Social Psychology

Personality Traits and Marital Adjustment: Interaction between Intra and Interpersonal Aspects

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Abstract: Personality characteristics have been evaluated due to the reflexes that they provoke in the conjugal satisfaction and adjustment. The objective of this study was to evaluate the actor-partner effects of personality traits on the conjugal adjustment of heterosexual couples. The study, quantitative and explanatory, evaluated 231 couples from different cities of Rio Grande do Sul. Respondents completed the Socio-demographic questionnaire, the Revised Dyadic Adjustment Scale and the Personality Adjectives Marker scale. The data was analyzed using the Latent Traits Model. The results indicate that socialization, neuroticism and achievement factors have an effect on the marital adjustment of husbands and wives. There is a partner effect on the wives' neuroticism factor and on the husbands' achievement factor. The extroversion and openness factors do not provoke actor-partner effects on the adjustment of the couples. The results are discussed in the light of other studies and research agendas are suggested.

Keywords: marital relations, personality traits, emotional adjustment

Traços de Personalidade e Ajustamento Conjugal: Interação entre Aspectos Intra e Interpessoais

Resumo: As características de personalidade têm sido avaliadas devido aos reflexos que provocam na satisfação e no ajustamento conjugal. O objetivo deste estudo foi avaliar os efeitos ator-parceiro dos traços de personalidade sobre o ajustamento conjugal de casais heterossexuais. O estudo, quantitativo e explicativo, avaliou 231 casais provenientes de diferentes cidades do Rio Grande do Sul. Os respondentes preencheram questionário sócio demográfico, o *Revised Dyadic Adjustment Scale* e a escala de Adjetivos Marcadores da Personalidade. Os dados foram analisados por meio do Modelo de Traços Latentes. Os resultados indicam que os fatores socialização, neuroticismo e realização provocam efeito ator sobre o ajustamento conjugal de maridos e esposas. Ocorre efeito parceiro no fator neuroticismo das esposas e no fator realização dos maridos. Os fatores extroversão e abertura não provocam efeitos ator-parceiro sobre o ajustamento dos casais. Os resultados são discutidos à luz de outros estudos e agendas de pesquisa são sugeridas.

Palavras-chave: relações conjugais, traços de personalidade, ajustamento emocional

Rasgos de Personalidad y Ajuste Conyugal: Interacción entre los Aspectos Intra e Interpersonales

Resumen: Las características de la personalidad se han evaluado debido a los reflejos en la satisfacción y ajuste marital. El objetivo del estudio fue evaluar los efectos actor-pareja de los rasgos de personalidad en el ajuste marital de las parejas heterosexuales. El estudio, cuantitativo y explicativo, evaluó 231 parejas de diferentes ciudades del Rio Grande do Sul. Los entrevistados completaron un cuestionario sociodemográfico, el *Revised Dyadic Adjustment Scale* y la escala de Adjetivos Marcadores de la Personalidad. Los datos fueron analizados por el Modelo de Rasgos Latentes. Los resultados indicaron que los fatores socialización, neuroticismo y realización tuvieran un efecto en el ajuste marital de los maridos y las esposas. El neuroticismo de las esposas y el factor de realización de los maridos tuvieran un efecto en la pareja. Los factores extroversión y apertura no provocaron efectos de actor-pareja en el ajuste marital de las parejas. Los resultados se examinan a la luz de otros estudios y se sugieren agendas de investigación.

Palabras clave: relaciones conyugales, rasgos de personalidad, ajuste emocional

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Being a couple involves the desire and decision to live with another person, to share a life project, despite the challenges inherent in the daily life of two people, such as conflicts arising from differences about values, priorities, needs, etc. (Costa & Mosmann, 2015). Couples who experience high and frequent levels of conflict tend to have low levels of marital adjustment and in the long run can develop physical and emotional health problems (Abbasi, 2017).

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Marital adjustment is made up of the factors of consensus, cohesion and conjugal satisfaction. It is a measure that evaluates, respectively, the spouses' ability to agree on the aspects under which they diverge, the emotional closeness of partners who manage to feel intimate, and how satisfied the couple is with the relationship and wish to remain together (Hollist et al., 2012). In the scientific literature, the terms adjustment and marital satisfaction are often used as synonyms, although the former is a more robust measure. We will use the original nomenclature that appears in each study, however, to establish this distinction is necessary.

Low levels of marital adjustment are strong predictors of divorce and have therefore been the focus of national and international research (Solomon & Jackson, 2014). In these relationships high levels of conflict tend to occur involving, among other reasons, the disapproval of personal characteristics in the partner (Costa & Mosmann, 2015). To deepen this perspective, a literature review study found that the personality traits of the spouses are among the factors associated with the different levels of marital satisfaction (Tavakol, Nasrabadi, Moghadam, Salehiniya, & Rezaei, 2017).

Personality is defined as a set of traits referring to an individual's way of thinking, feeling and behaving in a wide variety of situations. In adulthood, personality traits are stable, broad and easy to recognize. However, values, beliefs and motivations that make up the personality can be altered through the different experiences that the individual has throughout life and which depend on the context in which he/she is inserted (Feist, Feist, & Roberts, 2015). It is even discussed that the individual's perception of marital adjustment depends on his own personality traits (Mônego & Teodoro, 2011; Schaffhuser, Allemand, Werner, & Martin, 2015).

To evaluate the personality the researches have used, predominantly, the Big Five - Model of the Big Five Factors, widely researched and considered the most prominent personality evaluation construct. The model is composed by neurotic factors, socialization, extroversion, achievement and openness (Hutz et al., 1998).

The neuroticism factor involves emotional instability and excessive concern. Individuals with this personality trait have emotions such as anxiety, insecurity, distrust and anger at higher levels. Also present are depressed moods and distorted perceptions which include a negative perception of the relationship (Hellmuth & McNulty, 2008; Hutz et al., 1998).

The extroversion factor is characterized by the capacity for social interaction, communication and assertiveness. People who score more on this factor are active, optimistic, dynamic and little impulsive and dominant. The socialization factor is related to kindness, generosity, kindness and delicacy in dealing with others. Individuals with high scores in this factor provide emotional support, are docile, warm, caring, affable and altruistic (Noronha, Martins, Campos, & Mansão, 2015).

The achievement factor is related to persistence, control, organization and motivation to achieve objectives.

Organized, determined, reliable, punctual, hard-working, ambitious and scrupulous people present high scores in this factor. Finally, the openness factor refers to the valorization of new experiences and exploratory behaviors. Imaginative, creative, curious, flexible people with little traditional and conservative values score more on this factor (Hutz et al., 1998; Noronha et al., 2015).

A meta-analysis that gathered data from 19 empirical studies totaling 3,848 participants analyzed the five personality factors that make up the Big Five Model in association with marital satisfaction and found significant correlations of four factors with satisfaction. Individuals with low levels of neuroticism and high levels of socialization, achievement and extroversion had higher levels of marital satisfaction. There was no significant difference between men and women (Malouff, Thorsteinsson, Schutte, Bhullar, & Rooke, 2010).

In Brazil, Mônego and Teodoro (2011) investigated the predictor effect of personality traits on the conjugal satisfaction of 192 university students who were in a loving relationship. The results indicated neuroticism as a negative predictor of marital satisfaction and the achievement factor as a positive predictor. An equivalent sample study conducted in Tehran, pointed out neuroticism as the main negative predictor of marital satisfaction and the factors socialization, achievement, extroversion and openness as positive predictors of satisfaction (Amiri, Farhoodi, Abdolvandc, & Bidakhavidi, 2011).

In a longitudinal study conducted in Saint Louis, USA, with a sample of 4,103 couples, it was evaluated whether personality traits influence marital satisfaction and predict divorce (Solomon & Jackson, 2014). The results confirmed the influence of personality on conjugal satisfaction and the latter on divorce, therefore, satisfaction as a mediating variable. It was also found that the partner effect - personality characteristics of one member of the couple as a predictor of the other's marital satisfaction – was superior to the actor effect – personality characteristics of the individual influencing his/her own marital satisfaction.

Neuroticism has been associated with the negative perception of conjugality, being considered the most persistent and harmful vulnerability within a relationship (Malouff et al., 2010). It is the most robust negative predictor of marital satisfaction and adjustment (Hellmuth & McNulty, 2008; Solomon & Jackson, 2014), mainly from the intrapersonal perspective - actor effect (Schaffhuser, Wagner, Lüdtke, & Allemand, 2014). This occurs because in this personality trait individuals react in an exaggerated and distorted way to misunderstandings, are more critical and perceive the partner also as more critical and hostile, even if this characteristic is not confirmed (Malouff et al., 2010). Other researches with couples in long term relationships found the sociability factors (Brudek, Steuden, & Jasik, 2018) and achievement (Brudek et al., 2018), as the most robust predictors of marital adjustment.

A review of research using the data analysis method APIM - Actor Partner Interdependence Model, found in most studies that neuroticism, socialization and achievement factors are effectively associated and predict marital adjustment through intrapersonal (actor effect) and interpersonal (partner effect) effects. Extroversion and openness factors have been associated with conjugal adjustment in fewer studies (Weidmann, Ledermann, & Grob, 2016).

According to the research, personality traits predict the marital adjustment, more specifically, the evaluation that each member of the dyad makes of the relationship and the spouse (Brock, Dindo, Simms, & Clark, 2016; Mund, Finn, Hagemeyer, & Neyer, 2016; Schaffhuser et al., 2014). Therefore, effects occur from an intrapersonal (actor effect) and interpersonal (partner effect) perspective, although the actor effect is superior to the partner effect because the evaluation of the adjustment is directly associated to the personality trait of the one who evaluates (Brock et al., 2016).

As for the differences between men and women, the studies are inconclusive. Malouff et al. (2010), found no difference in relation to gender, Terveer and Wood (2014) argue that wives have more influence on the marital functioning and Iveniuk, Waite, McClintock and Teidt (2014) that the characteristics of husbands have greater impact on the marital satisfaction of wives.

Studies with samples composed of couples make it possible to consider the interdependence between the

variables of the couple (Kenny, Kashy, & Cook, 2006). Thus, it is possible to analyze the effect that personality traits have on the individual's own marital adjustment, actor effect - intrapersonal perspective, and the effect that one spouse's personality traits have on the other's marital adjustment, partner effect - interpersonal perspective (Brock et al., 2016; Mônego & Teodoro, 2011; Mund et al., 2016).

Moreover, no studies were found with Brazilian couples considering the interaction between personality traits and conjugal adjustment. Therefore, the objective of this study was to evaluate the actor-partner effects of personality traits on the marital adjustment of heterosexual couples.

Five structural dyadic models were constructed, each composed of a personality trait, as illustrated in Figure 1.

The following assumptions were tested: (H1) neurotic factors (Hellmuth & McNulty, 2008; Mônego & Teodoro, 2011; Schaffhuser et al., 2014; Solomon & Jackson, 2014; Weidmann et al., 2016), socialization (Brudek et al., 2018; Weidmann et al., 2016) and achievement (Brudek et al., 2018; Mônego & Teodoro, 2011; Weidmann et al., 2016), will produce actor-partner effects on the marital adjustment for husbands and wives; (H2) extroversion and openness factors will not produce effects on the marital adjustment (Weidmann et al., 2016).

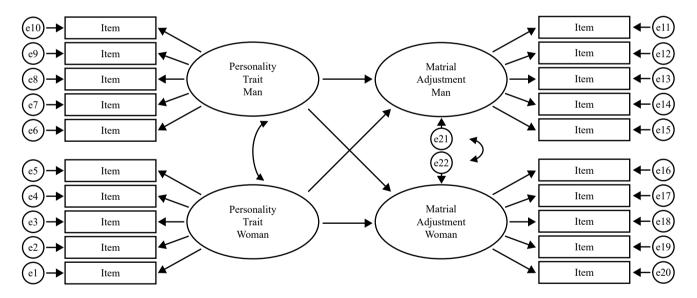


Figure 1. Dyadic structural model built by the authors - illustrative.

Method

Participants

This study characterizes a quantitative approach of a transversal and explanatory nature. The participants were 231 heterosexual couples (462 individuals). The minimum age of respondents was 18 years and the maximum 79 years (M = 41.41; SD = 12.40) and the union time ranged from 6 months to 53 years (M = 15.15; SD = 12.05). In order

to participate in the study, respondents should be over eighteen years old, declare themselves heterosexual, be in a stable union and have lived with their spouse for at least six months so that the interaction could be evaluated in the context of cohabitation. The exclusion criteria were non-heterosexual individuals, those in love relationships without the context of cohabitation, and cases where only one member of the dyad was willing to participate in the research. Other socio-demographic information from the sample is shown in Table 1.

Table 1 Socio-demographic Characteristics of the Sample (N = 462)

Education Elementary level 37 8.0 Highschool level 110 23.8 Technical level 28 6.1 Higher education level 120 26 lato and stricto sensul Post-graduation 167 36.1 Place of residence Porto Alegre 74 16 Metropolitan region 64 13.9 Cities in the interior of the state 324 70.1 Marital situation Only civil marriage 64 13.9 Only religious marriage 11 2.4 Civil and religious marriage 206 44.6 Living together - stable union 181 39.2 Number of children 260 56.2 3, 4 or 5 children 46 10 Work Retired or out of work 75 16.2 Away from home 387 83.8 Hours of work away from home 38 8.2 Up to 1 minimum wages 167 36.1 4 to 6 minimum wages 167 36.1 <tr< th=""><th colspan="2">Sociodemographic variables</th><th colspan="3">Participants</th></tr<>	Sociodemographic variables		Participants		
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Spiritism 56 12.1	Religion	Catholic	313	67.7	
1		Evangelical	47	10.2	
Protestant 9 1.9		Spiritism	56	12.1	
		Protestant	9	1.9	
Non-religious 37 8		Non-religious	37	8	

Instruments

Socio-demographic Questionnaire. The survey of the participants' characteristics investigated age, time of union, schooling, place of residence, marital status, and number of children, type of work, work load, personal income and religion.

Personality Adjectives Markers - Big Five (Hutz et al., 1998). The questionnaire, created based on the Theory of Trait, evaluates the Five Great Factors (FGF) of personality, which are: socialization, extroversion, achievement, neuroticism and openness. The scale, in the simplified version, has 64 adjectives that complement the statement "I am a person...". The respondent should assess how much each adjective describes his/her personality on a Likert scale of seven points ranging from a "totally disagree" to seven "totally agree". In the Brazilian study the Cronbach alphas for the five factors were 0.88 for socialization, 0.88 for extroversion, 0.84 for achievement, 0.80 for neuroticism and 0.78 for openness. In this study, the respective values were 0.86, 0.70, 0.76, 0.73 and 0.78 for men and 0.85, 0.66, 0.70, 0.66 and 0.76 for women.

Revised Dyadic Adjustment Scale (R-DAS) (Hollist et al., 2012). The reduced version of the marital adjustment scale has 14 items that constitute three factors. The first, consensus, has six items that evaluate the level of agreement/ disagreement between partners on different topics on a scale of six points ranging from five "we always agree" to zero "we always disagree". The satisfaction factor has four items that measure the frequency with which partners quarrel, talk about divorces, among other topics, on a scale of six points ranging from zero "always" to five "never". The third factor, cohesion, has four items that measure the frequency with which partners carry out different activities together. Items must be scored on a Likert five-point scale ranging from zero "never" to five "more than once a day", with the exception of item 11 which is scored on a five-point scale, four being "every day" and zero "never". In the validation for Brazil were found alpha de Cronbach of 0.90 for total adjustment, 0.81 for the consensus factor, 0.85 for satisfaction and 0.80 for cohesion. In this study, the Cronbach's Alpha values for total adjustment and consensus, satisfaction and cohesion factors were 0.84, 0.77, 0.78 and 0.80 for men and 0.87, 0.72, 0.83 and 0.82 for women, respectively.

Procedure

Data collection. The data collection took place in Porto Alegre, metropolitan region and cities of the interior of the state of Rio Grande do Sul. The responsible researcher contacted the couples via phone, *WhatsApp* and email through the indication of known people, therefore, data collection for convenience. In the first contact the objectives of the study were explained, as well as the risks and benefits involved in participation. If there was interest and availability, the day and time were scheduled for the collection at the couple's preferred location, which varied between residence and workplace.

The procedure took an average of 60 minutes and involved reading aloud the Free and Informed Consent Term (FICT), clarifying doubts, signing the term in four copies, each member of the couple kept one copy and returned the other to the researcher who would keep the documents separately from the questionnaires, avoiding the identification

of participants. Finally, the survey questionnaire was filled out, which was carried out by the couple separately, that is, without one having access to the other's answers. In addition, each survey questionnaire was identified with the letter corresponding to gender, man "H" and woman "M" and a number corresponding to the couple, as an example: Envelope 1 - Questionnaires H1 and M1; Envelope 2 - Questionnaires H2 and M2 etc.

Data analysis. Initially a database was built through the SPSS 25.0 program (*Statistical Package for Social Science*), The sample's normality criteria were checked, and then descriptive analyses were performed to calculate percentages, means and standard deviations. A second database was also built, organized in its own structure for the performance of daily analyses. In this format, different from the usual one where each individual corresponds to one line of the database, each couple corresponds to one line. There are, therefore, the double of variables and the reduction of the sample by half (Andrade, Cassepp-Borges, Ferrer, & Sanchez-Aragón, 2017).

The AMOS 22.0 program (Analysis of Moment Structures) was used to perform the analysis of latent traits model in which Structural Equation Modeling (SEM) is performed. It is a multivariate technique of data analysis in which it is possible to test simultaneous relationships between dependent and independent variables (Kenny et al., 2006), by means of theoretical models of multiple relationships (Byrne, 2010). The first step was to perform the factor invariance test through the Multi-group Confirmatory Factor Analysis (ML). In these analyses it is possible to verify the invariance of parameters between men and women, in the case of this study if the observable variables are interpreted by the members of the dyad in a relatively equivalent manner (Andrade et al., 2017). In the invariance test, the structure (configuring invariance) and the factor loads (metric invariance) were evaluated, considering that the equivalence in the factor loads demonstrates the similarity in the latent traits for the two groups (Andrade et al., 2017). Invariance is accepted if the difference in the CFI (Comparative Fit Index) between the general unrestricted model and the model with factor load restriction is equal to or less than 0.010 (Byrne, 2010).

In the second step we test the effects of personality traits on conjugal adjustment. The following model adjustment indices were used: Chi-square (χ^2), Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Standardized Root Mean Square Residual (SRMR) e Root Mean Square Error of Approximation (RMSEA) with 90% confidence interval. The estimation method was the one of maximum likelihood (Maximum Likelihood - ML). Lower Chi-square values, higher than 0.90 for CFI and TLI, lower than 0.08 for SRMR

and lower than 0.060 for RMSEA are acceptable and indicate good model fit (Byrne, 2010).

Ethical Considerations

This study was approved by the Research Ethics Committee of the Universidade do Vale do Rio dos Sinos (UNISINOS) (Opinion No. 2.075.195; CAAE: 658516.6.0000.5344). The procedures adopted followed rigorously what is stated in Resolution 510/2016 of the National Health Council, attending the pertinent ethical and scientific foundations, as read in the FICT.

Results

Through the Multi-group Confirmatory Factorial Analysis it was possible to test the structural and metric invariance, between men and women, of the marital adjustment outcome variable and the independent variables socialization, extroversion, neuroticism, achievement and openness, according to Table 2. When comparing the non-restricted model (model 0) in which the configuration invariance was tested and the model with factor load restriction (model 1) in which the metric invariance was tested, it was verified that the difference in the Comparative Fit Index (CFI), was less than 0.010 for all the factors tested, being possible to proceed to the execution of the dyadic analyses through the Latent Trait Model (Andrade et al., 2017; Kenny et al., 2006).

The five structural dyadic models tested with each of the personality traits showed satisfactory rates of adjustment, indicating that the empirical data fit the proposed models. Therefore, it was possible to evaluate the actor-partner effects of each of the five personality traits on the marital adjustment of husbands and wives. The adjustment rates of each of the models are shown in Table 3.

Besides the adjustment indexes, the latent traits models allow estimating the magnitude of prediction - actor-partner effects, of independent variables on the outcome variables of husbands and wives. Table 4 shows the actor effect for husbands in the personality traits of socialization (B = 0.32; p < .000), neuroticism (B = -0.31; p < .000) and achievement (B = 0.41; p < .000), and the partner effect only in the achievement factor (B = 0.28; p < .001). For the wives the actor effect was similar to that of the husbands, that is, in the social traits (B = 0.19; p < .018), neuroticism (B = -0.48; p < .000) and achievement (B = 0.18; p < 0.040), but different in the partner effect that occurred only in the neuroticism factor (B = -0.31; p < .000). The models composed by the personality traits extroversion and openness did not predict the conjugal adjustment of the couples participating in this study.

Table 2
Multi-group Confirmatory Factorial Analysis (N = 462)

Tested models	Model Comparison	χ^2	df	p	CFI	RMSEA (90% CI)
Marital adjustment	Non-restricted model	155.939	118	.011	.983	.026 (0.013-0.037)
	Restriction of factor loads	178.558	131	.004	.979	.028 (0.017-0.038)
Socialization	Non-restricted model	321.238	176	.000	.951	.042 (0.035-0.050)
	Restriction of factor loads	346.705	191	.000	.947	.042 (0.035-0.049)
Extroversion	Non-restricted model	89.442	52	.001	.986	.040 (0.025-0.053)
	Restriction of factor loads	100.828	61	.001	.985	.038 (0.024-0.050)
Neuroticism	Non-restricted model	158.373	92	.000	.955	.040 (0.029-0.050)
	Restriction of factor loads	169.527	103	.000	.955	.037 (0.027-0.047)
Achievement	Non-restricted model	179.401	110	.000	.965	.037 (0.027-0.047)
	Restriction of factor loads	207.844	123	.000	.957	.039 (0.029-0.048)
Openness	Non-restricted model	156.952	76	.000	.933	.048 (0.037-0.059)
	Restriction of factor loads	169.123	87	.000	.932	.045 (0.035-0.055)

Note. χ^2 = Chi-square; df = degrees of freedom; p = significance; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation.

Table 3 Dyadic Structural Model (N = 231)

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Model	Personality trait	χ^2	Df	p	CFI	TLI	SRMR	RMSEA (90% CI)
Model 1	Socialization	784.210	617	.000	.954	.947	.060	.034 (0.026-0.041)
Model 2	Extroversion	354.758	269	.000	.973	.968	.058	.037 (0.026-0.047)
Model 3	Neuroticism	518.177	373	.000	.934	.923	.061	.041 (0.032-0.049)
Model 4	Achievement	576.724	475	.001	.961	.954	.060	.031 (0.020-0.039)
Model 5	Openness	497.896	355	.000	.924	.907	.067	.042 (0.033-0.050)

Note. χ^2 = Chi-square; df = degrees of freedom; p = significance; CFI = Comparative Fit Index; TLI = Tucker-Lewis Index; SRMR = Standardized Root Mean Square Residual; RMSEA = Root Mean Square Error of Approximation.

Table 4

Dyadic Structural Model: Actor-Partner Effect (N = 231)

Model	Actor-Partner Effect	B	S.E.	C.R.	p
Model 1 Socialization	Adjustment_H < socialization_H	.32	.530	3.612	***
	Adjustment _M < socialization _H	.13	.480	1.609	.108
	Adjustment _H < socialization _M	.05	.489	.643	.520
	Adjustment _M < socialization _M	.19	.496	2.364	.018
	Adjustment _H < extroversion_H	.01	.398	.174	.862
Model 2 Extroversion	Adjustment _M < extroversion _H	11	.387	-1.347	.178
	Adjustment _H < extroversion _M	.10	.397	1.229	.219
	Adjustment _M < extroversion_M	.05	.381	.601	.548
	Adjustment _H < neuroticism_H	31	.354	-3.712	***
Model 3	Adjustment _M < neuroticism_H	04	.312	486	.627
Neuroticism	Adjustment _H < neuroticism_M	31	.335	-3.676	***
	Adjustment _M < neuroticism_M	48	.335	-5.561	***
Model 4 Achievement	Adjustment _H < achievement _H	.41	.500	4.433	***
	Adjustment _M < achievement_H	.28	.457	3.226	.001
	Adjustment _H < achievement_M	.04	.594	.494	.621
	Adjustment _M < achievement_M	.18	.600	2.055	.040
Model 5 Openness	Adjustment _H < openness_H	.10	1.270	1.117	.264
	Adjustment _M < openness_H	03	1.151	329	.742
	Adjustment _H < openness_M	.13	2.714	1.167	.243
	Adjustment M < openness M	.30	4.438	1.604	.109

Note. B = Standardized estimate; S.E. = standard error; C.R. = standard errors above zero; p = significance.

Discussion

The objective of this study was to evaluate the actorpartner effects of personality traits on the conjugal adjustment of heterosexual couples. The first hypothesis was partially confirmed, since the socialization, neuroticism and achievement factors produced an actor effect on the conjugal adjustment for husbands and wives, but only the achievement factor produced a partner effect for husbands and the neuroticism factor a partner effect for wives. The second hypothesis that extroversion and openness factors would not have an actor-partner effect on the marital adjustment of husbands and wives has been confirmed.

Analyzing each personality trait separately, it can be seen that the socialization factor produced an actor effect for husbands and wives, but did not produce a partner effect. This result may indicate that kind, generous, warm, altruistic and capable of providing emotional support (Noronha et al., 2015), characteristics of individuals

who score more on this personality trait, evaluate their own marital adjustment in a similar perspective to the trait, therefore, the intrapersonal effect of the personality on the adjustment occurs. In other words, they are more flexible and generous in their perception of the relationship. Otherwise, this characteristic has no effect on the spouse's assessment of the marital adjustment.

The neuroticism factor produced an actor effect for husbands and wives, but a partner effect only for wives. As the literature indicates (Hellmuth & McNulty, 2008; Schaffhuser et al., 2014; Solomon & Jackson, 2014), neuroticism is a factor that negatively predicts adjustment and conjugal satisfaction. The result found may indicate that individuals who score more in neuroticism tend to perceive the marital adjustment in a more negative way due to insecurity, mistrust and low self-esteem, although the evaluation may refer more to the one they assess than to the characteristics of the relationship (Schaffhuser et al., 2014, 2015). Additionally, it is possible that the

levels of marital adjustment of individuals who score more in neuroticism are actually lower, since criticality, hostility; excessive jealousy and exacerbated perception of negative aspects negatively impact the relationship over time (Hellmuth & McNulty, 2008; Hutz et al., 1998; Malouff et al., 2010; Mônego & Teodoro, 2011; Solomon & Jackson, 2014). As for the partner effect of neuroticism on wives, it is possible to conjecture that women are still socially encouraged to constantly evaluate their marital and family lives, often culminating in a more demanding posture (Iveniuk et al., 2014; Terveer & Wood, 2014), aspects that may add to the higher levels of neuroticism and negatively impact the marital adjustment of husbands.

The personality trait of achievement, characteristic of persistent, disciplined, reliable, punctual, scrupulous and motivated people to achieve their objectives (Hutz et al., 1998; Noronha et al, 2015), also had an actor effect for husbands and wives (Mônego & Teodoro, 2011). Similar to socialization, individuals who score more on this trait tend to evaluate their own marital adjustment more favorably because they are more self-confident and manage marital difficulties with persistence and determination. In addition, the partner effect of this personality trait for husbands on the marital adjustment of wives may indicate that men and women are influenced by different aspects of the partner and relationship (Iveniuk et al., 2014; Terveer & Wood, 2014). It may be that husbands who score more on this trait inspire more confidence, care and awareness about the relationship, aspects that positively impact on the perception of marital adjustment of wives.

Finally, the absence of actor-partner effects of extrovert personality traits and openness on the marital adjustment of husbands and wives may indicate that they are characteristics that are expressed little in conjugality, in terms of adjustment. In both personality traits a directionality is identified to the aspects of individuality and social life (Hutz et al., 1998; Noronha et al., 2015), Therefore, they may involve neutral characteristics to the perception of marital issues. In addition, the results confirm that the marital adjustment of husbands and wives is impacted less by extroversion and openness factors (Weidmann et al., 2016), and more by neurotic factors, socialization and achievement (Brudek et al., 2018; Mônego & Teodoro, 2011; Weidmann et al., 2016).

The result of the actor-partner effects on the marital adjustment of husbands and wives differs from what was found in the study by Solomon and Jackson (2014) in which the partner effect was superior to the actor effect. According to other studies (Brock et al., 2016; Schaffhuser et al., 2014), the actor effect tends to be a more robust predictor of marital adjustment because it interferes with the perception of the one who evaluates the relationship. The partners can,

therefore, evaluate the love relationship quite differently due to personality differences that interfere with perception and not necessarily because the adjustment presents significant variations, as several studies on the subject indicate (Brock et al., 2016; Mônego & Teodoro, 2011; Saggino et al., 2015; Schaffhuser et al., 2015).

The results found through this study made it possible to achieve the proposed goal and have relevant implications for psychology research. The present study is unprecedented in Brazil in that it evaluates personality traits and marital adjustment from a dyadic perspective, serving as an anchor for new studies with couples mainly because it points out characteristic results of this population. The scarcity of research in the area has led researchers to transpose empirical results from different contexts and to make comparisons and analyses between realities and idiosyncratic phenomena, especially when involving the personality that is formed in a biopsychosocial context. Therefore, research that provides advances in terms of reflection on the interactive processes and dynamics that couples develop at the beginning of the relationship and that are difficult to change are fundamental.

Finally, the analyses carried out in this study by means of a non-recursive structural model made it impossible to verify the impacts of the marital adjustment on each personality trait, that is, aspects of the relationship in aspects of the individual. Therefore, analysis through recursive models can be an agenda for future studies with heterosexual and non-heterosexual dyads. Furthermore, longitudinal studies in which data collection occurs at more than one point in time may reveal additional information to the results found in this study. Finally, studies that test the personality typologies formed from the different levels that each individual score on each factor associated with the relationship variables may suggest combinations that lead to more accurately assessed marital outcomes.

On the other hand, the analyses performed considered the actor-partner effect of an individual variable on a couple variable, considering simultaneously and concurrently the interaction between all the variables through a dyadic model, providing robustness to the data. In addition, it contributes to the advancement of research with couples because it is a survey of couples from different cities in southern Brazil and with significant socio-demographic variability and time of marriage.

Referências

Abbasi, I. S. (2017). Personality and marital relationships: Developing a satisfactory relationship with an imperfect partner. *Contemporary Family Therapy*, 39(3), 184-194. doi:10.1007/s10591-017-9414-1

- Amiri, M., Farhoodi, F., Abdolvandc, N., & Bidakhavidi, A. R. (2011). A study of the relationship between Big-five personality traits and communication styles with marital satisfaction of married students majoring in public universities of Tehran. *Procedia Social and Behavioral Sciences*, 30, 685-689. doi:10.1016/j.sbspro.2011.10.132
- Andrade, A. L., Cassepp-Borges, V., Ferrer, E., & Sanchez-Aragón, R. (2017). Análises de dados diádicos: Um exemplo a partir da pesquisa com casais [Dyadic data analysis: An example from couples research]. *Trends in Psychology*, 25(4), 1571-1588. doi:10.9788/TP2017.4-05
- Brock, R. L., Dindo, L., Simms, L. J., & Clark, L. A. (2016). Personality and dyadic adjustment: Who you think your partner is really matters. *Journal of Family* Psychology, 30(5), 602-613. doi:10.1037/fam0000210
- Brudek, P. J., Steuden, S., & Jasik, I. (2018). Personality traits as predictors of marital satisfaction among older couples. *Psychoterapia*, 185(2), 5-20.
- Byrne, B. M. (2010). Structural equation modeling with AMOS: Basic concepts, applications, and programming. 2nd ed. New York, NY: Routledge.
- Costa, C. B., & Mosmann, C. P. (2015). Estratégias de resolução dos conflitos conjugais: Percepções de um grupo focal [Marital conflict resolution strategies: Perceptions of a focus group]. *Psico*, 46(4), 472-482. doi:10.15448/1980-8623.2015.4.20606
- Feist, J., Feist, G. J., & Roberts, T.-A. (2015). *Teorias da personalidade* [Theories of personality] (S. M. M. Rosa, Trans., 8th ed.). Porto Alegre, RS: AMGH.
- Hellmuth, J. C., & McNulty, J. K. (2008). Neuroticism, marital violence, and the moderating role of stress and behavioral skills. *Journal of Personality and Social Psychology*, 95(1), 166-180. doi:10.1037/0022-3514.95.1.166
- Hollist, C. S., Falceto, O. G., Ferreira, L. M., Miller, R. B., Springer, P. R., Fernandes, C. L. C., & Nunes, N. A. (2012). Portuguese translation and validation of the Revised Dyadic Adjustment Scale. *Journal of Marital and Family Therapy*, 38(Suppl. 1), 348-358. doi:10.1111/j.1752-0606.2012.00296.x
- Hutz, C. S., Nunes, C. H., Silveira, A. D., Serra, J., Anton, M., & Wieczorek, L. S. (1998). O desenvolvimento de marcadores para a avaliação da personalidade no modelo dos cinco grandes fatores [The development of the big five markers for personality assessment in Brazil]. Psicologia: Reflexão e Crítica, 11(2), 395-410. doi:10.1590/S0102-79721998000200015

- Iveniuk, J., Waite, L. J., McClintock, M. K., & Teidt, A. D. (2014). Marital conflict in older couples: Positivity, personality, and health. *Journal of Marriage and the Family*, 76(1), 130-144. doi:10.1111/jomf.12085
- Kenny, D. A., Kashy, D. A., & Cook, W. L. (2006). *Dyadic data analysis*. New York, NY: Guilford.
- Malouff, J. M., Thorsteinsson, E. B., Schutte, N. S., Bhullar, N., & Rooke, S. E. (2010). The Five-Factor Model of personality and relationship satisfaction of intimate partners: A meta-analysis. *Journal of Research in Personality*, 44(1), 124-127. doi:10.1016/j.jrp.2009.09.004
- Mônego, B. G., & Teodoro, M. L. M. (2011). A teoria triangular do amor de Sternberg e o modelo dos cinco grandes fatores [Sternberg's triangular theory of love and the big five factor model]. *Psico-USF*, *16*(1), 97-105. doi:10.1590/S1413-82712011000100011
- Mund, M., Finn, C., Hagemeyer, B., & Neyer, F. J. (2016). Understanding dynamic transactions between personality traits and partner relationships. *Current Directions in Psychological Science*, 25(6), 411-416. doi:10.1177/0963721416659458
- Noronha, A. P. P., Martins, D. F., Campos, R. R. F., & Mansão, C. S. M. (2015). Relações entre afetos positivos e negativos e os cinco fatores de personalidade [Relationship between positive and negative affects and the big five]. Estudos de Psicologia (Natal), 20(2), 92-101. doi:10.5935/1678-4669.20150011
- Saggino, A., Martino, M., Balsamo, M., Carlucci, L., Ebisch, S., Innamorati, M., ... Tommasi, M. (2015). Compatibility quotient, and its relationship with marital satisfaction and personality traits in Italian married couples. *Sexual and Relationship Therapy*, 31(1), 83-94. doi:10.1080/14681994.2015.1070952
- Schaffhuser, K., Allemand, M., Werner, C. S., & Martin, M. (2015). Discrepancy in personality perceptions is related to relationship satisfaction: Findings from dyadic latent discrepancy analyses. *Journal of Personality*, 84(5), 658-670. doi:10.1111/jopy.12189
- Schaffhuser, K., Wagner, J., Lüdtke, O., & Allemand, M. (2014). Dyadic longitudinal interplay between personality and relationship satisfaction: A focus on neuroticism and self-esteem. *Journal of Research in Personality*, *53*, 124-133. doi:10.1016/j.jrp.2014.08.007
- Solomon, B. C., & Jackson, J. J. (2014). Why do personality traits predict divorce? Multiple pathways through satisfaction. *Journal of Personality and Social Psychology*, 106(6), 978-996. doi:10.1037/a0036190

- Tavakol, Z., Nasrabadi, A. N., Moghadam, Z. B., Salehiniya, H., & Rezaei, E. (2017). A review of the factors associated with marital satisfaction. *Galen Medical Journal*, *6*(3), 197-207. doi:10.22086/gmj.v0i0.641
- Terveer, A. M., & Wood, N. D. (2014). Dispositional optimism and marital adjustment. *Contemporary Family Therapy: An International Journal*, 36(3), 351-362. doi:10.1007/s10591-013-9292-0
- Weidmann, R., Ledermann, T., & Grob, A. (2016). The interdependence of personality and satisfaction in couples: A review. *European Psychologist*, 21(4), 284-295. doi:10.1027/1016-9040/a000261

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