



# The Effectiveness of Mindfulness Training on Self-Compassion, Sexual Satisfaction, and Resilience in Pregnant Women

Fatemeh Abdi-Malekabadi<sup>1</sup> , Sayed Morteza Tavakoli<sup>2</sup> , Attieh Farzanfar<sup>2</sup>

<sup>1</sup> MSc, Department of Psychology, Science and Research Branch, Islamic Azad University, Tehran, Iran

<sup>2</sup> MSc, Department of General Psychology, Varamin-Pishva Branch, Islamic Azad University, Tehran, Iran

## Quantitative Study

### Abstract

**Background:** Pregnancy is considered as a period of vulnerability in women, which presents new problems and difficulties to mothers that may impair their mental health. The purpose of this study was to determine the effectiveness of mindfulness training on self-compassion, sexual satisfaction, and resilience in pregnant women.

**Methods:** This quasi-experimental study was performed as a pretest-posttest design with control and experimental groups. The sample of this study consisted of 30 people who were selected using convenience sampling method and were randomly divided into experimental (30 subjects) and control groups (30 subjects). The measurement tools used included the Self-Compassion Scale (SCS), Index of Sexual Satisfaction (ISS), and Connor-Davidson Resilience Scale (CD-RISC). First, pretest was performed in both groups. Then, the training was performed in the experimental group in 8 sessions (90 minutes). Subsequently, the posttest was conducted in both groups, and a month later, the follow-up was implemented. Data were analyzed using multivariate analysis of covariance (MANCOVA) and one-way analysis of covariance (ANCOVA).

**Results:** The results showed that mindfulness training was effective on self-compassion, sexual satisfaction, and resilience in pregnant women.

**Conclusion:** The results of this study showed that mindfulness training is effective in promoting self-compassion, sexual satisfaction, and resilience in pregnant women.

**Keywords:** Mindfulness training, Self-compassion, Sexual satisfaction, Resilience, psychological, Pregnant women

**Citation:** Abdi-Malekabadi F, Tavakoli SM, Farzanfar A. **The Effectiveness of Mindfulness Training on Self-Compassion, Sexual Satisfaction, and Resilience in Pregnant Women.** *Int J Body Mind Culture* 2019; 6(3): 160-7.

Received: 01 May 2019

Accepted: 30 Jun. 2019

### Introduction

Pregnancy is an important stage of human evolution during which many psychological and physical changes occur in women,

resulting in increased mental and physical vulnerability (Parvez et al., 2018) and physical and psychological challenges. In the last two decades, numerous researches have been conducted on women's mental health in most countries. The same findings have shown that in reproductive years, women's use of mental health services is twice as men's (Oduyebo et al., 2017). In Iran, as in

#### Corresponding Author:

Sayed Morteza Tavakoli

Email: [tavakoli01@gmail.com](mailto:tavakoli01@gmail.com)

many countries around the world, the prevalence of psychological disorders in women is twice that of men, with 25.9 versus 14.9 for men (Sharifirad, Fathi, Tirani, & Mehaki, 2007).

Moreover, recent research studies have focused on self-compassion and its role in shaping mental health and preventing mental disorders (Trompetter, de Kleine, & Bohlmeijer, 2017). Self-compassion is a replacement for critical and high self-esteem, as a three-component construct of self-compassion versus self-judgment, human companionship versus isolation, and mindfulness versus increased imitation (Neff & Germer, 2013). Self-compassion can be defined as a positive attitude towards oneself when things go wrong. Self-compassion is considered as an effective trait and protective factor for nurturing emotional resilience; recently developed therapeutic approaches are aimed at improving self-compassion (Williams, Dalgleish, Karl, & Kuyken, 2014). In this regard, Krieger, Berger, and Holtforth (2016), in a study examining the relationship between self-compassion and depression, showed that lack of self-compassion can act as a vulnerability factor for depression. Krieger, Altenstein, Baettig, Doerig, and Holtforth (2013) showed that depressed individuals had lower levels of compassion than non-depressed individuals. Since the concept of self-compassion has been introduced into psychology literature over the past decade, not much evidence has been found for the impact of self-compassion on mental health and psychological problems, but research in this field is expanding (Marshall & Brockman, 2016).

One of the issues that mostly affect one's personal and social life is sexuality. Sexual satisfaction is the individual's judgment of the sexual behavior that they find enjoyable. Prenatal sexual relations and sexual response in pregnancy were first studied by Masters and Johnson in the 1960s. The two first discussed the physiology of human-specific responses, including pregnancy, in 1996

(McNulty, Wenner, & Fisher, 2016); during the first 3 months of pregnancy, due to fatigue, pain and tenderness of the breasts, and nausea, there is a decrease in libido. Occasionally, a decrease in female attractiveness causes reluctance in men. In the second trimester, sexual desire increases due to better general feeling and congestion of the pelvic vessels. Orgasm may occur for the first time during this period. In the third trimester, with the larger uterus that places pressure on the perineum, increased vaginal discharge, and shortened breathing for many women, intercourse is difficult and uncomfortable (Schoenfeld, Loving, Pope, Huston, & Stulhofer, 2017). Sexual intercourse during pregnancy is influenced by factors such as social situations, wanted or unwanted pregnancy, relationship with spouse and psychological involvement, and personal skills in sexual intercourse. Of course, there are many differences between people's sexual relationships, and the amount of sexual intercourse can vary even during different pregnancies. During pregnancy, uterine growth and pressure on the inferior vena cava prevent abnormal conditions that interfere with uterine and placental bleeding, and other positions such as side-by-side should be used. Sexual intercourse is not prohibited in a normal pregnancy (Blais-Lecours, Vaillancourt-Morel, Sabourin, & Godbout, 2016).

Therefore, the factors that make a person more adaptable to life's needs and threats are the most fundamental constructs of the approaches to improving self-compassion. Resilience, meanwhile, has a special place in psychology, especially in the areas of evolutionary psychology, family psychology, and mental health (Cullen, Baiocchi, Eggleston, Loftus, & Fuchs, 2016). Resilience to stress is the positive psychological capacity of individuals to cope with stress and disaster. Researchers point out that stress resilience may mean the ability to fear or the tendency to extinguish fear quickly and efficiently after a traumatic event has been

reported (Lam et al., 2017). Resilience is defined as a process, ability, or consequence of successful adaptation despite threatening conditions. Resilience does not mean the absence of risk factors in life, but the presence of psychological supportive factors; psychological supportive factors in individuals can be applied to processes and practices that lead to desirable outcomes in human life. For example, when people are faced with life's dangers and challenges, they can reduce the negative and destructive effects of life pressures due to supportive factors such as positive thinking, self-esteem, and negative emotion control. Stress-resistant people, generally, have a source of internal control, that is, they can take responsibility for their own circumstances and issues, have a positive self-esteem, and are optimistic about life (Luthar & Eisenberg, 2017).

Various therapeutic approaches have been used to promote self-compassion, sexual satisfaction, and resilience in pregnant women. One of these therapeutic models is mindfulness training. Mindfulness is non-judgmental, indescribable, and present-based conscious awareness of an experience that is at the center of a person's attention at a particular moment. In addition, this concept includes acknowledging and accepting the experience. Mindfulness can also be defined as technical consciousness, which by combining meditation and specific mental orientations towards an experience, encourages non-judgmental present-day awareness by minimizing conflict in thoughts and feelings (Frank, Reibel, Broderick, Cantrell, & Metz, 2015). Mindfulness is derived from cognitive-behavioral therapies and is an important component of the third wave of psychological therapeutic models. All mindfulness exercises are designed to increase the body's attention. The important role of the body in new interdisciplinary areas such as mind-body medicine has also been proven. Studies using mindfulness emphasize the interaction between physical, cognitive, and emotional processes (Lever,

Cavanagh, & Strauss, 2016). However, the main purpose of mindfulness is not to relax, but the non-judgmental observation of negative internal events or the physiological arousal of these conditions. Mindfulness meditation activates an area of the brain that produces positive emotions and has beneficial effects on the body's immune function (van der Riet, Levett-Jones, & Aquino-Russell, 2018).

Given the large number of pregnant women and their major problems in self-compassion, sexual satisfaction, and resilience, it seems that many pregnant women do not have the sufficient knowledge and skills to manage these problems. Such problems in pregnant women can be alleviated by mindfulness training. Therefore, the purpose of this study was to determine the effectiveness of mindfulness training on self-compassion, sexual satisfaction, and resilience in pregnant women.

## Methods

This quasi-experimental study was performed as a pretest-posttest design with control and experimental groups. The study population consisted of 284 pregnant women undergoing medical care in Shariati Hospital in Tehran, Iran, in autumn 2018. The study participants consisted of 60 subjects (30 experimental and 30 control group participants) who were selected using convenience sampling and were randomly assigned to 2 groups (case and control). The sample size was determined as 30 individuals in each group based on statistical power of 0.95 and effect size of 0.25, and using G-power software. Research participants were assessed in two stages (pretest and posttest) using the Self-Compassion Scale (SCS), Index of Sexual Satisfaction (ISS), and Connor-Davidson Resilience Scale (CD-RISC). The experimental group received 9 sessions of mindfulness training (1 session per week; each lasting 90 minutes), and the control group received no intervention. The inclusion criteria included pregnant women

referring to Shariati Hospital in Tehran in autumn 2018, pregnancy for first child, and age range of 25-40 years. The exclusion criteria included pregnancy for second child, age of less than 25 years and over 40 years, and providing incomplete information. All individuals received written information about the research and participated in the study voluntarily. They were assured that all information would remain confidential and would be used for research purposes only. In order to respect privacy, the participants' names and surnames were not recorded.

**Self-Compassion Scale:** The SCS contains 26 questions and was developed by Neff in 2003 to measure self-compassion in the 6 subscales of self-compassion (5 questions), self-judgment (5 questions), human subscriptions (4 questions), isolation (4 questions), mindfulness (4 questions), and extreme replication (4 questions) that measure the quality of a person's relationship with their experiences. The questions are scored on a 5-point Likert scale ranging 0 to 4 (almost never to almost always). The subscales of judgment about self-esteem, isolation, and extreme replication are reverse scored (Neff, 2003). Cronbach's alpha reliability coefficient for the whole scale was 0.92 and for the subscales ranged from 0.75 to 0.81, and the retest reliability coefficient (2 weeks interval) was reported as 0.93 (Neff, Pisitsungkagarn, & Hsieh, 2008). In this study, the Cronbach's alpha reliability coefficient of the whole scale and that of the subscales of self-compassion, self-judgment, human subscriptions, isolation, mindfulness, and extreme replication was 0.83, 0.79, 0.78, 0.76, 0.77, 0.78, and 0.80, respectively.

**Connor-Davidson Resilience Scale (CD-RISC):** This questionnaire was developed by Davidson and Connor in 2003 and has 25 questions aimed at measuring resilience in different individuals (Connor & Davidson, 2003). The questions are scored on a Likert scale, and to obtain the overall score of the questionnaire, the sum of the scores of all questions is calculated, which ranges from

0 to 100. The reliability of the questionnaire was determined using Cronbach's alpha coefficient, and an alpha of 0.84 and validity of 0.79 were obtained for this questionnaire (Green et al., 2014). In the present study, the reliability of the CD-RISC was calculated as 0.78 using Cronbach's alpha.

**Index of Sexual Satisfaction:** The ISS was developed by Hudson in 1992 to assess couples' satisfaction levels. The questionnaire consists of 25 questions, which are scored on a 7-point scale ranging from never to always (1-7). The total score of the scale ranges from 0 to 100, and higher scores indicate the respondent's sexual satisfaction with her spouse, and vice versa. The validity of the scale was calculated as 0.93 using a one-week retest method. The validity of the scale was calculated through discriminant validity, which indicated that the scale was able to identify couples with and without sexual problems (Liu, Fairweather-Schmidt, Burns, & Roberts, 2015). The validity of this scale was calculated through its correlation with the sexual satisfaction subscale of the ENRICH questionnaire which was 0.74. For a more detailed examination of validity, the validity coefficient (0.88) and the Guttman Split-half coefficient were calculated (0.88) (Azizi, Mohammadkhani, Foroughi, Lotfi, & Bahramkhani, 2013). The validity and reliability of this questionnaire were 0.78 and 0.81, respectively.

The collected data were analyzed using descriptive (mean and standard deviation) and inferential statistical methods. Descriptive statistics were used to calculate frequencies and determine central indices and dispersion. Analysis of variance and covariance were performed in SPSS software (version 22, IBM Corporation, Armonk, NY, USA).

## Results

The mean (standard deviation) age of the experimental and control groups was 35.23 (4.22) years and 36.32 (5.14) years. Table 1 presents the mean (standard deviation) of the research variables by group and test.

**Table 1.** Mean (standard deviation) by group and test

Variables	Experimental		Control	
	Pretest	Posttest	Pretest	Posttest
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Resilience	42.13 (2.4)	47.60 (5.1)	42.40 (1.5)	42.73 (2.0)
Self-compassion	36.73 (4.3)	32.53 (4.5)	37.40 (4.1)	36.40 (4.1)
Sexual satisfaction	44.8 (8.5)	54.46 (8.9)	45.53 (5.5)	46.33 (3.9)

Univariate analysis of covariance was used to evaluate the effectiveness of the intervention due to the univariability of the dependent variable. Therefore, the homogeneity of the error variance assumption was tested using Levene's test, and the results showed that this assumption is valid ( $P > 0.05$ ;  $F_{1,58} = 3.56$ ).

By controlling for pretest, significant levels of all tests indicated that there is a significant difference between the experimental and control groups in at least one of the dependent variables (self-compassion, sexual satisfaction, and resilience) ( $P < 0.0001$ ;  $F = 34.36$ ). The effect or difference is equal to 0.57, that is, 57% of the individual differences in posttest scores on self-compassion, sexual satisfaction, and resilience were related to the effect of mindfulness training (group membership) (Table 2).

As shown in table 3, with pretest control between the experimental and control groups, in terms of resilience ( $P < 0.0001$ ;  $F = 29.31$ ), self-compassion ( $P < 0.0001$ ;  $F = 72.26$ ), sexual satisfaction ( $P < 0.0001$ ;  $F = 85.53$ ), and pessimism ( $P < 0.0001$ ;  $F = 51.07$ ); in other words, mindfulness training increased self-compassion, sexual satisfaction, and resilience in the experimental group.

## Discussion

The findings showed that mindfulness

training had a significant effect on self-compassion, sexual satisfaction, and resilience in pregnant women. It seems reasonable to conclude that participants attending mindfulness training sessions use their typical responses as secret emotional triggers (antecedent strategies) and learn how to quickly discard stressful exposures by learning new mindfulness techniques, such as tagging and consideration (a response-oriented strategy). The use of these types of emotion regulation strategies focused on antecedents and responses may be the underlying mechanism that can explain the effectiveness of mindfulness in enhancing compassion (Mark, Herbenick, Fortenberry, Sanders, & Reece, 2014). The second and most important mechanism likely to explain the decrease in stress and exhaustion, and mental health that is associated with mindfulness may be related to the elicitation of positive self-strategic attitudes. When participants learn to become aware of their own mental processes, such as emotions, behaviors, and habitual cognitive tendencies, they are able to avoid negative self-esteem and being absorbed in ruminative tendencies. Shapiro, Carlson, Astin, and Freedman (2006) view this process as a reactionary reaction in which there is a fundamental shift in the relation of the individual to the experience.

**Table 2.** Results of multivariate analysis of covariance on mean posttest scores of psychological well-being and optimism in the experimental and control groups with pretest control

Test name	Value	DF hypothesis	DF Error	F	Significant level	Eta squared	Statistical power
Pillai's trace	0.57	3	56	34.36	0.0001	0.57	1.00
Wilks' Lambda	0.01	3	56	34.36	0.0001	0.57	1.00
Hotelling effect	65.29	3	56	34.36	0.0001	0.57	1.00
The largest root	65.29	3	56	34.36	0.0001	0.57	1.00

**Table 3.** Results of one-way analysis of covariance in the Mankua text on mean posttest scores of self-compassion, sexual satisfaction, and resilience in the experimental and control groups with pretest control

Variables	Sum of the squares	Degrees of freedom	Mean of the squares	F	Significant level	Eta squared	Statistical power
Resilience	15.31	1	15.31	29.31	0.0001	0.34	1.00
Self-compassion	1760.34	1	1760.34	72.26	0.0001	0.45	1.00
Sexual satisfaction	100.61	1	100.61	85.53	0.0001	0.51	1.00

This process is thought to be very helpful in changing automated processes and conditional interaction between thoughts, feelings, and behaviors. As a result, people are more likely to practice forgiveness and compassion for themselves and others. Research has shown that people who engage in compassionate and loving exercises improve their mental health and emotional balance. Mindfulness training makes it possible for a person to be more receptive to others and to accept others without prejudice and negative judgments. It also encourages people to be kinder and more responsive to the needs of others. In fact, as pregnant women increase their capacity for mindfulness, empathic concerns and emotional regulation of mindfulness provides steps to increase their communicative capacity (Neto, 2012).

In explaining this finding, it can be said that the presence of the mind, which means being and living in the present moment, has an impact on increased sexual satisfaction in pregnant women. It enables them to be aware of their strengths and weaknesses and their shared life at any given moment, and this awareness creates a conceptual harmony for couples and enables them to live together (Greenfield, Roos, Hagler, Stein, Bowen, & Witkiewitz, 2018), and assess and retrieve themselves and their problems. People with high situational awareness can create a constantly dynamic and flexible environment in their lives because of their aristocracy over time and lack of fear of change (Carsley, Khoury, & Heath, 2018). This dynamic and flexible environment prevents the growth of chronic conflicts and long-term emotional and emotional distress, conflicts, and psychological distance that will create a chain

of subsequent problems. Importantly, high-minded people pay close attention to their own and their spouse's point of view, as a means of keeping the relationship dynamic and preventing frostbite and ultimately enhancing the quality of marital relationships. Langner believes that, in a conscious mind relationship, the ideas and attitudes within an individual or a relationship are more easily exchanged. This conscious mindfulness creates lasting effects on couples in terms of problem-solving with respect, intimacy, and empathy. People with high minds are not only aware of themselves and their inner and outer state, but are also aware of changes in their spouse's appearance and behavior. This awareness will help change empathetic attitudes as well as enhance the quality of marital relationships.

In explaining this finding, it can be said that increasing mindfulness leads to reduced avoidance or excessive involvement with distressing thoughts and emotions, thus keeping the emotions in balance. If conscious attention is given to emotion regulation, the improvements in emotion regulation may be due to an overall increase in positive emotional experiences and a decrease in negative emotional experiences. Increasing positive emotional experiences through mindfulness exercises can relieve anxiety and other psychological stresses, thus leading to better regulation of emotions. It has a clear structure and homework assignments, enhances the ability of clients to pursue treatment, and has significantly influenced the relevant techniques in changing clients' mental status (Thomas & Atkinson, 2016). This treatment changes the fundamental beliefs and negative self-thoughts of the clients, and after making cognitive changes in

them and concurrently (after the tenth session) making them aware of their cognitive and emotional content, enables them to explore more appropriate alternatives and prevent automatic responses. The mindfulness training method, due to its underlying mechanisms, such as acceptance, increased awareness, desensitization, presence in the moment, observation without judgment, confrontation, and release, in combination with traditional cognitive behavioral therapy techniques is effective in increasing resilience and maintaining the long-term effectiveness of treatment.

## Conclusion

The results of this study showed that mindfulness training is effective in promoting self-compassion, sexual satisfaction, and resilience in pregnant women.

## Conflict of Interests

Authors have no conflict of interests.

## Acknowledgments

The researcher would like to express gratitude and appreciation to all those who have contributed to the advancement of this research and to all those who participated in the research.

## References

- Azizi, A., Mohammadkhani, P., Foroughi, A., Lotfi, S., & Bahramkhani, M. (2013). The validity and reliability of the Iranian Version of the Self-Compassion Scale. *Practice in Clinical Psychology, 1*(3), 149-155.
- Blais-Lecours, S., Vaillancourt-Morel, M. P., Sabourin, S., & Godbout, N. (2016). Cyberpornography: time use, perceived addiction, sexual functioning, and sexual satisfaction. *Cyberpsychol.Behav Soc.Netw., 19*(11), 649-655. doi:10.1089/cyber.2016.0364 [doi]. Retrieved from PM:27831753
- Carsley, D., Khoury, B., & Heath, N. L. (2018). Effectiveness of mindfulness interventions for mental health in schools: A comprehensive meta-analysis. *Mindfulness, 9*(3), 693-707.
- Connor, K. M., & Davidson, J. R. (2003). Development of a new resilience scale: the Connor-Davidson Resilience Scale (CD-RISC). *Depress.Anxiety, 18*(2), 76-82. doi:10.1002/da.10113

[doi]. Retrieved from PM:12964174

Cullen, M. R., Baiocchi, M., Eggleston, K., Loftus, P., & Fuchs, V. (2016). The weaker sex? Vulnerable men and women's resilience to socio-economic disadvantage. *SSM.Popul.Health, 2*, 512-524. doi:10.1016/j.ssmph.2016.06.006 [doi];S2352-8273(16)30035-0 [pii]. Retrieved from PM:29349167

Frank, J. L., Reibel, D., Broderick, P., Cantrell, T., & Metz, S. (2015). The Effectiveness of Mindfulness-Based Stress Reduction on Educator Stress and Well-Being: Results from a Pilot Study. *Mindfulness, 6*(2), 208-216.

Green, K. T., Hayward, L. C., Williams, A. M., Dennis, P. A., Bryan, B. C., Taber, K. H. et al. (2014). Examining the factor structure of the Connor-Davidson Resilience Scale (CD-RISC) in a post-9/11 U.S. military veteran sample. *Assessment, 21*(4), 443-451. doi:1073191114524014 [pii];10.1177/1073191114524014 [doi]. Retrieved from PM:24586090

Greenfield, B. L., Roos, C., Hagler, K. J., Stein, E., Bowen, S., & Witkiewitz, K. A. (2018). Race/ethnicity and racial group composition moderate the effectiveness of mindfulness-based relapse prevention for substance use disorder. *Addict Behav, 81*, 96-103. doi:S0306-4603(18)30073-X [pii];10.1016/j.addbeh.2018.02.010 [doi]. Retrieved from PM:29454179

Krieger, T., Altenstein, D., Baettig, I., Doerig, N., & Holtforth, M. G. (2013). Self-compassion in depression: associations with depressive symptoms, rumination, and avoidance in depressed outpatients. *Behav Ther, 44*(3), 501-513. doi:S0005-7894(13)00039-7 [pii];10.1016/j.beth.2013.04.004 [doi]. Retrieved from PM:23768676

Krieger, T., Berger, T., & Holtforth, M. G. (2016). The relationship of self-compassion and depression: Cross-lagged panel analyses in depressed patients after outpatient therapy. *J Affect.Disord., 202*, 39-45. doi:S0165-0327(16)30467-0 [pii];10.1016/j.jad.2016.05.032 [doi]. Retrieved from PM:27253215

Lam, W. W., Yoon, S. W., Sze, W. K., Ng, A. W., Soong, I., Kwong, A. et al. (2017). Comparing the meanings of living with advanced breast cancer between women resilient to distress and women with persistent distress: a qualitative study. *Psychooncology., 26*(2), 255-261. doi:10.1002/pon.4116 [doi]. Retrieved from PM:27061966

Lever, T. B., Cavanagh, K., & Strauss, C. (2016). The Effectiveness of Mindfulness-Based Interventions in the Perinatal Period: A Systematic Review and Meta-Analysis. *PLoS.One., 11*(5), e0155720. doi:10.1371/journal.pone.0155720 [doi];PONE-D-15-38979 [pii]. Retrieved from PM:27182732

Liu, D. W. Y., Fairweather-Schmidt, A. K., Burns, R. A., & Roberts, R. M. (2015). The Connor-Davidson Resilience Scale: Establishing invariance between

gender across the lifespan in a large community based study. *Journal of Psychopathology and Behavioral Assessment*, 37(2), 340-348.

Luthar, S. S., & Eisenberg, N. (2017). Resilient Adaptation Among At-Risk Children: Harnessing Science Toward Maximizing Salutary Environments. *Child Dev.*, 88(2), 337-349. doi:10.1111/cdev.12737 [doi]. Retrieved from PM:28144962

Mark, K. P., Herbenick, D., Fortenberry, J. D., Sanders, S., & Reece, M. (2014). A psychometric comparison of three scales and a single-item measure to assess sexual satisfaction. *J Sex Res*, 51(2), 159-169. doi:10.1080/00224499.2013.816261 [doi]. Retrieved from PM:24112135

Marshall, E. J., & Brockman, R. (2016). The Relationships Between Psychological Flexibility, Self-Compassion, and Emotional Well-Being. *J.Cogn.Psychother.*, 30(1), 60-72.

McNulty, J. K., Wenner, C. A., & Fisher, T. D. (2016). Longitudinal Associations Among Relationship Satisfaction, Sexual Satisfaction, and Frequency of Sex in Early Marriage. *Arch Sex Behav*, 45(1), 85-97. doi:10.1007/s10508-014-0444-6 [doi];10.1007/s10508-014-0444-6 [pii]. Retrieved from PM:25518817

Neff, K. D., & Germer, C. K. (2013). A pilot study and randomized controlled trial of the mindful self-compassion program. *J Clin Psychol*, 69(1), 28-44. doi:10.1002/jclp.21923 [doi]. Retrieved from PM:23070875

Neff, K. D. (2003). The development and validation of a scale to measure self-compassion. *Self and Identity*, 2(3), 223-250.

Neff, K. D., Pisitsungkagarn, K., & Hsieh, Y. P. (2008). Self-Compassion and Self-Constraint in the United States, Thailand, and Taiwan. *Journal of Cross-Cultural Psychology*, 39(3), 267-285.

Neto, F. (2012). The Satisfaction With Sex Life Scale. *Measurement and Evaluation in Counseling and Development*, 45 (1), 18-31.

Oduyebo, T., Polen, K. D., Walke, H. T., Reagan-Steiner, S., Lathrop, E., Rabe, I. B. et al. (2017). Update: Interim Guidance for Health Care Providers Caring for Pregnant Women with Possible Zika Virus Exposure - United States (Including U.S. Territories), July 2017. *MMWR Morb.Mortal.Wkly.Rep.*, 66(29),

781-793. doi:10.15585/mmwr.mm6629e1 [doi]. Retrieved from PM:28749921

Parvez, S., Kamendulis, L., Daggy, J., Reiter, J., Proctor, C., Gerona, R. et al. Urinary Measures of Glyphosate and Oxidative Stress in Pregnant Women. [Abstract].

Schoenfeld, E. A., Loving, T. J., Pope, M. T., Huston, T. L., & Stulhofer, A. (2017). Does Sex Really Matter? Examining the Connections Between Spouses' Nonsexual Behaviors, Sexual Frequency, Sexual Satisfaction, and Marital Satisfaction. *Arch Sex Behav*, 46(2), 489-501. doi:10.1007/s10508-015-0672-4 [doi];10.1007/s10508-015-0672-4 [pii]. Retrieved from PM:26732606

Shapiro, S. L., Carlson, L. E., Astin, J. A., & Freedman, B. (2006). Mechanisms of mindfulness. *J Clin Psychol*, 62(3), 373-386. doi:10.1002/jclp.20237 [doi]. Retrieved from PM:16385481

Sharifirad, G. H., Fathi, Z., Tirani, M., & Mehaki, B. (2007). Study on Behavioral Intention Model (BIM) to the attitude of pregnant women toward normal delivery and cesarean section in province of Esfahan Khomeiny shahr-1385. *J Ilam Univ Med Sci*, 15(1), 19-24.

Thomas, G., & Atkinson, C. (2016). Measuring the effectiveness of a mindfulness-based intervention for children's attentional functioning. *Educational and Child Psychology*, 33(1), 51-64.

Trompeter, H. R., de Kleine, E., & Bohlmeijer, E. T. (2017). Why Does Positive Mental Health Buffer Against Psychopathology? An Exploratory Study on Self-Compassion as a Resilience Mechanism and Adaptive Emotion Regulation Strategy. *Cognitive Therapy and Research*, 41(3), 459-468.

van der Riet, P., Levett-Jones, T., & Aquino-Russell, C. (2018). The effectiveness of mindfulness meditation for nurses and nursing students: An integrated literature review. *Nurse Educ.Today*, 65, 201-211. doi:S0260-6917(18)30143-6 [pii];10.1016/j.nedt.2018.03.018 [doi]. Retrieved from PM:29602138

Williams, M. J., Dalgleish, T., Karl, A., & Kuyken, W. (2014). Examining the factor structures of the five facet mindfulness questionnaire and the self-compassion scale. *Psychol Assess.*, 26(2), 407-418. doi:10.1037/a0035566 [doi]. Retrieved from PM:24490681