S., Semin, S., & Orcin, E. (2005). Sexual attitudes and behaviors among medical students in Dokuz Eylül University, Turkey. *The European Journal of Contraception and Reproductive Health Care, 10,* 171-183.

Öksüz, E. & Malhan, S. (2005). The prevalence of male sexual dysfunction and potential risk factors in Turkish men: a Web-based survey. *International Journal of Impotence Research. 7,* 539–545.

Pepe, M. V., & Bryne, T. J. (1991). Women's perceptions of immediate and long-term effects of failed infertility treatment on marital and sexual satisfaction. *Family Relations, 40,* 303-309.

Peyrot, M., McMurry, Jr., J. F., & Hedges, R. (1988). Marital adjustment to adult diabetes: Interpersonal congruence and spouse satisfaction. *Journal of Marriage and the Family, 50(2),* 363-376.

Pinkerton, S. D., Bogart, L. M., Cecil, H., & Abramson, P. R. (2002). Factors associated with masturbation in a collegiate sample. *Journal of Psychology and Human Sexuality*, 14(2/3), 103-121.

Pornchaikate, A. (2003). Sexual self-schema and sexual behaviors among young adult Thai women. *Unpublished Doctoral Dissertation. University of Wisconsin, Madison.*

Reath, R. A., Piercy, F., Hovestadt, A., & Oliver, M. (1980). Assertion and marital adjustment. *Family Relations, 29(2),* 249-253.

Reichert, T., & Fosu, I. (2005). Women's responses to sex in advertising: Examining the effect of women's sexual self-schemas on responses to sexual content in commercials. *Journal of Promotion Management, 11(2/3),* 142-153.

Reissing, E. D., Binik, Y. M., Khalife, S., Cohen, D., & Amsel, R. (2003). Etiological correlates of vaginismus: Sexual and physical abuse, sexual knowledge sexual self-schema and relationship adjustment. *Journal of Sex & Marital Therapy*, *29(1),* 47-59.

Renaud, C., Byers, E. S., & Pan, I. (1997). Sexual and relationship satisfaction in mainland China. *Journal of Sex Research, 34(4),* 399-410.

Rogge, R.D., Bradbury, T. N., Hahlweg, K., Engl, J., & Thurmaier, F. (2006). Predicting marital distress and dissolution: refining the two factor hypothesis. *Journal of Family Psychology, 20,* 156-159.

Rosenthal, C.M. (1998). Women's experience of their sexuality: In theory and practice. *Unpublished Doctoral Dissertation, Massachusetts School of Proffesional Psychology.*

Rosenzweig, J. M. & Dailey, J. M. (1989). Dyadic adjustment/sexual satisfaction in women and men as a function of psychological sex role self-perception. *Journal of Sex & Marital Therapy, 15,* 42-56.

Rowland, D. L., Cooper, S. E., & Slob, A. K. (1996). Genital and psychoaffective response to erotic stimulation in sexually functional and dysfunctional men. *Journal of Abnormal Psychology, 105,* 194-203.

Rust, J. & Golombok, S. (1986). The GRISS: A psychometric instrument for the assessment of sexual dysfunction. *Archives of Sexual Behavior, 15(2),* 157-165.

Rusticus, S. A., Hubley, A. M., & Zumbo, B. D. (2004, July). *Cross-national comparability of the Rosenberg Self-Esteem Scale.* Poster presented at the 112th Convention of the American Psychological Association, Hawaii, the United States.

Samelson, D. A., & Hannon, R. (1999). Sexual desire in couples living with chronic medical conditions. *Family Journal, 7(1),* 29-39.

Sanchez, J. M. (2004). The relationship between sex role orientation, socialization and to desire financial independence and sexual self-schema for women. *Unpublished Doctoral Dissertation, Alliant International University, Los Angeles, California.*

Savaşır, I. (1994). Ölçek uyarlamasındaki sorunlar ve çözüm yolları. *Türk Psikoloji Dergisi, 9(33),* 27-32.

Schneidewind-Skibbe, A., Hayes, R. D., Koochaki, P. E., Meyer, J., & Dennerstein, L. (2008). The Frequency of Sexual Intercourse Reported by Women: A Review of Community-Based Studies and Factors Limiting Their Conclusions. *The Journal of Sexual Medicine, 5(2),* 301-335.

Seidman, S., Fischer, N., & Meeks, C. (2006). *Handbook of the new sexuality studies.* New York: Routledge.

Sexual activity. (2009, March 25). In *Wikipedia, the free encyclopedia.* Retrieved March 25, 2009, from http://en.wikipedia.org/wiki/Sexual_activity.

Shek, D. T. L. (1995). Marital quality and psychological well-being of married adults in a Chinese context. *Journal of Genetic Psychology, 156,* 45-57.

Shope, D. F. (1975). *Interpersonal sexuality.* Philadelphia: Saunders.

Shulman, J. L., & Horne, S. G. (2003). The use of self-pleasure: Masturbation and body image among African American and European American women. *Psychology of Women Quarterly, 27,* 262-269.

Sigusch, V. & Schmidt, G. (1973). Teenage boys and girls in the West Germany. *Journal of Sex Research, 9(2),* 107-123.

Silberbogen, A. K. (2002). Gender role adoption and women's sexual satisfaction. *Unpublished Doctoral Dissertation, University of Missouri, St. Louis.*

Soyer, A. (2006). An exploration of masculinity, femininity, sexual fantasy and masturbation as predictors of marital satisfaction. *Unpublished Master's Thesis, Middle East Technical University, Ankara.*

Spanier, G. B. (1976). Measuring dyadic adjustment: A new scale for assessing the quality of marriage and similar dyads. *Journal of Marriage and the Family, 38,* 15-28.

Spanier, G. B., Lewis, R. A., & Cole, C. L. (1975). Marital adjustment over the family life cycle: The issue of curvilinearity. *Journal of Marriage and the Family, 37(2),* 263-275.

Spence, S. H. (1997). Sex and relationships. In W. K. Halford & H. J. Markman (eds.). *Clinical Handbook of Marriage and Couples Interventions* (pp. 73-101). New York: John Wiley & Sons.

Spencer, S. L. & Zeiss, A. M. (1987). Sex roles and sexual dysfunction in college students. *Journal of Sex Research, 28,* 338-347.

Sprecher, S., & McKinney, K. (1993). *Sexuality.* Newbury Park, California: Sage Publications, Inc.

Stewart, C. A. (2004). Predictors of sexual satisfaction in Canadian heterosexual adults: An interdisciplinary approach. *Unpublished Master's Thesis, University of Guelph.*

Stone, K. C. (2007). Sexual messages, self-schema, and contentment: An influential threesome for women's sexuality? *Unpublished Doctoral Dissertation, The University of Memphis.*

Sunar, D., & Fişek, G. (2005). Contemporary Turkish families. In J. L. Roopnarine & U. P. Gielen (Eds.), *Families in Global Perspective* (pp. 169–183). Boston: Pearson.

Tabachnick, B.G., & Fidell, L.S. (2000). *Using Multivariate Statistics.* (7th ed.) Boston: Allyn and Bacon.

Taylor, L. D. (2006). College men, their magazines, and sex. *Sex Roles, 55,* 693-702.

Tiefer, L. (1994). Three crises facing sexology. *Archives of Sexual Behavior, 23(4),* 361-374.

Tiefer, L. (1995). *Sex is not a natural act and other essays.* Boulder, CO: Westview Press.

Timm, T. M. (1999). The effects of differentiation of self, adult attachment, and sexual communication on sexual and marital satisfaction: A path analysis. *Unpublished Doctoral Dissertation, Purdue University.*

Trussell, J., & Westoff, C. F. (1980). Contraceptive practice and trends in coital frequency. Family Planning Perspectives, 12, 246-249.

Tuğrul, C., Öztan, N., & Kabakçı, E. (1993). Golombok-Rust Cinsel Doyum Ölçeği'nin standardizasyon çalışması. *Türk Psikiyatri Dergisi, 4,* 83-88.

Tuncay, E. (2006). Predictive role of perfectionism on marital adjustment. *Unpublished Master's Thesis, Middle East Technical University, Ankara.*

Turkish Statistical Institute. (2007). *Marriage and divorce statistics for the year of 2007.* Prime Ministry, Republic of Turkey. Retrieved in July 17, 2008 from http://www.turkstat.gov.tr/PreHaberBultenleri.do?id=1994.

Uçman, P. (1982). Cinsel sorunların tedavisinde yeni yaklaşımlar. *Psikoloji Dergisi, 14-15,* 3-7.

Udry, J. R. (1980). Changes in the frequency of marital intercourse from panel data. *Archives of Sexual Behavior, 9,* 319-325.

Ulu, S. (2009, March). *The relationship between perceived parental attitudes and marital adjustment on adulthood.* Presented at the annual meeting of the National Congress of Family and Marriage Therapies, İstanbul, Turkey.

Volsky Rushton, J. A. (2002). Exploring the construct of female sexual self-schema. *Unpublished Doctoral Dissertation, Concordia University.*

Young, M., Denny, G., Luquis, R., & Young, T. (1998). Correlates of sexual satisfaction in marriage. *The Canadian Journal of Human Sexuality, 7(2),* 115-127.

Yurek, D. L. (1997). Surgical treatment of breast cancer: Sexual self schema, stress reactions, and sexuality outcomes. *Unpublished Doctoral Dissertation, Ohio State University.*

Walters, A. S., & Williamson, G. M. (1998). Sexual satisfaction predicts quality of life: A study of adult amputees. *Sexuality & Disability, 16(2),* 103-115.

Westoff, C. F. (1994). Coital frequency and contraception. *Family Planning Perspectives, 6,* 136-141.

Wiederman, M. W., & Hurst, S. R. (1997). Physical attractiveness, body image, and women's sexual self-schema. *Psychology of Women Quarterly, 21*, pp. 567–580.

Whipple, B. & McGeer, K. B. (1997). Management of female sexual dysfunction. In M. L. Sipski & C. J. Alexander (Eds.). *Sexual Function in People with Disability and Chronic Illness: A Health Professional's Guide* (pp. 511-525). Gaithersburg, MD: Aspen Publishers, Inc.

Whitley, M. P., & Poulsen, S. B. (1975). Assertiveness and sexual satisfaction in employed professional women. *Journal of Marriage and the Family, 37(3),* 573-581.

Whisman, M. A. (1999). Marital Dissatisfaction and Psychiatric Disorders: Results from the National Comorbidity Survey. *Journal of AbnormalPsychology, 108, 701-706.*

Winceze, J. P., & Carey, M. P. (2001). *Sexual dysfunction: A guide for assessment and treatment (2nd ed.).* New York: Guilford.

Witting, K., Santtila, P., Alanko, K., Harlar, N., Jern., P., Johansson, A., Von Der Pahlen, B., Varjonen, M., Algars, M., & Sandnabba, N. K. (2008). Female sexual function and its associations with number of children, pregnancy, and relationship satisfaction. *Journal of Sex & Marital Therapy, 34,* 89-106.

Wolsky, J. A. (1998). Intimacy, marital satisfaction, and sexuality in mature couples. *Unpublished Master's Thesis, Concordia University.*

Wood, W., Rhodes, N., & Whelan, M. (1989). Sex differences in positive well-being: A consideration of emotional style and marital status. *Psychological Bulletin, 106(2),* 249-264.

APPENDICES

APPENDIX A

The Original and Translated Items of the Sexual Self Schema Scale

Romantic	Romantik
Soft-hearted	Yumuşak kalpli
Passionate	Tutkulu
Powerful	Güçlü
Warm	Sıcak
Outspoken	Açık sözlü
Loving	Sevgi dolu
Spontaneous	Doğal
Timid	Çekingen
Independent	Özgür
Feeling	Duygusal
Sympathetic	Sempatik
Domineering	Baskın
Arousable	Uyarılabilir
Stimulating	Tahrik edici olan
Revealing	Açık
Aggressive	Saldırgan
Direct	Dolaysız
Warm-hearted	Sıcakkanlı
Frank	Dürüst
Exciting	Heyecan verici
Experienced	Deneyimli
Sensitive	Hassas
Uninhibited	Çekinmeyen
Reserved	Ağırbaşlı

Embarrassed	Utangaç
Conservative	Tutucu
Unromantic	Romantic olmayan
Compassionate	Şefkatli
Cautious	Dikkatli
Self-conscious	Kendine-odaklı
Straightforward	Dobra
Inexperienced	Deneyimsiz
Prudent	Sağduyulu
Individualistic	Bireysel
Sensual	Şehvetli

APPENDIX B

Information Form for Married Individuals

(Evli Bireyler için Bilgi Formu)

Değerli Katılımcı,

Bu çalışma Orta Doğu Teknik Üniversitesi Psikoloji Bölümü Klinik Psikoloji Yüksek Lisans Programı kapsamında yürütülen bir tez çalışmasıdır. Çalışmanın amacı, yetişkin kadın ve erkeklerin cinsel benlikleri, cinsel hayatları ve evlilik ilişkileri ile ilgili bilgi toplamaktır. Çalışmaya katılım tamamıyla gönüllülük temelindedir. Ölçeklerin tamamlanması yaklaşık 30 dakikanızı alacaktır.

Bu çalışma kapsamında verilen anketlerdeki soruların doğru ya da yanlış cevapları yoktur. Sizin dürüst ve içten cevaplar vermeniz geçerli ve güvenilir sonuçlar elde etmek açısından önemlidir.

Çalışmada sizden kimlik belirleyici hiçbir bilgi istenmemektedir. Cevaplarınız tamamıyla gizli tutulacak ve sadece çalışma kapsamında değerlendirilecektir; elde edilecek sadece bilgiler bilimsel yayımlarda kullanılacaktır. Anketler, genel olarak cinsellik hakkında çok ayrıntılı sorular içermektedir. Bu nedenle, katılım sırasında sorulardan ya da herhangi başka bir nedenden ötürü kendinizi rahatsız hissederseniz cevaplamayabilir veya cevaplama işini istediğiniz zaman bırakabilirsiniz. Böyle bir durumda anketi uygulayan kişiye, anketi tamamlamadığınızı söylemek yeterli olacaktır. Anket sonunda, bu çalışmayla ilgili sorularınız varsa cevaplanacaktır. Çalışma hakkında daha fazla bilgi almak için Psk. Gözde Koçak (E-posta: e132587@metu.edu.tr) ile iletişim kurabilirsiniz.

Gösterdiğiniz ilgi ve yardım için şimdiden teşekkür ederim.

Bu çalışmaya tamamen gönüllü olarak katılıyorum ve istediğim zaman yarıda kesip çıkabileceğimi biliyorum. Verdiğim bilgilerin bilimsel amaçlı yayımlarda kullanılmasını kabul ediyorum. (Formu doldurup imzaladıktan sonra uygulayıcıya geri veriniz).

İsim Soyadı   Tarih   İmza

                      ----/----/----

Demographic Information Form for Married Individuals

(Evli Bireyler için Demografik Bilgi Formu)

Cinsiyetiniz: _____ Kadın   _____ Erkek

Yaşınız: _____

Eğitim seviyeniz: _____ İlkokul

                   _____ Ortaokul

                   _____ Lise

                   _____ Yüksekokul / Üniversite

                   _____ Lisans üstü

Yaşamınızın çoğunu geçirdiğiniz yer: _____ Köy

                                      _____ İlçe

                                      _____ Şehir

                                      _____ Metropol (Büyükşehir)

Ne kadar süredir evlisiniz? _____ (yıl)

Şu anki evliliğiniz kaçıncı evliliğiniz? _____

Çocuğunuz var mı? _____ Evet   _____ Hayır

             Cevabınız evetse, lütfen kaç çocuğunuz olduğunu belirtiniz: _____

Son altı aylık süreyi düşündüğünüzde;

*(Eğer hiç yapmıyorsanız lütfen **0** yazınız.)*

Eşinizle haftada ortalama kaç kez cinsel ilişkiye giriyorsunuz? _____

Haftada ortalama kaç kez mastürbasyon yapıyorsunuz? _____

APPENDIX D

The Sexual Self-Schema Scale

(Cinsel Benlik Şeması Ölçeği)

Sample Items:

	Beni hiç tanımlamıyor						Beni çok iyi tanımlıyor
Tutkulu	0	1	2	3	4	5	6
Güçlü	0	1	2	3	4	5	6
Sıcak	0	1	2	3	4	5	6
Açık sözlü	0	1	2	3	4	5	6
Sevgi dolu	0	1	2	3	4	5	6
Doğal	0	1	2	3	4	5	6
Çekingen	0	1	2	3	4	5	6
Özgür	0	1	2	3	4	5	6
Duygusal	0	1	2	3	4	5	6

Development by

Hill, D. B. (2007). Differences and similarities in men's and women's sexual self-schemas. *Journal of Sex Research, 44(2),* 135-144.

Translation/Adaptation by

Koçak, G. (2009). Sexual self-schemas: An exploration of their impact on frequency of masturbation and sexual activity, sexual satisfaction, and marital adjustment. *Unpublished Master's Thesis, Middle East Technical University.*

Contact Address: Gözde Koçak, Orta Doğu Teknik Üniversitesi Psikoloji Bölümü, Ankara/Türkiye.

Golombok-Rust Inventory of Sexual Satisfaction

(Golombok-Rust Cinsel Doyum Ölçeği)

Sample Items from the Male Form:

	Hiçbir Zaman	Nadiren	Bazen	Çoğu Zaman	Her Zaman
2. Eşinize, cinsel ilişkinizle ilgili olarak nelerden hoşlanıp nelerden hoşlanmadığınızı söyleyebilir misiniz?	(....)	(....)	(....)	(....)	(....)
11. Eşinizle olan cinsel ilişkinizde sevgi ve şefkatin eksik olduğunu hisseder misiniz?	(....)	(....)	(....)	(....)	(....)

Sample Items from the Female Form:

	Hiçbir Zaman	Nadiren	Bazen	Çoğu Zaman	Her Zaman
8. Cinsel ilişki sırasında doyuma (orgazma) ulaşır mısınız?	(....)	(....)	(....)	(....)	(....)
13. Eşiniz sizinle sevişmek istediğinde rahatsız olur musunuz?	(....)	(....)	(....)	(....)	(....)

Development by

Rust, J. & Golombok, S. (1986). The GRISS: A psychometric instrument for the assessment of sexual dysfunction. *Archives of Sexual Behavior, 15(2),* 157-165.

Translation/Adaptation by

Tuğrul, C., Öztan, N., & Kabakçı, E. (1993). Golombok-Rust Cinsel Doyum Ölçeği'nin standardizasyon çalışması. *Türk Psikiyatri Dergisi, 4,* 83-88.

Contact Address: Doç. Dr. Elif Kabakçı, Hacettepe Üniversitesi Tıp Fakültesi, Ankara/Türkiye.

Dyadic Adjustment Scale

(Çift Uyum Ölçeği)

Sample Items:

23. Eşinizi öper misiniz?

Her gün	Hemen hemen her gün	Ara sıra	Nadiren	Hiçbir zaman

24. Siz ve eşiniz ev dışı etkinliklerinizin ne kadarına birlikte katılırsınız?

Hepsine	Çoğuna	Bazılarına	Çok azına	Hiçbirine

Development by

Spanier, G. B. (1976). Measuring dyadic adjustment: A new scale for assessing the quality of marriage and similar dyads. *Journal of Marriage and the Family, 38,* 15-28.

Translation/Adaptation by

Fışıloğlu, H. & Demir, A. (2000). Applicability of the Dyadic Adjustment Scale for measurement of marital quality with Turkish couples. *European Journal of Psychological Assessment, 16(3),* 214-218.

Contact Address: Prof. Dr. Hürol Fışıloğlu, Orta Doğu Teknik Üniversitesi Psikoloji Bölümü, Ankara/Türkiye.

Information Form for University Students

(Üniversite Öğrencileri için Bilgi Formu)

Değerli Katılımcı,

Bu çalışma Orta Doğu Teknik Üniversitesi Psikoloji Bölümü Klinik Psikoloji Yüksek Lisans Programı kapsamında yürütülen bir tez çalışmasıdır. Çalışmanın amacı, yetişkin kadın ve erkeklerin cinsel benlikleri ile ilgili bilgi toplamaktır. Çalışmaya katılım tamamıyla gönüllülük temelindedir. Ölçeklerin tamamlanması yaklaşık 15 dakikanızı alacaktır.

Bu çalışma kapsamında verilen anketlerdeki soruların doğru ya da yanlış cevapları yoktur. Sizin dürüst ve içten cevaplar vermeniz geçerli ve güvenilir sonuçlar elde etmek açısından önemlidir.

Çalışmada sizden kimlik belirleyici hiçbir bilgi istenmemektedir. Cevaplarınız tamamıyla gizli tutulacak ve sadece çalışma kapsamında değerlendirilecektir; elde edilecek sadece bilgiler bilimsel yayımlarda kullanılacaktır. Anketler, genel olarak cinsellik hakkında sorular içermektedir. Bu nedenle, katılım sırasında sorulardan ya da herhangi başka bir nedenden ötürü kendinizi rahatsız hissederseniz cevaplamayabilir veya cevaplama işini istediğiniz zaman bırakabilirsiniz. Böyle bir durumda anketi uygulayan kişiye, anketi tamamlamadığınızı söylemek yeterli olacaktır. Anket sonunda, bu çalışmayla ilgili sorularınız varsa cevaplanacaktır. Çalışma hakkında daha fazla bilgi almak için Psk. Gözde Koçak (E-posta: e132587@metu.edu.tr) ile iletişim kurabilirsiniz.

Gösterdiğiniz ilgi ve yardım için şimdiden teşekkür ederim.

Bu çalışmaya tamamen gönüllü olarak katılıyorum ve istediğim zaman yarıda kesip çıkabileceğimi biliyorum. Verdiğim bilgilerin bilimsel amaçlı yayımlarda kullanılmasını kabul ediyorum. (Formu doldurup imzaladıktan sonra uygulayıcıya geri veriniz).

İsim Soyad   Tarih   İmza

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Demographic Information Form for University Students

(Üniversite Öğrencileri için Demografik Bilgi Formu)

Cinsiyetiniz: _____ Kadın   _____ Erkek

Yaşınız: _____

Yaşamınızın çoğunu geçirdiğiniz yer: _____ Köy

_____ İlçe

_____ Şehir

_____ Metropol (Büyükşehir)

Kaçıncı sınıftasınız? _____

Şu ana dek;

Hiç mastürbasyon yaptınız mı? _____ Evet   _____ Hayır

Hiç cinsel ilişkide bulundunuz mu? _____ Evet   _____ Hayır

Rosenberg's Self-Esteem Scale

(Rosenberg Benlik Saygısı Ölçeği)

Sample Items:

1. Kendimi en az diğer insanlar kadar değerli

   buluyorum……………………………………………………….(1)….(2)…(3)…(4)

2. Bazı olumlu özelliklerimin olduğunu

   düşünüyorum…………………………………………………(1)….(2)…(3)…(4)

3. Genelde kendimi başarısız bir kişi olarak görme

   eğilimindeyim.……………..……………………………….(1)….(2)…(3)…(4)

Development by

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.

Translation/Adaptation by

Çuhadaroğlu, F. (1986). Adolesanlarda benlik saygısı (Self-esteem in adolescents). Psikiyatri Uzmanlık Tezi. Hacettepe Üniversitesi, Ankara.

Contact Address: Prof. Dr. Füsun Çuhadaroğlu, Hacettepe Üniversitesi Tıp Fakültesi Çocuk ve Ergen Ruh Sağlığı ve Hastalıkları Ana Bilim Dalı, Ankara/Türkiye.

Extraversion Subscale of the Eysenck Personality Questionnaire Revised-Abbreviated Form

(Eysenck Kişilik Anketi-Gözden Geçirilmiş Kısaltılmış Formu'nun Dışa Dönüklük Alt Ölçeği)

Sample Items:

1. Duygu durumunuz sıklıkla mutlulukla mutsuzluk arasında değişir mi?	Evet	Hayır
2. Konuşkan bir kişi misiniz?	Evet	Hayır
3. Borçlu olmak sizi endişelendirir mi?	Evet	Hayır
4. Oldukça canlı bir kişi misiniz?	Evet	Hayır
5. Hiç sizin payınıza düşenden fazlasını alarak açgözlülük yaptığınız oldu mu?	Evet	Hayır

Development by

Francis, L. J., Brown, L. B., & Philipchalk, R. (1992). The development of an abbreviated form of the Revised Eysenck Personality Questionnaire (EPQR-A): Its use among students in England, Canada, the USA and Australia. *Personality and Individual Differences, 13, 443-449.*

Translation/Adaptation by

Karancı, N., Dirik, G., & Yorulmaz, O. (2007). Eysenck Kişilik Anketi-Gözden Geçirilmiş Kısaltılmış Formu'nun (EKA-GGK) Türkiye'de geçerlik ve güvenilirlik çalışması. *Türk Psikiyatri Dergisi, 18(3), 254-261.*

Contact Address: Prof. Dr. Nuray Karancı, Orta Doğu Teknik Üniversitesi Psikoloji Bölümü, Ankara/Türkiye.