Using a Structural Equation Model to Examine Factors Affecting Married Individuals’ Sexual Embarrassment

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Abstract
This study aimed to predict the effects of levels of sexual awareness, sexual courage, and sexual self-disclosure on sexual embarrassment. Data was collected from 336 married individuals, who have students in the Sultangazi District of Istanbul. According to the structural equation model (SEM), sexual self-disclosure, directly, and sexual courage and sexual awareness, indirectly, predicted sexual embarrassment. Hence, sexual self-disclosure was a moderator, and the model had acceptable indexes. The significant chi-square values were $x^2 = 287.29$, $df = 146$, $p = 0.00$. The fit-index values were RMSEA = .054, GFI = .92, AGFI = .89, CFI = .95, IFI = .95, NFI = .91, NNFI = .95, SRMR = .05, and CI = (0.045; 0.063). Comparing participants’ sexual embarrassment in terms of gender, women showed more sexual embarrassment than men; conversely, men showed more sexual courage than women. In terms of marriage style, the participants with arranged marriages showed more sexual embarrassment than those with dating marriages; those with dating marriages showed more sexual courage than those with arranged marriages. Furthermore, in terms of education level and marriage duration, the lower the educational level, the higher the sexual embarrassment, and the greater the duration of marriage, the greater the sexual embarrassment.

Keywords
about sexual activities: Not explaining oneself might bring about sexual disorders. Marriage can also be negatively or positively affected by many factors related to sexual embarrassment. These factors might be pornography, sexual awareness, sexual disclosure, and sexual courage. Unhealthy sexual behaviors, such as consumption of sexual materials and pornography, are especially seen in youth (Flood, 2007; Wolak, Mitchell, & Finkelhor, 2007). Although some studies (Cooper & Griffin-Shelley, 2002; Paul, 2005; Traen, Sorheim Nilsen, & Stigum, 2006) have indicated that consumption of sexual materials, like pornography, is the part of the modern social world, maladaptive consumption of sexual materials has dangerous social and medical consequences (Abramson & Pinkerton, 1995), which might negatively affect the community (McNair, 2002). Furthermore, increasing consumption of sexual materials might relate to sexual embarrassment. Thus sexual embarrassment that might be related to self-consciousness and self-expression should be examined.

Self-consciousness might be a vital factor for individuals examining and exploring different perspectives of their relationships. A healthy relationship is associated with mutual awareness and mutual understanding of feelings, thoughts, and behaviors of individuals (Bandura, Pastorelli, Barbanelli, & Caprara, 1999; Beck, Rawlins, Williams, & Louis, 1984). Moreover, a healthy relationship correlates with an individual’s self-awareness of feelings, thoughts, and behaviors (Hanem, Ahmed, & Elmasri, 2011; Rohrer, 2002). Snell, Fisher, and Miller (1991) observed that sexual awareness includes four dispositions: sexual consciousness, sexual preoccupation, sexual assertiveness, and sexual monitoring. Sexual consciousness is defined as thinking about the nature of sexuality and reflection on sexual tendencies. Sexual preoccupation is defined as hyper-reflection about sexuality. Sexual assertiveness is defined as a dominant style of sexual perspective (cited in Salisbury, 2004).

In general, marriage is a communication and interaction system. Cupach and Metts (1991) stated that communication quality implies the couple’s relationship quality. And couples also have to communicate about sexuality, such as preferences in sexual activities, expectations, and so on to attain sexual harmony in marriage (Metts & Spitzberg, 1996). Women generally prefer to communicate with their friends about sexuality rather than their husbands (Herold & Way, 1988). Furthermore, Geismar (1984) found positive correlations among verbal communication, sexual satisfaction, frequency of sexual activities, and the importance of sexuality. And in talking about sexuality, couples obtain information about sexual pleasure, sexual preferences, and sexual fears that complete the requirements of being a couple (Metts & Cupach, 1989). Sexual communication is also a moderator between similarities of sexual attitudes and sexual satisfaction (Cupach & Metts, 1995).

Although couples should explain their sexual expectations because they affect sexual satisfaction, they might feel shame in sexual expression due to community pressures, sanctions, and taboos. Sexual satisfaction is described as happiness and getting pleasure from sexual interactions (Sprecher & Cate, 2004). The literature reports that a few experimental studies (Byers & Demmons, 1999; Cupach & Metts, 1995; Metts & Cupach, 1989) have shown the importance of sexual expression and sexual self-disclosure in marriage. Individuals who self-disclose sexually might also have sexual courage. Courage is divided into categories of physical, moral, community, and creative (May, 1975/2008). Community courage means that an individual behaves assertively in social contexts and in contacts in intimate relationships with others. Sexual courage, inferred from the definition of community courage, is an individual showing assertive sexual behaviors and expressing sexuality in constructing intimate relationships. According Verschoor (2004), courage is vital for survival in any institution.

However, the literature lacks direct research about sexuality and courage. Thus, it is inferred from other research, for instance, from research on sexual disclosure and courage. Byers and Demmons (1999) found that sexual self-disclosure predicted sexual satisfaction directly, and social pressure predicted it indirectly. Cupach and Metts (1991) indicated the importance of sexual self-disclosure for a trusting relationship that increases positive sexual communication and decreases sexual conflicts. Furthermore, sharing desired and undesired activities in sexual is crucial in the relationship between sexual disclosure and sexual satisfaction (Byers & Demmons, 1999; MacNeil & Byers, 2005).

Courage has been described as a virtue of management (Srivastva & Cooperrider, 1998). Peterson and Seligman (2004) explained different psychological and physiological forms of courage such as enthusiasm, genuineness, and tenacity.
And Gruber (2011) indicated that courage has a different structure from solemnity and enterprise, defining courage as an individual’s ability to change behaviors, thoughts, and environments. According to Woodard (2004), although courage includes anxiety and fears, it also includes tenacity and decisiveness. In parallel to this, Cox, Hallam, O’Connor, and Rachman (1983) and O’Connor, Hallam, and Rachman (1985) focused on the behavioral perspectives of courage instead of on experiences of fear. May (2008) categorized different forms of courage such as physical, moral, community, and creative. Community courage involves the ability to communicate with others and take risks in intimate relationships. Thus, this study is the first to describe sexual courage in terms of community courage. According to this view, sexual courage might be described as being entrepreneurial, establishing intimacy, and introducing the self in relationships. Verschoor (2004) showed the importance of courageous behaviors in organizations and in the members of organizations. Furthermore, van Hooft (2006) defined courage as an exposure temperament that demonstrates the contribution of benefits of courage in both community and individual (as cited in Lindh, da Silva, Berg, & Severinsson, 2010). Hence courage might be a crucial concept in the continuation of a healthy marriage relationship. And especially in sexual life, courage might be very important in preventing sexual and other marital problems. Without courage, married couples can face conflicts.

Taking into consideration courage research, courage correlates with anxiety symptoms (Marks, 1987; Muris, Mayer, & Schubert, 2010; Norton & Weiss, 2009), gender role (Muris et al., 2010), genuine leadership, ethic, and community behaviors (Hannah, Avolio, & Walumbwa, 2011), application of nurses (Lindh et al., 2010), fears (Cox et al., 1983; Muris, 2009), fearlessness (O’Connor et al., 1985), and moral behavior (Raffel, 2011)

Considering all the research mentioned above, this study aimed to predict the effects on sexual embarrassment of levels of sexual awareness, sexual courage, and sexual self-disclosure. Moreover, the study investigated whether some differences among sexual awareness, sexual courage, and sexual self-disclosure and sexual embarrassment in terms of gender and marriage style. Last, but not least, the study examined whether some differences in sexual embarrassment stem from the educational level of couples and the duration of marriage.

### Method

#### Participants

The study participants were married individuals. The study sample, chosen by convenience sampling, consisted of 336 married individuals, who had students in the Sultangazi District of Istanbul. Of the participants, 105 (31%) were male, and 231 (69%) were female. Their ages ranged from 20 to 60 years.

#### Data Collection Tool

To test sexual embarrassment, the Sexual Self-Consciousness Scale developed by van Lankveld et al. (2008) and adapted into Turkish by Çelik (2013) was used. To test sexual awareness, sexual courage, and sexual self-disclosure, the Sexual Self-Confidence Scale developed by Çelik (2012) was used.

#### Procedures

How levels of sexual awareness, sexual courage, and sexual self-disclosure affected sexual embarrassment was analyzed with the Structural Equation Model (SEM). The structural equation model has recently been one of the most popular methods. Showing relationships between variables in a model is one of the most important advantages of the SEM as opposed to other analysis methods (Aydın, 2010; Çokluk, Şekercioğlu, & Büyüköztürk, 2010; Şimşek, 2007). In terms of gender and marriage style, differences between the three factors of sexual awareness, sexual courage, sexual self-disclosure and sexual embarrassment were analyzed by $t$-test and one-way analysis of variance. Last, but not least, differences in sexual embarrassment with regard to couples’ educational level and duration of marriage were analyzed by $t$-test. The Scheffe test determined any significant difference in the groups. To determine the effects size, Eta Squared ($\mu^2$) was used and interpreted with regard to values of Cohen (.01 = small; .06 and over = moderate; .14 and over = large) (Sipahi, Yurtkoru, & Çinko, 2008).

#### Results

Before the SEM analysis, correlations were analyzed, finding that sexual embarrassment correlated with sexual courage ($r = - .25$), with sexual self-disclosure ($r = - .32$), and with sexual awareness ($r = - .18$). Sexual courage was also
associated with sexual self-disclosure ($r = .38$) and with sexual awareness ($r = .26$). Moreover, sexual self-disclosure correlated with sexual awareness ($r = .43$). To examine the relationships between variables in the present study, SEM was used. The SEM showed the correlational coefficient of sexual courage and sexual embarrassment to be $-0.40$; of sexual courage and sexual self-disclosure $0.27$; of sexual awareness and sexual self-disclosure $0.43$. Sexual courage and sexual embarrassment correlated negatively. Furthermore, sexual courage, sexual self-disclosure, and sexual awareness showed positive relationships.

According to SEM, sexual self-disclosure, directly, and sexual courage and sexual awareness, indirectly, predicted sexual embarrassment. Therefore, sexual self-disclosure was a moderator, and the model had acceptable indexes. The significant Chi-square values were $\chi^2 = 287.29$, df = 146, $p = 0.00$. The fit-index values were RMSEA = .054, GFI = .92, AGFI = .89, CFI = .95, IFI = .95, NFI = .91, NNFI = .95, SRMR = .05, and CI = (0.045; 0.063). Schermelleh-Engel, Moosbrugger, and Müller (2003) stated that reasonable fit indices of model range between 2≤ $\chi^2$/df≤3 for $\chi^2$/df, 0.01≤ $p$ ≤0.05 for $p$, 0.05≤ RMSEA≤0.08 for Root Mean Square Error of Approximation, 0.05≤SRMR≤0.10 for Standardized Root Mean Square Residual. AGFI values typically range between zero and one with larger values indicating a better fit. In this regard, the results indicated that this model has acceptable fit indices. Figure 1 illustrates these results.

As a result of the t-test analysis (Female $\bar{X} = 10.65$, Male $\bar{X} = 8.45$; $p = 0.04$), sexual embarrassment and sexual awareness (Female $\bar{X} = 6.39$, Male $\bar{X} = 8.18$; $p = 0.00$) were significantly differentiated in terms of gender. The effects size of variances of sexual embarrassment ($\mu^2 = 0.035$) and sexual awareness ($\mu^2 = 0.08$) explained gender. However, sexual courage and sexual self-disclosure were not significantly differentiated in terms of gender. Furthermore, women showed more sexual embarrassment than men; men showed more sexual courage than women.

As a result of the t-test analysis of sexual embarrassment, dating marriage ($\bar{X} = 9.35$), arranged marriage ($\bar{X} = 11.33$; $p = 0.01$), and sexual awareness (dating marriage $\bar{X} = 7.19$, arranged marriage $\bar{X} = 6.45$; $p = 0.02$) were significantly differentiated according to marriage style. However, sexual courage and sexual self-disclosure were not significantly differentiated according to marriage style. The participants with arranged marriages showed more sexual embarrassment than participants with dating marriages; participants with dating marriages showed more sexual courage than participants with arranged marriages.

One-way analysis of variance revealed significant mean differences in sexual embarrassment.

![Figure 1: Structural Equation Model.](image-url)
according to the couples' educational level and the duration of marriage \[ F(2,325) = 8.91, \ p < .001, \ \mu^2 = .05]. \] The effects size of variances of sexual embarrassment \( (\mu^2 = .035) \) and sexual awareness \( (\mu^2 = .054) \) explained the educational level of couples. To determine the significant difference of the groups, a Scheffe test was conducted, showing differences between primary \( (X = 11.41) \) and university \( (X = 8.51; \ p = .001) \) levels with regard to sexual embarrassment. There were differences between high school \( (X = 11.48) \) and university \( (X = 8.51; \ p = .001) \) with regard to sexual embarrassment. However, there were no differences between primary school and high school. In other words, participants with higher educational levels showed lower levels of sexual embarrassment.

One-way analysis of variance showed significant mean differences in sexual embarrassment with regard to the duration of marriage \[ F(3,320) = 3.59, \ p = .01, \ \mu^2 = .04] . \] The effects size of variances of sexual embarrassment \( (\mu^2 = .035) \) and sexual awareness \( (\mu^2 = .04) \) explained the duration of marriage. To determine the significant difference of the groups, a Scheffe test was conducted, finding differences between participants with 5-year marriages \( (X = 8.14) \) and those with 15-year-and-above marriages \( (X = 11.26; \ p = .002) \) with regard to sexual embarrassment. No differences were revealed among the other durations of marriage \( (0–5 \text{ year } X = 8.14, \ 10–15 \text{ year } X = 10.73) \) and sexual embarrassment. These results showed that increased duration of marriage increased the level of sexual embarrassment.

**Conclusion and Discussion**

Of embarrassment studies, some indicated the effectiveness of social skills education on embarrassment (Hasdemir, 2005; Kozanoğlu, 2006; Yıldırım, 2006) and the relationship among embarrassment, stress coping strategies (Epli Koç, 2006), coping strategies (Altıok, 2011), non-functional attitudes (Demirbaş, 2009), prosocial behaviors (Özdemir, 2010), and sexual stimulation (Karafa & Cozzarelli, 1997).

Hasdemir (2005) found that social skills education decreased the embarrassment levels of high school students. Parallel to this, Kozanoğlu (2006) indicated the significance of social skills education on embarrassment levels. Therefore, social skills might affect sexual confidence. Individuals with high social skills might have high sexual confidence perhaps because they easily communicate with the opposite sex, easily explain themselves about sexuality, and experience successful sexual activity. Hence, embarrassment, or rather the lack of it, might be an important predictor of sexual confidence.

Petronio, Olson, and Dollar (1989) found that people experience embarrassment in romantic relationships, but those with long-enduring relationships have low levels of embarrassment and high levels of relational satisfaction due to increased communication levels. Any relationship has some rules, and embarrassment might emerge in any relationship due to violation of social rules. But intimate relationships have some specific rules to guide them. Thus, intimate-relationship embarrassment might be specific. Individuals in intimate relationships might have sexual embarrassment that affects their intimate and other social relationships.

In regard to this, the literature has found that embarrassment affects individuals. Epli Koç (2006) found that students with low levels of embarrassment were confident and optimistic, and they used social strategies in coping with stress. He also found that students with high levels of embarrassment used submissive and desperate strategies in coping with stress. Altıok (2011) revealed a significant positive relationship between embarrassment and problem solving and a significant negative relationship between embarrassment and avoidance. Demirbaş (2009) showed that individuals with high self-esteem levels have low embarrassment levels, and individuals with low self-esteem levels have high embarrassment levels. Moreover, embarrassment and recognition needs are also significantly associated.

This study revealed a negative correlation among sexual embarrassment, sexual courage, sexual self-disclosure, and sexual awareness. Furthermore, it revealed positive relationships among sexual courage, sexual self-disclosure, and sexual awareness. According to the SEM, sexual self-disclosure, directly, and sexual courage and sexual awareness, indirectly, predicted sexual embarrassment. Thus, sexual self-disclosure was a moderator, and the model had acceptable indexes.

Furthermore, in terms of gender, sexual embarrassment and sexual awareness were significantly differentiated, whereas sexual courage and sexual self-disclosure were not significantly differentiated. The results also revealed that women showed more sexual embarrassment than men, and men showed more sexual courage than women.
Moreover, in terms of marriage style, sexual embarrassment and sexual awareness were significantly differentiated, while sexual courage and sexual self-disclosure were not. The participants with arranged marriages showed more sexual embarrassment than those with dating marriages. Conversely, participants with dating marriages showed more sexual courage than participants with arranged marriages.

Furthermore, significant mean differences were shown in sexual embarrassment with regard to couples’ educational levels. With regard to sexual embarrassment, there were differences between primary and university levels and between high school and university levels. However, there were no differences between primary school and high school levels. Overall, participants with higher educational levels showed lower levels of sexual embarrassment.

Last, but not least, there were significant mean differences in sexual embarrassment with regard to the duration of marriage. There were differences between participants with 5-year marriages and participants with 15-year-and-above marriages with regard to sexual embarrassment. There were no differences among the other durations of marriage in sexual embarrassment. In other words, increased duration of marriage increased levels of sexual embarrassment. This result might be explained by certain factors, for instance, age. With age, individuals develop morally and socially, such that their maturation might prevent talking about sexuality. A second factor might be social values that inhibit individuals from sexual experiences and sexual sharing, with the moderators of social pressure and social anxiety. A third factor might be that people in Turkey perceive sexuality as taboo and generally approve keeping sexual experiences hidden. In parallel, hidden sexual experiences might increase individuals’ sexual embarrassment.

The last factor might be related to child rearing. With advanced duration of marriage, individuals have children and rear them according to their social and moral values. Therefore, couples might repress sexual sharing in order to model for their children, and, over time, this might increase their sexual embarrassment.

Taking into consideration the literature on couples and family counseling and the results of this study, some suggestions should be provided. The research on couples and family counseling include a long list of subjects: sexuality in marriage, sexual satisfaction, marital satisfaction, marital adjustment, sexual fantasy, divorce, marriage problems, attributions, gender, gender roles, attachment style, temperament and character, psychiatric problems, cognitive distortions, happiness, conflicts, problem-solving skills, and perfectionism. The research on couples’ sexuality and family counseling include sexual satisfaction, sexual disorders, sexual counseling, marital satisfaction, self-esteem, locus of control, and sexual life—all studied as variables. Henceforth, more sexual embarrassment research should be conducted to support previous studies and this study’s results.

In this study, sexual embarrassment was approached cross-sectionally, with regard to sexual disclosure, sexual courage, and demographic information. However, longitudinal studies should be conducted to deepen understanding of these relationships over time. Furthermore, sexual embarrassment might be differentiated within socioeconomic levels.

Last, but not least, marital satisfaction research has indicated the positive effects of sexual satisfaction on marital satisfaction (Litzinger & Gordon, 2005; Trudel, 2002; Young, Luguis, Denny, & Young, 1998). Therefore, marital and sexual satisfaction should be studied, taking sexual embarrassment and sexual confidence into consideration.


