

Are Personality Traits Effective in Marital Adjustment in Couples with Sexual Dysfunction? The Mediating Effect of Sexual Satisfaction



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SUMMARY

Objective: The primary aim of the study is to investigate the relationships between personality traits, marital relationship and sexual satisfaction in couples with sexual dysfunction (SD). The secondary aim is to examine the mediating effects of marital adjustment between personality traits and sexual satisfaction, and of sexual satisfaction between personality traits and marital adjustment.

Method: The study was conducted with a total of 202 participants consisting of 101 married individuals diagnosed with SD and their spouses. Personal Information Form, Temperament and Character Inventory (TCI), Golombok-Rust Sexual Satisfaction Scale (GRISS), and Dyadic Adjustment Scale (DAS) were administered to the participants.

Results: High harm avoidance and low self-directedness were associated with decreased marital adjustment and reduced sexual satisfaction. Reduced sexual satisfaction was related to the decreased marital adjustment. According to the results of multiple mediating analyzes, mediating effect of marital adjustment was not significant in the relationship between personality traits and sexual satisfaction, while the mediating effect of sexual satisfaction was significant in the relationship between personality traits and marital adjustment. Namely, self-directedness predicted the marital adjustment through the mediating role of sexual satisfaction.

Conclusion: The results of this study demonstrated that the effects of personality traits on sexual satisfaction and marital adjustment should be considered cautiously and in detail, especially in people with SD. Interventions designed to improve healthy marital functioning should include personality traits and sexual satisfaction. In the psychotherapy for SD, focusing on personality traits and sexual functions can affect marital adjustment.

Keywords: Sexual dysfunction, temperament, character, sexual satisfaction, marital relationship

INTRODUCTION

In the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition-Text Revision (DSM-IV-TR) (American Psychiatric Association 2000), sexual dysfunction (SD) is described as the impairment in sexual desire and psychobiological stages that characterize the sexual response cycle, creating marked distress and complicates interpersonal relationships. SD is a heterogeneous ailment with clinically significant disturbance in an individual's ability to respond sexually or to have sexual pleasure (American Psychiatric Association 2013) and it has a high prevalence among males (10-52%) and females (25-63%) in the society (Laumann et al. 1999, Lewis et al. 2010); with the corresponding

percentages in Turkey being 43.3% and 48.3%, respectively (Oksuz and Malhan 2005, 2006).

Although very prevalent the etiology of sexual problems is not known (American Psychiatric Association 2013). The underlying personality traits may play a role in the development and maintenance of SD (Harris et al. 2008, McCabe et al. 2010). There are studies stating that personality traits play a role in SD (Crisp et al. 2013, Leeners et al. 2014, Peixoto and Nobre 2016, Quinta-Gomes and Nobre 2011), in sexual function (Crisp et al. 2015, Fisher and McNulty 2008, Harris et al. 2008), sexual behavior (Schenk and Pfrang 1986), sexual attitudes (Heaven et al. 2000) and sexual cognition (Moyano and Sierra 2013). Considering the literature that examined the relationship between SD and personality traits, there are

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different results encountered because different personality models and different sampling are used. In studies depending on the Five-Factor Personality Model, sexual problems were found to be related to neuroticism and extraversion (Kennedy et al. 1999, Quinta-Gomes and Nobre 2011). Problems of sexual arousal and orgasm in females were observed to be strongly related to high neuroticism and low extraversion. It has been determined that neuroticism differentiates males with and without SD and that it has an important role in male SD.

In the psychobiological model put forward by Cloninger et al. (1993) to define the structure and development of personality, personality was conceptualized with the 4 temperament dimensions (novelty seeking, harm avoidance, reward dependence and persistence) and the 3 character dimensions (self-directedness, cooperativeness, and self-transcendence). Recently, a small number of studies are seen to have been conducted on SD, depending on Cloninger model and different results have been seen to be in these studies. Konkan et al. (2012) found out that the vaginismus patients got a higher score than the control group only on the reward dependency trait which they found not to be a character trait specific to vaginismus. Investigation of premature ejaculation has drawn attention to high scores on harm avoidance (Kempeneers et al. 2013). In the literature, investigations on whether or not SD is related to certain personality dimensions have controversial results.

Marital adjustment is defined as the adjustment of partners enabling couples to solve effectively or avoid conflicts, thereby getting satisfied with their marriage and each other (Chen et al. 2007). According to Spanier and Lewis (1980), marital adjustment is the individual's perception of the degree to meet the necessities in a marital relationship, which not only expresses the general satisfaction with marriage but also the more special situations such as the satisfaction from friendship and sexuality in a marriage. Marital relationship is proposed to play an important role as both the cause and the consequence of SD (Althof et al. 2005). It has been observed that sexual problems are sometimes the result and sometimes the cause of dysfunctional or unsatisfactory relationship, although it is often difficult to determine which comes first (McCabe et al. 2010). It is thought that there is a bilateral relationship between the unresolved or increasing conflicts of relationship and the development of SD (Metz and Epstein 2002). On the one hand, distressed relationship conflicts can prevent sexual desire, arousal and intimate behaviours. On the other hand, SD can cause increasing conflicts and distress in the overall relationships of couples. Studies have shown that the couples with SD display reduced emotional and physical intimacies and less satisfaction with sexual life and marital relationship (Gülsün et al. 2006, Rust et al. 1988, Trudel et al. 1993, Trudel et al. 1997). It is seen in these studies that

there is a strong relationship between SD and the problems experienced in marriage.

Sexual satisfaction is an important component of human sexuality (Sánchez-Fuentes et al. 2014) and consists of physical and affective/emotional components. The physical component means "the pleasure" or "satisfaction from a sexual relationship"; emotional sexual satisfaction means "happiness in a continuous relationship" (Barrientos and P'aez 2006). It is stated that SD and sexual satisfaction are related to each other (Sánchez-Fuentes et al. 2014). Studies have shown that there is low sexual satisfaction in couples with SD (Byers and MacNeil 2006).

As can be foreseen, sexual satisfaction is also related to marital adjustment. The individuals with low marital adjustments have low sexual satisfaction (Byers and MacNeil 2006, Ojo 2017, Rahmani et al. 2009, Sánchez-Fuentes et al. 2014, Santtila et al. 2008). Studies have also indicated that there is a relationship between personality traits and sexual satisfaction (Sánchez-Fuentes et al. 2014). The females with elevated scores on personality trait of agreeableness reported that they had more sexual intercourse; and the males with low openness and neuroticism and females with low neuroticism reported that they drew more satisfaction from sexual intercourse (Meltzer and McNulty 2016). Similarly, neuroticism in young adult males was positively correlated with reduced sexual satisfaction (Kurpisz et al. 2016).

Little is known about the effect of personality on marriage. Karney and Bradbury (1995) stated that personality tendencies such as emotional instability and neuroticism compose "enduring vulnerabilities" affecting how the couple will adjust to stressful lives. There are studies on how an individual's personality will predict his/her marital adjustment (Kansız and Arkar 2011, Samaneh 2012), on the relationship of similarities and different features of personality with marital relationship (Wilson and Cousins 2003), and on the relationship between marital adjustment and the personality of a partner (Chen et al. 2007, Fisher and McNulty 2008). In these studies, the personality traits such as low neuroticism, openness to experience, extraversion, and social commitment have been found to be the traits that affect marital satisfaction of spouses positively; while the traits of inconsistency in emotional stability and high level of neuroticism have been deduced to have adverse effects on marital satisfaction. However, there is limited number of studies that have directly examined temperament and character traits and marital adjustment.

The model by Metz and Epstein (2002) proposes that the relationship conflict can be related to SD with three different processes; the first being the consequence of conflict and distress generated by SD; the second being the one contributing to SD and the third being a means of increasing

a couple's emotional and sexual intimacy. In the first group of these pathways, the characteristics of individual partners can contribute to SD creating distress and negative conflict interactions in the relationship of the couple. For instance, personality traits influence the couple's relationship by causing SD. Secondly, there are several pathways in which relationship conflict can lead SD. This includes negative influences of relationship conflict over sexual function. These relationship conflicts themselves can be caused by the personality traits of one partner or both partners.

As seen, the relationship between SD and personality, sexual satisfaction and marital adjustment, and the relationships of these variables with one another continue to be discussed in the literature. Also, the direction of relationship between marital adjustment and sexual satisfaction is ambiguous in the literature. Whereas some studies state that marital adjustment affect sexual satisfaction, some others advocate the reverse point of view. Furthermore, the role of personality traits in this relationship is controversial and studies dealing with all three variables are limited in the literature. Within the framework of the cited theoretical and empirical proposals, the main objective of this study is to investigate the relationships between personality traits, marital relationship and sexual satisfaction in couples with SD. Given the ambiguity of the direction of the relationship between sexual satisfaction and marital adjustment, the mediating effect of marital adjustment between personality traits and sexual satisfaction and of sexual satisfaction between personality traits and marital adjustment have been examined. Hence, it is also aimed to examine which model will produce more significant results.

METHOD

Participants

The sampling of the study consists of 101 married couples of 18-55 years of age who were diagnosed with SD according to DSM-IV-TR diagnostic criteria by psychiatrist and who applied as outpatients to gynecology and urology polyclinics of Izmir Ege Maternity and Gynecological Diseases Training and Research Hospital for a sexual problem and who haven't yet started to receive treatment. Since the study was begun before the publication of the DSM-5, the diagnostic criteria of the DSM-IV-TR were used in this study. These participants are the persons diagnosed with SD included in the database of a previously-published study (Şafak Öztürk and Arkar 2018).

Because it is known that there are problems in several fields of sexual functions in the male or female partners of persons diagnosed with SD, compared to healthy volunteers (Derogatis and Meyer 1979), the spouses of the diagnosed persons were included in this study, thereby increasing the

participant numbers to 202. The total score averages from Golombok-Rust Inventory of Sexual Satisfaction (GRISS) of the participants diagnosed and the spouses diagnosed ones in our study were 43.98 ± 16.27 and 28.72 ± 14.24 , respectively. The criteria of exclusion from the study were being illiterate, mentally retarded and having any known physical and psychological/psychiatric disorders. The mean age of the female and the male participants were, respectively 29.66 ± 7.79 and 33.73 ± 8.12 years; and 23.8% of the participants were married for less than one year, 25.7% were married for 1-3 years and 28.3% were married for 10 years or more.

Data Collecting Tools

The Personal Information Form: In the form arranged to get information about demographic features and marital status of participants, there are also two questions asked to determine whether the participants had ever applied to a psychologist or psychiatrist and whether they had a chronic/ongoing medical disease.

The Temperament and Character Inventory (TCI): This self-report inventory filled as true/false, composed of 240 items, being able to be applied to persons over 17 years of age measures four temperament (novelty seeking, harm avoidance, reward dependency, and persistence) and three character (self-directedness, cooperativeness, and self-transcendence) dimensions according to Cloninger's psychobiological personality theory (Cloninger et al. 1994). The suitability of the psychometric properties and the clinical use of the TCI in Turkey was demonstrated by Köse et al. (2004) and Arkar et al. (2005).

The Golombok-Rust Inventory of Sexual Satisfaction (GRISS): The inventory is a means of measurement developed by Rust and Golombok (1986) and applied to heterosexual individuals with a permanent single spouse or couples for evaluating the quality of sexual intercourse and SD. It has two forms of 28 items each, responded in 5-point Likert-type scale, and arranged for males and females. In the forms of male and female there are seven sub-dimensions, five of which are common (frequency, communication, satisfaction, avoidance, sensuality). Apart from common dimensions, there are sub-dimensions such as vaginismus and orgasm disorder (anorgasmia), premature ejaculation and impotence (erectile dysfunction). In the evaluation of the inventory, both the total score of the scale and the scores obtained from sub-dimensions can be used. High scores point out the deterioration in the quality of sexual life and in sexual functioning. Turkish adaptation of the inventory was made by Tuğrul et al. (1993), evidence for its validity and reliability were obtained.

The Dyadic Adjustment Scale (DAS): The scale, developed by Spainer (1976) to evaluate the quality of a couples' marriages,

their marital adjustments and the quality of the adjustments, is composed of four sub-scales (dyadic satisfaction, dyadic consensus, dyadic cohesion, and affectional expression). The scale consists of 32 items totally, with 2 items in the form of yes/no questions and other answered by 5, 6 or 7-point Likert-type scaling. Five scores can be obtained from the scale, four from sub-scales and one from the sum of the sub-scales. The increase in the scores show the increase in marital adjustment. The validity and reliability studies of the scale in its Turkish sampling were made by Fıfılođlu and Demir (2000).

Procedure

After the ethical approval was taken from the Clinical Researches Ethics Committee of Ege University, the patients who applied as outpatients to gynecology and urology polyclinics of Izmir Ege Maternity and Gynecology Diseases Training and Research Hospital for a sexual problem and who did not receive any treatment yet were directed to psychiatrist for diagnostic evaluation and thus they were diagnosed with clinician interview. The patients diagnosed with SD were informed about the study, and the participants volunteered to take part in the study with his/her spouse were given informed volunteer approval form and measurement tools. In order to eliminate a potential order effect, Personal Information Form was submitted to participants at the top, other scales being in a different order. The spouses were enabled to fill separately in the scales which were given in envelopes. The participants filled in the scales in a safe quiet and special room of hospital; after filling in the scales, they submitted them by putting in an envelope and closing it. Data collecting process continued from June 2012 until April 2013.

Statistical Analysis

The data were analyzed using the SPSS-17 (Statistical Package for the Social Sciences) software program. Some arrangements were made in the data before analyses. The scale scores of the 101 participants with SD diagnosis and of their spouses were arranged in accordance with the purpose of the study. Because GRISS's sub-scale scores of female and male and total scores were calculated differently, data set was arranged related to the scores taken from the scale in question. Accordingly, five sub-scales which were common for female and male and the total score obtained from the sum of these sub-scales were prepared to use in analyses. Two sub-scales in the female form (vaginismus and anorgasmia) and two sub-scales in the male form (premature ejaculation and impotence) were excluded from this study. Since there was not any hypothesis about gender in this study, only common sub-scales were included in the study because evaluation of females and males together was thought to serve to purpose.

In order to examine the relationships between the participants' temperament and character traits, marital adjustments and sexual satisfactions, Pearson's correlation analyses were applied and so as to determine the variables predicting sexual satisfaction and marital adjustment, hierarchical regression analyses were applied. Multiple mediation analyses were conducted with the bootstrap method proposed by Preacher and Hayes (2008).

RESULTS

The relationships between participants' temperament and character traits, marital adjustments and sexual satisfaction were analyzed with Pearson's correlation coefficients. The results are presented in Table 1. The findings have shown that there are some significant relationships between the participants' personality traits, marital adjustment and sexual satisfaction. The common personality traits regarding the DAS and the GRISS have been seen to be the harm avoidance temperament dimension and the self-directedness character dimension. When examined in a more detailed way, it can be said that as the novelty seeking and harm avoidance temperament traits increase and self-directedness character trait decreases, marital adjustment gets decreased. As the reward dependence increases, marital adjustment increases. Considering sexual satisfaction, similarly, as the harm avoidance and self-transcendence increase and self-directedness decreases, sexual satisfaction gets decreased. A medium level correlation ($r = -0.36$, $p < 0.01$) was observed to be between marital adjustment and sexual satisfaction.

Whether or not the temperament and character traits and marital adjustments of the persons with SD diagnosis and their spouses are predictive of their sexual satisfaction was examined with hierarchical regression analysis.

For this purpose, the first step was entered 7 dimensions of the TCI (novelty seeking, harm avoidance, reward dependence, persistence, self-directedness, cooperativeness, self-transcendence) so as to predict the total score taken from the GRISS. At the second step, the model was added 4 sub-scales of the DAS (dyadic satisfaction, dyadic consensus, dyadic cohesion and affectional expression). The results are given in Table 2.

According to the first model, the temperament and character dimensions significantly predict the sexual satisfaction of the participants, Adjusted $R^2 = 0.17$, $F(7, 194) = 6.72$, $p < 0.001$. At this step, only the harm avoidance temperament trait and self-directedness character trait have been seen to make significant contribution to the model. The persons' harm avoidance traits contributed to model positively ($\beta = 0.26$), and their self-directedness traits negatively ($\beta = -0.24$).

Table 1. Correlation Coefficients Among Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. NS	-	-.07	.08	-.22**	-.16*	-.16*	-.03	-.14*	-.12	-.14	-.06	-.12	-.05	.02	.03	.01	-.10	-.12
2. HA		-	-.03	-.09	-.43**	-.11	.09	-.15*	-.15*	-.13	.01	-.21**	.38**	.12	.21**	.05	.25**	.26**
3. RD			-	.03	.05	.29**	.17*	.19**	.10	.17*	.25**	.06	-.02	.07	-.09	-.09	-.02	.02
4. P				-	-.02	.00	.17*	.09	.07	.04	.17*	.02	-.10	-.13	-.12	-.09	-.05	-.04
5. SD					-	.28**	-.47**	.28**	.28**	.23**	.15*	.19**	-.33**	-.11	-.24**	-.12	-.24**	-.22**
6. C						-	.02	.12	.08	.13	.10	-.00	-.03	.15*	-.11	.01	-.04	.05
7. ST							-	-.04	-.13	-.01	.06	-.04	.14*	.08	.06	.06	.13	.10
8. DAS Total Score								-	.85**	.90**	.59**	.69**	-.36**	-.28**	-.25**	-.49**	-.30**	-.19**
9. Dyadic Satisfaction									-	.66**	.30**	.58**	-.37**	-.26**	-.21**	-.45**	-.33**	-.22**
10. Dyadic Consensus										-	.37**	.56**	-.25**	-.18*	-.17*	-.39**	-.20**	-.11
11. Dyadic Cohesion											-	.27**	-.19**	-.12	-.26**	-.25**	-.12	-.08
12. Affectional Expression												-	-.44**	-.48**	-.16*	-.52**	-.41**	-.23**
13. GRISS Total Score													-	.53**	.54**	.52**	.73**	.76**
14. Frequency														-	.18*	.45**	.40**	.31**
15. Communication															-	.13	.32**	.41**
16. Satisfaction																-	.26**	.23**
17. Avoidance																	-	.64**
18. Sensuality																		-

* $p < 0.05$ ** $p < 0.01$

NS: Novelty Seeking; HA: Harm Avoidance; RD: Reward Dependency; P: Persistence; SD: Self-Directedness; C: Cooperativeness; ST: Self-Transcendence; DAS: The Dyadic Adjustment Scale; GRISS: The Golombok-Rust Inventory of Sexual Satisfaction.

The second model was also successful in explaining the sexual satisfaction of participants, Adjusted $R^2 = 0.30$, $F(11, 190) = 8.99$, $p < 0.001$. According to this result, in addition to harm avoidance and self-directedness personality traits, the affectional expression sub-scale of DAS also made significant contribution to the model ($\beta = -0.33$). After controlling the temperament and character traits, only marital adjustment explains by 15% the variance in the sexual satisfaction of the participants. At this step, when marital adjustment is added to the model, the significance of the contributions of the harm avoidance and self-directedness traits to the model were seen to decrease as compared to the previous step.

Depending on the results in hierarchical regression analysis, the mediating role of marital adjustment in the relationship

between personality traits and sexual satisfaction was examined with multiple mediation model. Two separate mediation analyses were conducted in which the harm avoidance and self-directedness personality traits seen to be significant in the consequence regression analysis were independent variables.

Whether marital adjustment has a mediating effect in the relationship between the harm avoidance temperament dimension and sexual satisfaction was examined with multiple mediation model as proposed by Preacher and Hayes (2008). On the model formed, harm avoidance had a direct effect on sexual satisfaction ($\beta = 1.08$, $t = 5.76$, $p < 0.001$). Besides, harm avoidance also has effect on the other sub-scales of DAS apart from dyadic cohesion. Similarly, two sub-scales

Table 2. Hierarchical Regression Analysis Results for the Golombok-Rust Inventory of Sexual Satisfaction Total Score

	NS	HA	RD	P	SD	C	ST	DS	DC	DH	AE	Constant	Adjusted R ²	F	F for ΔR^2
1. Step	B	-.33	.76	-.08	-1.07	-.64	.21	.06				44.95	.17	6.72***	6.72***
	SH B	.27	.21	.39	.75	.23	.26	.25							
	β	-.09	.26***	-.01	-.10	-.24**	.05	.02							
2. Step	B	-.51	.61	.15	-.95	-.44	.06	.08	-.38	.21	-.23	71.40	.30	8.99***	10.61***
	SH B	.25	.20	.37	.67	.22	.24	.23	.21	.16	.22	.53			
	β	-.13	.21**	.03	-.09	-.17*	.02	.02	-.16	.12	-.07	-.33***			

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

NS: Novelty Seeking; HA: Harm Avoidance; RD: Reward Dependency; P: Persistence; SD: Self-Directedness; C: Cooperativeness; ST: Self-Transcendence; DS: Dyadic Satisfaction; DC: Dyadic Consensus; DH: Dyadic Cohesion; AE: Affectional Expression.

Table 3. Hierarchical Regression Analysis Results for Dyadic Adjustment Scale Total Score

		NS	HA	RD	P	SD	C	ST	Frequency	Communication	Satisfaction	Avoidance	Sensuality	Constant	Adjusted R2	F	F for ΔR2
1. Step	B	-.46	-.12	1.14	.67	.81	-.13	.19						79.10	.10	4.08***	4.08***
	SH B	.32	.24	.46	.84	.27	.31	.29									
	β	-.10	-.04	.18*	.06	.27**	-.03	.05									
2. Step	B	-.53	-.05	.80	-.08	.54	-.04	.27	-.14	-.99	-2.21	-1.06	.59	71.40	.33	9.06***	14.11***
	SH B	.28	.21	.40	.73	.24	.27	.25	.64	.55	.35	.44	.46				
	β	-.12	-.02	.13*	-.01	.18*	-.01	.07	-.02	-.12	-.42***	-.19*	.10				

*p<0.05 ** p<0.01 ***p< 0.001

NS: Novelty Seeking; HA: Harm Avoidance; RD: Reward Dependency; P: Persistence; SD: Self-Directedness; C: Cooperativeness; ST: Self-Transcendence.

of DAS (dyadic satisfaction, affectional expression) also have effect on the total score of sexual satisfaction. Yet, when harm avoidance and all mediating variables were entered into the model, the effect of harm avoidance on sexual satisfaction did not lose its significance or did not have any decrease in its significance level ($\beta = 0.86$, $t = 4.91$, $p < 0.001$). Accordingly, sub-scales scores of marital adjustment did not have any mediating effect between the harm avoidance temperament trait and sexual satisfaction (point estimate = 0.22 and 95% BCa GA [0.04 - 0.42]). The harm avoidance temperament trait keeps its effect on sexual satisfaction even when marital adjustment score is put into effect.

Correspondingly, the multiple mediating effects of sub-scales of marital adjustment have been examined in the relationship between self-directedness character trait and sexual satisfaction. According to the result of the analysis, the direct effect of self-directedness on sexual satisfaction is significant ($\beta = -0.88$, $t = -4.96$, $p < 0.001$). However, this effect keeps its significance even when 4 sub-scales of marital adjustment are added to the model ($\beta = -0.64$, $t = -3.77$, $p < 0.001$). The marital adjustment was seen not to have a mediating effect also in the relationship between self-directedness character trait and sexual satisfaction (point estimate = -0.24 and 95% BCa GA [-0.41 - -0.09]). Similarly to harm avoidance, self-directedness has a direct effect on sexual satisfaction even when marital adjustment is included in the operation. Therefore, both conducted analyses have shown that marital adjustment does not have mediating effect between personality traits and sexual satisfaction. Personality traits do not explain sexual satisfaction through marital adjustment.

Whether or not the marital adjustment of persons with SD diagnosis and their spouses can be explained by the participants' personality traits and sexual satisfaction was examined with hierarchical regression analysis. For this purpose, in order to predict the total score taken from DAS, 7 dimensions of TCI (novelty seeking, harm avoidance, reward

dependence, persistence, self-directedness, cooperativeness, and self-transcendence) were added to the model at the first step and 5 sub-scales of GRISS in common for female and male (frequency, communication, satisfaction, avoidance, sensuality) were added to the model at the second step. The results are presented in Table 3.

According to the results of the first step of hierarchical regression analysis, the participants' temperament and character traits statistically significantly explain their marital adjustment, Adjusted $R^2 = 0.10$, $F(7, 194) = 4.08$, $p < 0.001$. According to the results, the reward dependence temperament trait ($\beta = 0.18$) and the self-directedness character trait ($\beta = 0.27$) significantly predicted the marital adjustment, with the latter trait making more contribution to the model as compared to reward dependence, by better explaining the marital adjustment.

According to the results of the second step of hierarchical regression analysis, this model was also found significant, Adjusted $R^2 = 0.33$, $F(12, 189) = 9.06$, $p < 0.001$. Accordingly, in addition to reward dependence and self-directedness personality traits found to be significant in the first model, the GRISS sub-scales of satisfaction ($\beta = -0.42$) and avoidance ($\beta = -0.19$) also made significant contributions to the model. After controlling the temperament and character traits of participants, only sexual satisfaction scores explained 13% of marital adjustment variance. Also, when sexual satisfaction scores of participants were entered into the model, the significance levels the contribution to the model of both of the reward dependence and self-directedness personality traits were reduced at the second step as compared to the first step.

Depending on these results (especially the reductions in the significance levels), it has been examined whether the sexual satisfaction has a mediating effect in the relationship between the participants' temperament and character traits and their marital adjustments. The fact that reward dependence and self-directedness personality traits which significantly explain

marital adjustment are independent variables has been conducted through two separate mediation analyses. These analyses have been performed as proposed by Preacher and Hayes (2008).

Whether the sexual satisfaction (5 sub-scales of GRISS) has a mediating effect in the relationship between reward dependence temperament trait and marital adjustment has been examined. According to the established model, reward dependence has a direct effect on marital adjustment ($\beta=1.19$, $t=2.69$, $p<0.01$). Yet, this temperament trait has been seen to have direct effect on none of the mediator variables. Accordingly, the reward dependence temperament trait has been seen not to explain sexual satisfaction. The mediation analysis conducted depending on this temperament trait has been brought to an end since it does not meet the assumptions (predicting variable must have direct effect on mediator variables).

Whether the sexual satisfaction has a mediating effect between the self-directedness character trait and marital adjustment has also been examined. According to the analyses, the self-directedness character trait has been seen to have significant direct effect on marital adjustment ($\beta=0.83$, $t=4.09$, $p<0.001$). Self-directedness also significantly predicts GRISS' sub-scales of communication, avoidance and sensuality; similarly, these three sub-scales have direct effect also on marital adjustment. When 5 sub-scale of GRISS are put into the relationship between self-directedness and marital adjustment, it is found that the effect of self-directedness on marital adjustment is still significant but its level of significance has decreased to some extent ($\beta=0.53$, $t=2.88$, $p<0.01$). Hence, it can be said that sexual satisfaction has a partial mediating effect between the self-directedness character trait and marital adjustment. Whether or not this effect had significance was analysed by 1000 bootstrap sampling as proposed by Preacher and Hayes (2008) and significant indirect effects of the mediator variables were observed (point estimate = 0.30 and 95% BCa GA [0.08 - 0.55]). When the mediator variables were examined singly, it was seen that the mediating effect of only the communication sub-scale (point estimate = 0.10 and 95% BCa GA [-0.01 - 0.25]) and the avoidance sub-scale (point estimate = -0.13 and 95% BCa GA [0.02 - 0.33]) were significant but the mediating effect of the other sub-scales were not. The results are shown in Figure 1. Two out of five sub-scales of GRISS are seen to have partial mediating effect in the relationship between the self-directedness and marital adjustment. In summary, it can be said that sexual satisfaction has a mediating effect between the self-directedness character trait and marital adjustment; and self-directedness explains marital adjustment through sexual satisfaction.

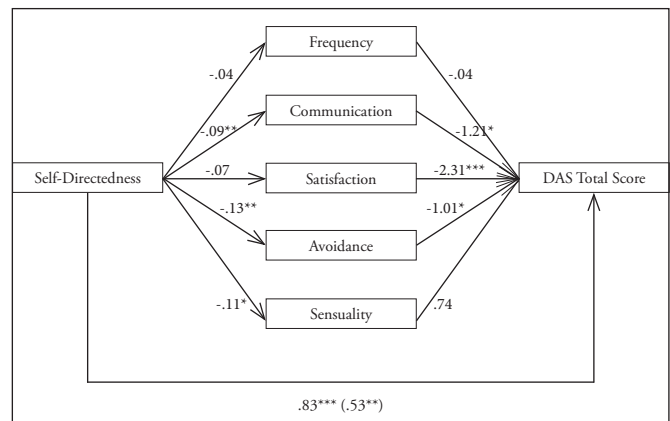


Figure 1. Mediating Roles of Sexual Satisfaction in the Relationship between Self-directedness and Marital Adjustment

Unstandardized Beta is Presented in Figure; * $p<0.05$ ** $p<0.01$ *** $p<0.001$.

DISCUSSION

In this study, the relationships between personality traits, marital adjustment and sexual satisfaction in couples with SD and whether the marital adjustment or the sexual satisfaction has mediating effect have been examined. According to the results, high harm avoidance temperament trait and low self-directedness character trait were related to decreased marital adjustment, while high reward dependence temperament trait was related to increased marital adjustment. Few studies are seen in the literature on the relationship of temperament and character dimensions with marital adjustment. Kansız and Arkar (2011), did not observe any relationship between marital adjustment and the harm avoidance and self-directedness traits; and, while the high reward dependence temperament trait was seen to predict directly general marital adjustment levels between spouses. It was concluded that the high reward dependence of spouses can be taken as a basis in foreseeing general marital satisfaction. However, the fact that this study was conducted with community sampling limits our study to be compared with it. In our study it is seen that high harm avoidance and low self-directedness traits are also related to decreased sexual satisfaction. In the literature, it is seen that there are studies finding relationship between personality traits and sexual satisfaction in the studies made with other personality models (Kurpysz et al. 2016, Meltzer and McNulty 2016). Consequently, this finding that we have obtained is in compliance with the finding of literature. In addition to them, the positive relationship between sexual satisfaction and marital adjustment are in compliance with the literature findings (Litzinger and Gordon 2005, Ojo 2017, Rahmani et al. 2009, Santtila et al. 2008, Sánchez-Fuentes et al. 2014).

The hierarchical regression analysis and the results of multiple mediation analyses conducted depending on them are other important findings of the study. Firstly, the sexual satisfaction

levels of people have been observed to be predicted by harm avoidance and self-directedness personality traits and additionally marital adjustment to be predicted by affectional expression sub-dimension. This result suggests that high harm avoidance and low self-directedness can be a main risk factor for sexual satisfaction. Results of the mediation analyses are of supportive to this interpretation. Marital adjustment has been observed not to have a mediating effect in the relationship between the harm avoidance temperament trait and the self-directedness character trait and sexual satisfaction. Namely, harm avoidance and self-directedness personality traits still have their effects on sexual satisfaction when the marital adjustment score is concerned. The fact that Borg et al. (2012) stated that harm avoidance temperament trait may have a direct effect on the development and maintaining of vaginismus is supportive of our results. Harm avoidance is characterized by passive avoidant characteristics such as pessimist thoughts about probable future problems, fear from uncertainty, feel ashamed of strangers (Arkar et al. 2005). In people with high harm avoidance and low self-directedness features, deliberateness, shyness, skepticism, and pessimism are higher, and responsibility, purposiveness, skillfulness, and self-esteem are lower (Arkar 2004). Considering that these features affect symptoms of differing mental disorders (Chávez-Eakle et al. 2006), they may within reason affect sexual satisfaction.

Since the direction of the relationship between marital adjustment and sexual satisfaction has not been exactly clarified in the literature, in this study these have been used in separate analyses as dependent variables. Therefore, it was thought that determining the prediction of marital adjustment scores of the participants was important. The results have shown that some personality traits and sexual satisfaction predict marital adjustment. According to the hierarchical regression analysis, the scores of sexual satisfaction and sexual avoidance predict marital adjustment as well as the reward dependence temperament trait and self-directedness character trait. The people with reward dependence traits are defined as those who try to please others, who are helpful, emotional and who can postpone their satisfaction (Arkar et al. 2005). When adhered to these traits, the self-directedness trait is also expected to predict marital adjustment. Thus, the study of Kansız and Arkar (2011) support our finding. The mediation analysis conducted depending on these results has indicated that sexual satisfaction has a mediating role between the self-directedness trait and marital adjustment. It can be said that the people who got low scores from self-directedness character trait have deteriorated sexual communication and increased sexual avoidance and therefore their marital adjustment decreases. Fisher and McNulty (2008) showed that sexual satisfaction has a mediating role between neuroticism and marital adjustment. Considering the relationship between

self-directedness character trait and neuroticism (Sevi Tok and Arkar 2012), our findings can be said to support the literature.

A person's ability to accept his/her own limitations is important in the development of mature self-oriented behaviour. Maladjusted individuals with inferiority and inadequacy senses are often reactional; whereas individuals with good adjustment know and accept the truth about themselves. It was said that individuals with low self-directedness trait have the very adverse characters and low self-esteem; they tend to accuse others for their problems and struggle with themselves (Cloninger et al. 1993). Therefore, these traits are expected to cause a variety of problems, one of which may involve sexual satisfaction. It has been found that self esteem is also related to sexual satisfaction, and that high level of self esteem enables better communication with the partner for satisfactory sexual behaviours (Oattes and Offman 2007). Timm and Keiley (2011) reported a positive relationship between sexual communication and marital satisfaction. Communication on sexuality and sexual intercourse largely involve emotional partnership. The intercommunication of couples is related to sustaining a cohesive relationship. The couples lacking the skills to organize their emotional expressions and to communicate successfully tend to be defensive and to withdraw from conflict. Such behaviours predict the later development of displeasure with marriage and its deterioration (Litzinger and Gordon 2005).

Avoidance of sexual intercourse, just as sexual communication, is one of the important components of sexual satisfaction. Micò et al. (2013) stated that in general the inhibitory aspects of the personality have deeper effects on sexual motivation than the excitatory ones. In this sense, the people with low self-esteem and low self-directedness character trait, who suppress their faults and accuse others are also likely to avoid sexual intercourse. This may have an effect deteriorating marital adjustment in the end.

These results of our study also overlap with the information reported in the literature. It can be said that lack of sexual communication and avoidance arising on the basis of low self-directedness character trait decrease marital adjustment. Individuals with negative self-orientation, addictive traits, the tendency to deny their faults and to be reactional may have difficulty in sexual communication and may avoid sexuality. This may lead to a reduction in general marital adjustment. Thus, sexual satisfaction can be said to be a feature to be dealt with (increasing communication in sexuality and decreasing avoidance of sexual intercourse) in the interventions to be designed to develop healthy marital functions and especially in treatment of couples with SD.

The results of the study are thought to have some theoretical and practical implications. Theoretically, our results demonstrated the necessity of understanding the importance

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- of sexual intercourse to comprehend better the relationship between personality traits and marital adjustment. Here it is specifically seen that the association of low self-directedness character trait with lower levels of marital adjustment is caused by special processes in which low self-directedness trait adversely affects sexual intercourse. Also, as mentioned, the direction between sexual satisfaction and marital relationship is controversial. Yet, the results of this study suggest that a path leading from sexual satisfaction to marital adjustment will be more reasonable. However, it should not be forgotten that this can be cyclical process. With respect to the practice, these findings emphasize the importance of sexual intercourse in the interventions designed to ensure healthy marital functioning. The interventions aiming to help couples to deal with the negative aspects of their relationships can increase the benefit to be taken by dealing also with the sexual component of the relationship. Indeed, many studies have pointed out the bilateral effects of sexual satisfaction and marital adjustment. In sexual therapy, focusing especially on sexual communication between couples and decreasing the avoidance from sexual intercourse will increase the marital adjustment of couples. In the literature, emphasis is put on the importance of the role of personality traits in psychotherapy (Zinbarg et al. 2008). Working on the negative symptoms seen in low self-directedness character trait may cause a change in marital adjustments of individuals. It may be important to pay attention to this character trait especially in interpersonal psychotherapy and cognitive psychotherapy. Also, depending on the results of the mediator variable analyses, it would be necessary to include sexual communication and avoidance from sexual intercourse which amount to sexual satisfaction and assumed to be affected by personality, even if personality traits are not made use of in psychotherapy.
- This study is one of the rare studies examining the personality, sexual satisfaction and marital adjustment in a clinical sampling. Besides, it also shows which personality traits and in which way the marital adjustment of couples with SD are explained. Despite these important findings, the study has some limitations. The cross sectional nature of the study is a limitation. Especially, the longitudinal studies to be undertaken will enable us to understand better this relationship. Using self-report scales is another limitation. In evaluating personality, it is important to carry out similar studies using clinical interviews or measurement tools with different theoretical basis. In this study aiming to submit a general viewpoint, evaluations according to the SD types have not been made. It is thought that repetition of obtained findings by carrying out similar studies on specific diagnostic groups will make important contributions. Additionally, it is important to examine females and males separately in a larger sampling. Therefore, designing prospective studies by considering all these limitations are thought to give in depth results.
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