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Developing a model of marital frustration based on sensory processing styles with the mediation of mentalizing capacity

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Abstract

Abstract

The experience of a healthy and lasting relationship is rooted in the mutual influence of inner mental processes and the quality of interpersonal exchanges.The present study aimed to develop a marital disaffection model based on sensory processing styles with the mediation of mentalizing capacity. Thus, a total of 409 married women and men from Mashhad were selected through voluntary convenience sampling method. In this research study, a descriptive-correlation design based on the type of structural equation modeling was used. The participants responded to Kayser's (1993) Marital Disaffection Questionnaire, Fonagy et al.'s (2016) Reflective Functioning Questionnaire (2016), and Brown and Dunn's (2002)Sensory Processing Style Questionnaire. The data were analyzed through structural equation modeling approach (SEM) using SPSS and AMOS. The research finding showed that sensory sensitivity processing style (0.132) and mentalization capacity (-0.20) had direct and significant effects on marital disaffection. In addition, sensory seeking style (-0.041), low registration (0.040), sensory avoidance (-0.058), and sensory sensitivity (-0.028) due to the capacity of mentalizing had indirect and significant effects on marital disaffection. These findings suggest that understanding sensory processing styles and mentalization capacity can offer deeper insight into psychological processes affecting marital quality, and provide a basis for preventive and therapeutic interventions.

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Introduction

Marriage is recognized as the most fundamental form of intimate connection in all societies (Wardle, 2011). One of the recent challenges in couple relationships is marital disaffection, which is replacing neutral or negative emotions with positive emotions in marital relationships (Dollahite et al., 2019).

Research has shown that personality traits are directly related to the quality of relationships and the occurrence of couples' disaffection (Arefi et al., 2014). Sensory processing, as a personality trait, plays a central role in how a person perceives environmental stimuli and the type of response to them (Sadoughi et al., 2007). Dunn (2001) introduced four sensory processing styles. In the sensory seeking style, people with a high neural threshold and active response seek stronger stimuli and enjoy stimulating activities (Zuckerman, 2007). In the low registration style, people react slowly and passively to stimuli and are weak in understanding their own or others' emotions (Lee & Park, 2020). In the sensory avoiding style, people with a low neural threshold are sensitive to stimuli and try to limit their exposure to them. Finally, the sensory sensitivity style is characterized by a low nervous threshold and passive response; people are prone to strong emotional reactions to conflicts, criticism, or rejection (Zorlular et al., 2022).

On the other hand, studies have shown that weaknesses in mentalization, which refers to an individual's ability to understand and interpret their own and others' mental states such as beliefs, intentions, emotions, and desires (Fonagy et al., 2019), are associated with difficulty in regulating emotions, increased misperceptions, and the emergence of disrupted communication patterns in close relationships (McCann, 2022).

Simultaneously examining sensory processing styles and mentalization capacity within the context of marital relationships can help to more comprehensively understand the mechanisms that influence the occurrence of marital disaffection and pave the way for designing more targeted clinical interventions that are compatible with the cultural context of Iranian couples. The current research question is whether mentalization capacity plays a significant mediating role in the relationship between sensory processing styles and marital disaffection in married individuals.

Method

The present study was a correlational study (i.e., path analysis), which examined the relationships between variables in the form of a causal model. The statistical population was married men and women in Mashhad, aged 20 to 55 years, who had been married for at least two years. The criterion for determining the sample size was the Soper formula (2020), which was calculated with the medium effect size (0.19), test power (0.80), number of latent variables (4 variables), and number of manifest variables (107 questions). The minimum required sample size was 382 individuals. A total of 409 individuals were selected from the statistical population of the study using voluntary convenience sampling method. These individuals filled out the research questionnaires, which consisted of the Kayser Marital Disappointment Scale (1993), the Fonagy et al. Reflective Functioning Questionnaire (RFQ) (2016), and the Brown and Dunn Sensory Processing Style Questionnaire (2002), via a link on the Porseline platform. Of these, 380 (92.9%) were female and 29 (7.1%) were male. The mean and standard deviation of the age of female participants were 29.03 and 6.78, respectively, and those of male participants were 39.93 and 8.563, respectively. The mean and standard deviation of all participants were 29.78 and 7.434, respectively. Descriptive statistics (e.g., mean, standard deviation, and Pearson correlation coefficient) were used to analyze the data, and structural equation modeling was used to examine the fit of the research model. These analyses were performed using SPSS software (version 27) and AMOS software (version 26).

Findings

Initially, the assumptions of using structural equation modeling (i.e., data normality, linearity of the relationship between variables, lack of collinearity between predictor variables, and independence of errors) were examined. According to the criteria proposed by Kline (2016) and West et al. (1995),

skewness values less than ±2 and kurtosis less than ±2 indicate an acceptable normal distribution in psychological samples. The skewness values of all variables are in the range of less than ±2 and kurtosis less than ±2; therefore, the assumption of normal data distribution was met. The scatter plots of the relationship between the predictor and mediator variables with the criterion variable indicated the existence of a linear relationship between them. Therefore, the assumption of the linearity of the relationships was also met. The VIF index was used to examine the lack of collinearity between the predictor variables. Based on the criteria proposed by Hair et al. (2019) and Kline (2016), VIF values less than 5 indicated the absence of collinearity in the model. In this study, all VIF values were within the acceptable range. The Durbin-Watson statistic was also used to examine the assumption of independence of errors. In this analysis, it was obtained as 1.88, which is within the acceptable range (between 1.5 and 2.5). Thus, there was no autocorrelation between errors and the assumption of independence of errors was met (Field, 2018; Hair et al., 2019). Therefore, all assumptions of structural equation modeling were valid.

In evaluating the initial conceptual model, the fit indices indicated that the model needed modification (see Table 1). Based on the high values of the modification indices and theoretical considerations, four two-way paths between the sensory processing subscales were added to the model. These paths included the relationship between sensory seeking and sensory avoiding, low registration and sensory sensitivity, low registration and sensory avoiding, and sensory avoiding and sensory sensitivity.

Table 1. *Fit indices of the marital Disaffection model based on sensory processing styles mediated by mentalization capacity*

Indices	Acceptance range	Original model	Modified model
Number of Parameters (NPAR)	-	21	25
Chi-square (CMIN)	-	305.75	5.11
Degrees of Freedom (DF)	-	6	2
Significance Level (P)	-	.001	.05
Relative Chi-square (CMIN/DF)	1-5	50.96	2.56
Root Mean Square Error Estimate (RMSEA)	<.07	.35	.06
Comparative Fit (CFI)	>.9	.20	.99
Softened Fit (NFI)	>.9	.22	.99
Tucker-Lewis Fit (TLI)	>.9	-.99	.94
Relative Fit (RFI)	>.9	-.96	.90
Incremental Fit (IFI)	>.9	.22	.99

Moreover, Figure 1 shows the fitted model of marital disaffection based on sensory processing styles mediated by mentalization capacity

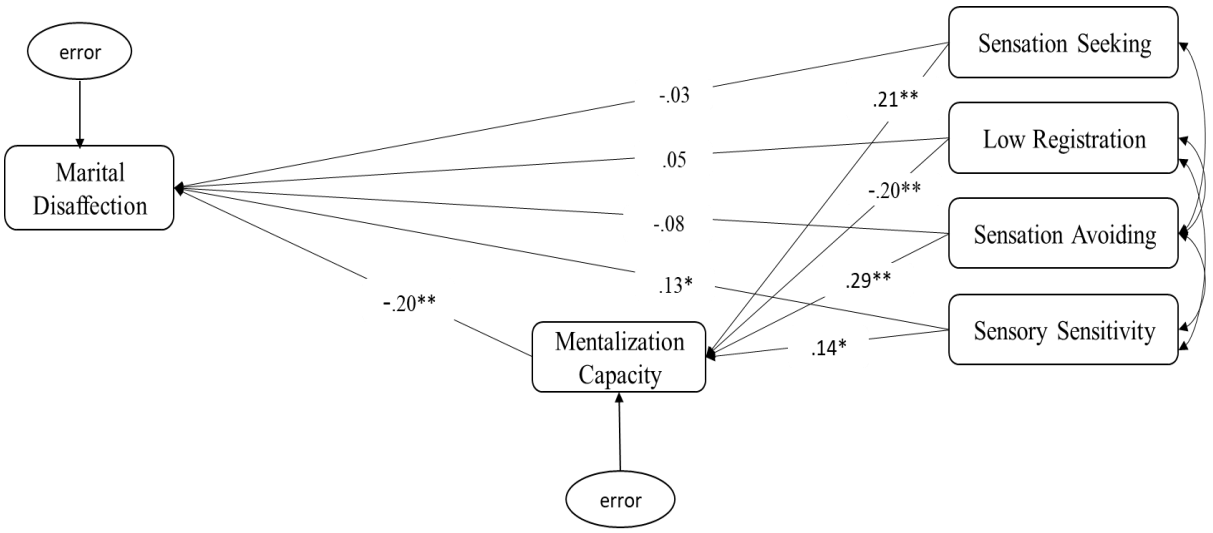

Figure 1. Fitted model of marital disaffection based on sensory processing styles mediated by mentalization capacity

According to Table 2, sensory seeking had a significant direct effect on mentalization capacity (.21) and a significant indirect impact on marital disaffection (-.04). Low registration style had a significant direct effect on mentalizing capacity (-.20) and a significant indirect effect on marital disaffection (.04). Sensory avoiding had a significant direct effect on mentalization capacity (.29) and a significant indirect effect (-.06) and total effect (-.14) on marital disaffection. Sensory sensitivity also had a significant direct effect on mentalization capacity (.14) and a significant indirect effect on marital disaffection (-.03).

Table 2. *Direct and indirect effects of research variables on marital disaffection*

Independent Variable		Mentalization Capacity	Marital Disaffection
Sensory Seeking	Direct effect	(.001) .21**	(.539) -.03
	Indirect effect	-	(.001) -.04**
	Total effect	(.001) .21**	(.152) -.08
Low Registration	Direct effect	(.001) -.20**	(.347) .05
	Indirect effect	-	(.001) .04**
	Total effect	(.001) -.20**	(.123) .09
Sensory Avoiding	Direct effect	(.001) .29**	(.187) -.09
	Indirect effect	-	(.001) -.06**
	Total effect	(.001) .29**	(.022) -.14*
Sensory Sensitivity	Direct effect	(.001) .14**	(.023) .13*
	Indirect effect	-	(.011) -.03*
	Total effect	(.001) .14**	(.077) .11
Mentalization Capacity	Direct effect	-	(.001) -.20**

Discussion and conclusion

The present study aimed to develop a model of marital disaffection based on sensory processing styles mediated by mentalization capacity. The results showed that mentalization capacity could have a significant mediating role in the relationship between sensory processing styles and marital disaffection. Sensory processing styles also had a direct and indirect effect on marital disaffection through mentalization capacity. These results were consistent with the results of Brown et al. (2022), Zorlular et al. (2022), McCann (2022), Ben-Avi et al. (2012), Forsberg et al., (2025), and Fonagy et al. (2019).

Couples who have one or both of the sensory processing styles of sensory avoiding or sensory sensitivity (which overlap with anxiety and insecure attachment) are more likely to experience emotional misperceptions, defensive reactions, avoidance of intimacy, and increased disaffection in the relationship

(Jerome & Liss, 2005; Meredith et al., 2016). However, these negative effects are reduced when the individual can better interpret the psychological meaning of their own and their partner's experiences through mentalization and responding more adaptively in interpersonal interactions (Fonagy et al., 2002). Therefore, the capacity for mentalization is not only a protective factor against the biological-neurological item of sensory processing styles, but can also improve the quality of couple relationships by reducing emotional reactivity and increasing empathy capacity and psychological flexibility (Greenberg et al., 2021; Luyten et al., 2020).

The present study was accompanied by limitations. Data collection through self-report instruments, the sample that was selected only from married individuals living in Mashhad, and voluntary available sampling were important limitations of the study. Providing interventions based on increasing the capacity of mentalization in contexts such as family counseling centers, psychotherapy clinics, and also within the framework of premarital education is recommended to improve the quality of couple interactions and prevent emotional erosion in marital relationships.

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Conflict of Interest

This article is taken from the PhD dissertation on counseling at Ferdowsi University and there is no conflict of interest in conducting it.

References

Arefi, M., Mohsen Zadeh, F., Ghezelbashian, Z., Sadeghpour, A., & ShaykhEsmaili, D. (2014). Personality similarity, the big five personality and marital satisfaction. *Family Counseling and Psychotherapy, 4*(3), 551-581. https://dor.isc.ac/dor/20.1001.1.22516654.1393.4.3.8.1 [In Persian]

Ben-Avi, N., Almagor, M., & Engel-Yeger, B. (2012). Sensory processing difficulties and interpersonal relationships in adults: an exploratory study. *Psychology, 3*(1), 70-74. https://doi.org/10.4236/psych.2012.31012

Brown, C., & Dunn, W. (2002). *Adolescent/Adult Sensory Profile: User's Manual.* Psychological Corporation. Adolescent/Adult Sensory Profile – Pearson Assessments

Brown, N. J., Meersand, P., & Rogers, K. (2022). Sensory processing sensitivity and adult attachment: A systematic review. *Journal of Personality, 90*(5), 1056–1072. https://doi.org/10.1111/jopy.12663

Dollahite, D. C., Marks, L. D., & Wurm, G. J. (2019). Generative devotion: A theory of sacred relational care in families of faith. *Journal of Family Theory and Review, 11*(3), 429-448. https://doi.org/10.1111/jftr.12339

Dunn, W. (2001). The Sensation of Everyday life: Empirical, Theoretical, and Pragmatic Considerations. *The American Journal of Occupational Therapy, 55*(6), 608-620. https://psycnet.apa.org/doi/10.5014/ajot.55.6.608

Field, A. P. (2018). *Discovering statistics using IBM SPSS Statistics (5th ed.).* SAGE Publications. https://us.sagepub.com/en-us/nam/discovering-statistics-using-ibm-spss-statistics/book260423

Fonagy, P., Gergely, G., Jurist, E. L., & Target, M. (2002). *Affect regulation, mentalization, and the development of the self*. Other Press. https://doi.org/10.4324/9780429471643

Fonagy, P., Luyten, P., & Allison, E. (2019). Epistemic trust, psychopathology and the great psychotherapy debate. *Psychological Medicine, 49*(3), 449–459. https://doi.org/10.1017/S0033291718001706

Forsberg, K., Erlandsson, L.-K., & Eklund, M. (2025). Sensory processing patterns and their relationships to coping and occupational engagement in mental health service users. *Australian Occupational Therapy Journal, 72*(1), 11-27. https://doi.org/10.1111/1440-1630.13016

Greenberg, D. M., Rudenstine, S., Alaluf, R., & Jurist, E. L. (2021). Development and validation of the Brief-Mentalized Affectivity Scale: Evidence from cross-sectional online data and an urban community-based mental health clinic. *Journal of Clinical Psychology, 77*(11), 2638–2652. https://doi.org/10.1002/jclp.23203

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis (8th ed.)*. Cengage Learning. https://doi.org/10.1007/978-3-030-06031-2_16

Jerome. E. M., Liss, M. (2005). *Relationships between sensory processing style, adult attachment, and coping.* Personality and Individual Differences. 38(6): 1341-1352. https://doi.org/10.1016/j.paid.2004.08.016

Kayser, K., Feldman, G., & Borstelmann, L. (2022). Disenchantment and emotional disengagement in long-term marriages: A process model of marital disenchantment. *Journal of Marital and Family Therapy, 48*(1), 189–204. https://doi.org/10.1111/jmft.12484

Kline, R. B. (2016). *Principles and practice of structural equation modeling (4th ed.)*. The Guilford Press. https://www.guilford.com/books/Principles-and-Practice-of-Structural-Equation-Modeling/Rex-Kline/9781462523344

Lee, O. N., & Park, G. A. (2020). The mediating effects of attachment styles on the relationship between sensory processing styles and interpersonal problems in healthy university students. *Occupational Therapy International, 1*, 1-6. https://doi.org/10.1155/2020/6204120

Luyten, P., Campbell, C., & Fonagy, P. (2020). The psychological foundations of culture: Mentalizing, attachment, and interpersonal relationships. *Journal of Psychotherapy Integration, 30*(4), 558–573. https://doi.org/10.1037/int0000219

McCann, D. (2022). Thinking under fire: Mentalization-based couple therapy for high conflict and domestically abusive couples. *Journal of Clinical Psychology, 87*(1), 67-79. https://doi.org/10.1002/jclp.23296

Meredith, P. J., Bailey, K. J., Strong, J., & Rappel, G. (2016). Adult attachment, sensory processing, and distress in healthy adults. *American Journal of Occupational Therapy, 70*(1), 7001250010. https://doi.org/10.5014/ajot.2016.017376

Sadoughi, Z., Vafaei, M., & Rasoulzadeh Tabatabaei, K. (2007). The association of sensory-processing sensitivity with parenting styles and indices of psychopathology. *Advances in Cognitive Science, 9*(1), 23-32. http://icssjournal.ir/article-1-334-en.html [In Persian]

Soper, D. S. (2020). A priori sample size calculator for structural equation models [Software]. Retrieved from http://www.danielsoper.com/statcalc

Wardle, L. D. (2011). The boundaries of belonging: Allegiance, purpose and the definition of marriage. *Journal of Public Law, 25*, 287-315. https://papers.ssrn.com/sol3/Delivery.cfm?abstractid=1962109

West, S. G., Finch, J. F., & Curran, P. J. (1995). *Structural equation models with nonnormal variables: Problems and remedies*. In R. H. Hoyle (Ed.), Structural equation modeling: Concepts, issues, and applications (pp. 56–75). Sage Publications.

Zorlular, A., Gunlu, A., & Gundogan, B. (2022). Romantic relationship experiences of highly sensitive persons: The mediating role of emotion regulation strategies. *Current Psychology, 41*, 7410–7420. https://doi.org/10.1007/s12144-021-01905-0

Zuckerman, M. (2007). *Sensation seeking and risky behavior*. American Psychological Association. https://doi.org/10.1037/11555-000