



ORIGINAL ARTICLE

Factors related to dyadic adjustment in couples with children of pediatric age[☆]



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Social Support;
Life change events

Abstract

Aim: To identify a relationship between social support, family life cycle, family transition and stressful events; and the dyadic adjustment among couples from Seville with children of pediatric age.

Method: Descriptive, observational and cross-sectional study. 95 Sevillian couples were recruited following a consecutive stratified sampling by quotas. They filled in a questionnaire with the study variables and the Dyadic Adjustment and Social Support scales. Data collection was carried out in 2015. The project was approved by the Research Ethics Committee of the University of Seville. Mann–Whitney U and Kruskal–Wallis non-parametric tests were used for statistical analysis, and Spearman test for correlation between variables. Significance was stated for $p < 0.05$.

Results: The couples were mostly marriages with good dyadic adjustment and social support. 26.3% had infant and 73.7% children of school age. No relationship between the life cycle nor the family transition and the dyadic adjustment were identified. The beginning-end of schooling was related to spousal cohesion and there were positive correlations between dyadic adjustment and social support; and negative correlations between the number of children and social support, consensus and satisfaction of the couple.

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Conclusion: Social support and the number of children are identified as the main conditioning factors of dyadic adjustment. In this sense, it is essential to know the resources available to each couple to face the difficulties where social support and the union between the spouses can help them face the challenges.

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PALABRAS CLAVE

Familia;
Matrimonio;
Escala de Ajuste
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Apoyo social;
Acontecimientos que
Cambian la vida

Factores relacionados con el ajuste diádico conyugal en parejas con hijos en edad pediátrica

Resumen

Objetivo: Determinar si el apoyo social, ciclo vital familiar, transición familiar y acontecimientos estresantes se relacionan con el ajuste diádico de parejas con hijos en edad pediátrica.

Método: Estudio descriptivo, observacional y de corte transversal. 95 parejas de la provincia de Sevilla, fueron escogidas mediante muestreo consecutivo estratificado por cuotas, y cumplieron un cuestionario con las variables de estudio y las escalas Ajuste Diádico Conyugal y Apoyo Social Percibido. La recogida de datos se realizó en el último trimestre del 2015 y fue aprobado por el Comité Ético de Investigación de la Universidad de Sevilla. Se aplicaron los test no paramétricos U de Mann–Whitney y Kruskal–Wallis. Para la relación entre variables el test de correlación de Spearman y para demostrar correlaciones significativas se comprobó que $p < 0,05$.

Resultados: Las parejas mayoritariamente eran matrimonios con buen ajuste diádico y apoyo social. El 26,3% tenían hijos lactantes y el 73,7% en edad escolar. No existe influencia del ciclo vital y la transición familiar sobre el ajuste diádico. El comienzo-fin de la escolaridad influye en la cohesión conyugal y existen correlaciones positivas entre ajuste diádico y apoyo social; y negativas entre el número de hijos y el apoyo social, consenso y satisfacción de la pareja.

Conclusiones: El apoyo social y el número de hijos se identifican como los principales factores condicionantes del ajuste diádico. En este sentido es fundamental conocer los recursos de los que dispone cada pareja para hacer frente a las dificultades donde el apoyo social y la unión entre los cónyuges puede ayudarles a enfrentar los desafíos.

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What is known?

Conjugal dyadic adjustment has been studied internationally using the Conjugal Dyadic Adjustment Scale. Disciplines such as psychology, sociology, ethnography and anthropology have focused on it. The quality of the conjugal relationship impacts the couple, parental relationships, progeny and the family.

There are few studies that analyse the factors having an effect on the quality of the conjugal relationship in the context of couples with children of paediatric age.

What does this paper contribute?

This study has made it possible to ascertain which variables are linked to a good or a poor dyadic adjustment in couples that have children of paediatric age. Dyadic adjustment can be considered a key resource for nurses with respect to maintaining the relationship over time, for the couple's adaptation to the various stages of the family life cycle (FLC), developing guidelines for living together that let them manage the various stressful events that impact the health of the family.

Introduction

The family plays a fundamental role in the health and well-being of every individual, given that it is the institution that gives people affection, security, stability, training, shelter, food and other basic elements in their healthy development. Consequently, if nurses study the family, the conjugal subsystem and family health, their understanding of the social and emotional development of the couple, the family and its members will be improved.

Studying couple relationships takes on special importance considering that this union constitutes the base of the family and, by extension, the foundation for raising the children; couple relationships contribute to the formation of individuals for a balanced, harmonious society, facilitating family functionality and contributing to its future.¹ In this way, it represents an ideal scenario for implementing nursing interventions aimed at prevention and promotion of health and at the encouragement of healthy life habits.

A couple is formed when 2 individuals set up a relationship that is significant, consensual and stable over time, forming a new social unit. Depending on its social, cultural and economic features, its FLC varies; it can remain in the state of «formation of the couple» or advance towards stages of growing complexity when the couple decide to have progeny, with the stages of infant (<18 months), school-age child (18 months to 16 years), adolescent (16 years until leaving the family home) or emancipated, among others, depending on the age of the eldest child.² For each stage, there are tasks and changes required that allow the couple and the family to adapt, stages in which the lack of commitment and of restructuring internal and external relationships can expose the couple to problems and to crisis.^{2,3}

For example, in the infant and school-age child stages, what is expected is that the new member becomes integrated, the needs and demands of the child are satisfied, the couple adjusts to the trio, roles are negotiated, affective links develop, child-rearing duties are fulfilled, values, autonomy and socialisation are taught, the couple's social life becomes restricted, sexual roles are redefined, family relationships within the family, with friends and between the couple themselves are reordered harmoniously, the balance between time and energy to satisfy work demands is found, and home maintenance, stability and development are accomplished. The problems that can arise at the level of the couple are as follows: personal and family habits change, energy and privacy are reduced, projects are postponed, a need for greater space and more personal time arises, relationship with friends, relatives and the couple themselves change, and conjugal stress and infidelity occur.^{2,3} So when the couple, in these stages, in the transitions between stages, or in reaction to stressful events, find it difficult to adapt to the changes, a substantial readjustment can be caused that has the potential to generate stress and a family crisis.^{3,4} This is the time in which the dyadic adjustment of the couple and the social support available become important aspects for the nurses to study.

The literature shows that social support is an important resource that has a great impact on people's health with a direct effect and a buffering effect,^{5,6} as well as impact on a couple's wellbeing.⁷ This support can be provided by the couple themselves or by individuals outside of the couple that give them emotional help (affection, love, empathy, warmth), instrumental help (goods or services), information (advice, suggestions, etc.) or assessment (relevant information or social comparisons for social self-evaluation).⁸

Couple dyadic adjustment is the quality of the relationship of the couple so that it is functional and harmonious and able to respond to changes and accommodate difficulties. It is the way of sharing interests, values, goals, points of view and experiences of living together in the relationship; it depends on factors such as consensus (the degree of agreement between the couple), cohesion (the degree to which they involve themselves in common activities) and satisfaction (the frequency and intensity of discussions and commitment to continuing together), among others.⁹ For all of this, negotiation and agreement between both members of the couple are required, as a couple relationship of low quality can lead to dissolving the relationship and separating the family.¹⁰

There are many studies that analyse the relationship and influence of dyadic adjustment on the couple, the parental dyad and the children.¹⁰ Such adjustment may affect the growth of the family system or be a determining factor in family health.¹⁰⁻¹² Moreover, a stable couple with a high quality conjugal relationship protects both members of the couple against physical¹³ and mental¹⁴ illness, or even mortality,¹⁵ and protects the children against the negative effects of low dyadic adjustment. Low dyadic adjustment is linked to dissatisfaction of the couple, infidelity, abuse, violence or breakups.¹⁶ It can also make the relations between parents and children more difficult and affect the progeny in aspects of socialisation, affectivity, emotionality, learning and cognitive factors.¹⁷⁻¹⁹ In contrast, there are few studies that analyse the inverse relationship, that is, which factors impact the quality of the couple's relationship.^{20,21} Very few studies analyse the impact on specifically couples with children of a paediatric age where factors such as the FLC stage, the transition between stages, social support and stressful events can alter couple dyadic adjustment.

Nowadays, nurses are focusing their practice with a family-centred approach, keeping the families in mind when planning care. However, family research is often limited to examining unidirectional processes. Given that an individual's behaviour has consequences that go beyond the individual her- or himself, family functioning should be investigated in all its complexity. This study represents the attempt to follow the recommendations of the World Health Organization and the multiple calls from researchers to study the family and consider it as a unit of care and attention.²⁰

Within the family, knowing the couple relationships is essential, considering that the couple is the main nucleus, and is fundamental for the development of the family members and for maintaining family health. Nurses are present in all stages of FLC, in direct contact with couples. The extent to which nurses know which variables can be linked or can impact the quality of the couple relationship will make it possible to approach the couples and the families, providing the support needed for maintaining adequate dyadic adjustment or for improving the quality of the couple relationship. Consequently, the objective of this study was to ascertain the couple dyadic adjustment that exist in couples with children of a paediatric ages in the province of *Sevilla* [Seville] and identify whether there are links between dyadic adjustment and socio-demographic variables and variables of interest: FLC, family transition, stressful vital events and perceived social support.

Method

Design

Descriptive cross-sectional study.

Population and study scope

The process of sample selection and data gathering was carried out in the last trimester of 2015 in Seville. The sample size was calculated with GPower v. 3.1.9.2, which estimated a minimum sample necessary of 34 couples for

statistical analysis by means of correlation, with a size of medium effect ($R^2 = 0.05$), power ($1-\beta$) of 95% and $P < .05$. Although the programme established 34 couples to achieve a specific power, it did not establish that this had to be the number of the final sample. Several authors recommend larger sample sizes, based on the central limit theorem,^{22,23} in which it is shown that the greater the sample size, the less the standard error is and, consequently, the greater the precision is, in both the estimation of measurements for numerical variables and in the estimations of proportions. Following these recommendations, the sample size was increased up to a total of 95 couples. This increase also attempts to provide an even greater statistical power ($1-\beta$), so as to give greater guarantees to the decisions based on the hypothesis tests applied.²⁴ In this line, some authors also recommend adding 10%–20% more participants to the initial calculation of the sample size.^{24,25} Stratified consecutive sampling was carried out in agreement with the data of the National Statistics Institute on the healthcare centres and the healthcare map of *Andalucía* [Andalusia] and the *Andaluz* [Andalusian] Health Service Users database. The assessments were as follows: healthcare level (primary healthcare, hospital healthcare); population belonging to primary healthcare and to the various healthcare districts (*Distrito Sierra Norte*, *Distrito Aljarafe*, *Distrito Sevilla*, *Distrito Sevilla Sur* and *Distrito Sevilla Este-Osuna*), and the number of beds in the hospital units (*Hospital Virgen del Rocío*, *Hospital Virgen Macarena*, *Hospital Virgen de Valme*, *Hospital de la Merced*, *Hospital de Osuna* and *Consortio Sanitario Público del Aljarafe*).

Our inclusion criteria were established as the following: heterosexual couples, age greater than 18 years, with a minimum of 12 months spent living together, with children of a paediatric age (0–14 years old) and residents of Seville. The exclusion criteria established were as follows: language difficulties, not knowing how to read and/or write, foreigners or having a culture different from Spanish culture, and choosing not to participate in the study.

Variables

The socio-demographic variables explored were sex (dichotomous variable in male, female); age (discrete quantitative variable in years); maximum educational level reached by the couple (polytomous nominal qualitative variable: no studies/primary school, secondary school, college preparation or vocational training, university education); type of couple union (polytomous nominal qualitative variable of common-law couple, marriage, unmarried partners); time spent living together (discrete quantitative variable in years), and number of children (discrete quantitative variable). The variables consistent with the objective posed were as follows: couple dyadic adjustment (discrete quantitative variable); FLC stages (dichotomous variable of couples with infants up to 18 months old and with school-age children up to 12 years old); family transition (dichotomous variable of yes or no); perceived social support (discrete quantitative variable), and stressful vital events linked to stages of the FLC: incorporation of a new member into the family, Change in life

conditions and Beginning or end of schooling (dichotomous variable in yes or no).

Data gathering

The data were gathered using a self-administered questionnaire that contained the socio-demographic and study variables together with the short version of the Dyadic Adjustment Scale (DAS, or *EAD-13* for its initials in Spanish), as well as the Perceived Social Support Questionnaire. The stressful vital events included in the study were selected from the Social Readjustment Scale.²⁶

The *EAD-13*²⁷ has been validated in Spain for evaluating the quality of a couple's relationship using 13 factors with Cronbach alpha reliability of 0.83 for the total scale and 3 interrelated factors: consensus, satisfaction and cohesion with internal alpha consistence of 0.73, 0.70 and 0.63. The sum of the items gives a score between 0 and 63 points, and cut-off point to define low or high dyadic adjustment is 44 points.

The Perceived Social Support Questionnaire⁸ validated in Spain establishes that social support contributes to health with 20 items. The first item dimensions the social network, and the remaining items correspond to 4 dimensions: emotional support, material help, social relationships and affective support, with Cronbach alpha reliability between 0.85 and 0.94. The sum of the items gives a score between 19 and 95; and the greater the score, the greater the social support is.

The research team contacted the couples through the nurses in the centres and the units that collaborated with the research. Appointments were set up to interview both members of the couple. Previously trained interviewers set up rooms with intimacy and separation so that there was no intercommunication between them that might affect their answers. A protocol was followed and the questionnaires were managed with standardised systematisation.

Data analysis

First of all, an exploratory analysis was carried out on the data to identify atypical or extreme values and to characterise differences between groups of cases. The most appropriate statistical techniques were identified and whether the data followed a Gaussian distribution was tested with the Kolmogorov-Smirnov normality test. Next, a descriptive analysis of the discrete quantitative variables (minimum value, maximum value, mean and standard deviation) and of nominal and dichotomous qualitative variables (frequencies and percentages) was carried out, with 95% confidence intervals for the different averages and percentages. For the *dyadic adjustment* and *social support* variables, the overall sum of each scale was calculated, the mean score was obtained to determine the degree of dyadic adjustment and of social support and the Cronbach alpha reliability was tested. An inferential analysis was then carried out, establishing bivariate correlations applying the Spearman correlation test for discrete quantitative variables (dyadic adjustment, social support and number of children), the non-parametric Mann-Whitney U test for the contrast of hypotheses between the study variable *dyadic adjustment*

Table 1 Descriptive analysis of sociodemographic and other variables of interest.

Variable	No. (%)
Maximum level of education reached by the couple	
<i>No studies/primary school</i>	12 (12.6)
<i>Secondary School</i>	11 (11.6)
<i>University preparation or Vocational training</i>	36 (37.9)
<i>University studies</i>	36 (37.9)
Type of union	
<i>Common-law couple</i>	7 (7.4)
<i>Marriage</i>	76 (80.0)
<i>Unmarried cohabitant partner</i>	12 (12.6)
Life cycle stage	
<i>Infant</i>	25 (26.3)
<i>School-age child</i>	70 (73.7)
Family transition	
<i>No</i>	83 (87.4)
<i>Yes</i>	12 (12.6)
Stressful life events	
<i>Incorporation of a new member into the family</i>	
<i>No</i>	70 (73.7)
<i>Yes</i>	25 (26.3)
<i>Change in life conditions</i>	
<i>No</i>	88 (92.6)
<i>Yes</i>	7 (7.4)
<i>Beginning or end of school studies</i>	
<i>No</i>	82 (86.3)
<i>Yes</i>	13 (13.7)
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and the dichotomous variables (FLC, transition and stressful events) and the Kruskal–Wallis test between the study variable *dyadic adjustment* and the polychotomous nominal variables (educational level and type of union). Statistical significance was set to $P < .05$. The statistical package SPSS version 18 for Windows was used for the analyses.

Ethical considerations

Data confidentiality was guaranteed in conformance with Organic Law 3/2018 (5 December), on Protection of Personal Data and guarantee of digital rights. The ethical considerations of the Declaration of Helsinki were respected. All the participants provided signed informed consents and the study received the approval of the Research Ethics Committee at the University of Seville.

Results

The majority of the couples were married (No. = 76; 80%), with an average of 13.45 ± 5.772 years of living together. Of the total, 26.3% had infants and 73.7% had school-age children (Table 1). The degree of dyadic adjustment was similar for males and females (50.42 ± 7.997 and 50.89 ± 7.366 , respectively), with the best evaluated3

dimension being *consensus*. The couples perceived high social support (84.56 ± 13.510). Both scales show good internal consistence (Table 2).

After the correlational analysis, significant positive relationships between dyadic adjustment and social support were noteworthy in both sexes ($P < .05$), while there were significant negative relationships between social support and the number of children (Spearman = -0.26 ; $P = .011$), as well as between the number of children and dyadic adjustment (Spearman = -0.30 ; $P = .003$ in males, and Spearman = -0.22 ; $P = .036$ in females). No significance was found between the number of children and the dimension cohesion in dyadic adjustment (Spearman = -0.00 ; $P = .993$ in males, and Spearman = -0.20 ; $P = .052$ in females) (Table 3). Although some significant relationships have appeared, the correlations are low. In males, statistically significant differences were obtained between the medians of couple consensus and the FLC stage ($z = -2.44$; $P < 0.05$), but in the rest of the samples compared the differences were not significant (Table 4). In contrast, in females, there was only 1 statistically significant difference between couple cohesion and Beginning or ending of schooling ($z = -2.03$; $P < .05$) (Table 5). Lastly, with respect to the relationships between dyadic adjustment and the socio-demographic variables (Table 6), statistically significant positive relationships were

Table 2 Descriptive analysis of scales and surveys.

Scale	Minimum-maximum	Average $\pm$ SD	Median	P25	P75	Cronbach's Alpha
<i>EAD-13 in males</i>	23–62	50.42 $\pm$ 7.997	52.00	46.00	56.00	.84
Consensus	2–25	20.29 $\pm$ 4.448	21.00	18.00	23.00	.85
Satisfaction	9–24	20.03 $\pm$ 2.970	21.00	19.00	22.00	.73
Cohesion	4–14	10.09 $\pm$ 2.682	10.00	8.00	12.00	.63
<i>EAD-13 in females</i>	27–64	50.89 $\pm$ 7.367	52.00	47.00	57.00	.85
Consensus	2–25	20.46 $\pm$ 4.138	21.00	19.0	24.00	.83
Satisfaction	9–24	20.01 $\pm$ 2.688	21.00	19.00	22.00	.79
Cohesion	4–15	10.42 $\pm$ 2.533	11.00	9.00	13.00	.60
<i>Social support perceived</i>	38–95	84.56 $\pm$ 13.510	92.00	79.00	95.00	.97
Friends	0–50	4.96 $\pm$ 4.928				
Relatives	0–40	7.34 $\pm$ 6.110				
Emotional support	16–40	35.23 $\pm$ 5.947	38.00	32.00	40.00	.95
Material support	4–20	17.58 $\pm$ 3.444	19.00	16.00	20.00	.90
Social relationships	8–20	18.01 $\pm$ 2.777	20.00	16.00	20.00	.95
Affective support	6–15	13.74 $\pm$ 2.140	15.00	13.00	15.00	.89

Table 3 Spearman correlation coefficients among EAD-13 scores in males and females, the social support perceived and the number of children.

	MOS	Emotional	Material	Social	Affective	No. of children
<i>EAD-13 - male</i>						
Spearman	.37	.33	.38	.33	.37	–0.22
P	<.001	.001	<.001	.001	<.001	.036
<i>Consensus</i>						
Spearman	.37	.34	.40	.36	.40	–0.31
P	<.001	.001	<.001	<.001	<.001	.002
<i>Satisfaction</i>						
Spearman	.28	.26	.26	.27	.33	–0.21
P	.005	.010	.011	.008	.001	.046
<i>Cohesion</i>						
Spearman	.19	.16	.16	.18	.22	–0.00
P	.061	.130	.062	.088	.034	.993
<i>EAD-13 - female</i>						
Spearman	.54	.51	.51	.48	.50	–0.30
P	<.001	<.001	<.001	<.001	<.001	.003
<i>Consensus</i>						
Spearman	.52	.49	.52	.46	.46	–0.33
P	<.001	<.001	<.001	<.001	<.001	.001
<i>Satisfaction</i>						
Spearman	.48	.47	.37	.46	.44	–0.21
P	<.001	<.001	<.001	<.001	<.001	.040
<i>Cohesion</i>						
Spearman	.34	.30	.001	.28	.35	–0.20
P	.001	.003		.007	<.001	.052
<i>Number of children</i>						
Spearman	–0.26	–0.30	–0.21	–0.26	–0.24	
P	.011	0.003	0.046	0.011	0.020	

found between the educational level of the couples and the dimensions of consensus (Kruskal–Wallis = 8.58; $P = .035$) and couple satisfaction in females (Kruskal–Wallis = 8.93; $P = .030$), as well as between type of union and couple satisfaction (males, Kruskal–Wallis = 6.79, $P = .034$; females, Kruskal–Wallis = 9.53, $P = .009$).

Discussion

Our results show that there are significant correlations among dyadic adjustment and social support, the number of children, FLC stage, the beginning and ending of schooling as a stressful event, the couple's level of education and

Table 4 Differences between the dyadic adjustment of males and females with respect to the family life cycle stage, infant or school-age child, using the Mann–Whitney U Test.

EAD-13	Average range (infant)	Average range (school-age child)	Z	P
<i>EAD-13 - male</i>	55.28	45.40	−1.54	.123
Consensus	59.46	43.91	−2.44	.015
Satisfaction	50.34	47.16	−0.50	.618
Cohesion	49.44	47.49	−0.31	.759
<i>EAD-13-female</i>	53.16	46.16	−1.09	.275
Consensus	50.60	47.07	−0.55	.580
Satisfaction	49.62	47.42	−0.35	.729
Cohesion	55.62	45.28	−1.62	.104

Table 5 Differences between the existence or not of family transition or vital life events in the dimensions of couple dyadic adjustment of males and females, using the Mann–Whitney U Test.

DV	IV	Range average (No)	Range average (Yes)	Z	P
EAD-13 - males	Family transition	46.81	56.21	−1.10	.269
	Incorporation of a member into the family	45.50	55.00	−1.48	.139
	Change in life conditions	48.06	47.29	−0.07	.943
	Beginning or end of schooling	48.68	43.69	−0.61	.544
Consensus	Family transition	47.17	53.75	−0.78	.437
	Incorporation of a member into the family	46.26	52.88	−1.04	.300
	Change in life conditions	48.53	41.36	−0.66	.505
	Beginning or end of schooling	48.82	42.85	−0.73	.466
Satisfaction	Family transition	46.72	56.88	−1.21	.228
	Incorporation of a member into the family	46.26	52.86	−1.04	.300
	Change in life conditions	47.84	50.07	−0.21	.835
	Beginning or end of schooling	48.72	43.46	−0.65	.519
Cohesion	Family transition	46.91	55.54	−1.02	.307
	Incorporation of a member into the family	46.19	53.06	−1.08	.282
	Change in life conditions	47.41	55.43	−0.75	.456
	Beginning or end of schooling	48.34	45.88	−0.30	.764
EAD-13 - females	Family transition	47.11	54.13	−0.82	.410
	Incorporation of a member into the family	47.10	50.52	−0.53	.594
	Change in life conditions	48.30	44.21	−0.38	.705
	Beginning or end of schooling	49.40	39.15	−1.25	.212
Consensus	Family transition	47.41	52.08	−0.55	.581
	Incorporation of a member into the family	48.71	46.02	−0.42	.674
	Change in life conditions	48.73	38.79	−0.92	.355
	Beginning or end of schooling	49.03	41.50	−0.92	.357
Satisfaction	Family transition	47.28	52.96	−0.67	.500
	Incorporation of a member into the family	48.19	47.48	−0.11	.912
	Change in life conditions	48.64	39.93	−0.81	.416
	Beginning or end of schooling	48.54	44.58	−0.49	.626
Cohesion	Family transition	47.04	54.67	−0.90	.366
	Incorporation of a member into the family	46.07	53.40	−1.15	.250
	Change in life conditions	48.05	47.43	−0.06	.954
	Beginning or end of schooling	50.26	33.73	−2.03	.043

the type of couple union. In contrast, no relationship was found with the years of living together, the family transition, the incorporation of a new child or the changes in life conditions.

Social support is known to contribute to the maintenance of health and to the improvement in illnesses and to prevent mental disorders; it acts as an attenuating or protective factor in stressful events and crises.²⁸ In the marital context, we have found that greater social support is related

to greater dyadic adjustment, a fact that has been corroborated by previous studies.^{12,29} The couples give great importance to their family networks for help in taking care of the children, in household tasks, to achieve a balance between work life and the family, above all in the occasions in which an overload at the personal and family levels is reported.³⁰ This may be favouring the quality of the couple relationships due to the buffering effect of the social support.

Table 6 Differences in couple dyadic adjustment with respect to the maximum level of studies reached by the couple and the type of partner union, using the Kruskal–Wallis test.

	Maximum levels of studies reached	Type of partner union
EAD-13 - males		
Kruskal–Wallis	6.29	4.51
<i>P</i>	.098	.105
<i>Consensus</i>		
Kruskal–Wallis	2.31	5.19
<i>P</i>	.511	.075
<i>Satisfaction</i>		
Kruskal–Wallis	6.71	6.79
<i>P</i>	.082	.034
<i>Cohesion</i>		
Kruskal–Wallis	2.91	3.57
<i>P</i>	.406	.168
EAD-13 - females		
Kruskal–Wallis	6.34	4.35
<i>P</i>	.096	.114
<i>Consensus</i>		
Kruskal–Wallis	8.58	2.97
<i>P</i>	.035	.227
<i>Satisfaction</i>		
Kruskal–Wallis	8.93	9.53
<i>P</i>	.030	.009
<i>Cohesion</i>		
Kruskal–Wallis	2.60	1.34
<i>P</i>	.458	.511

As for the number of children, we have found that the greater the number, the less the consensus and couple satisfaction are. There are studies that report that the presence of children (especially the arrival of the firstborn) progressively reduces satisfaction in both members of the couple, above all due to the chaos produced when the children are small.³¹ Moreover, the birth of the first child is the most influential event for the couple, which can make the couple relationship deteriorate; evidence has been found to recognise that paternity and maternity are reflections of the couple relationship before the first child.⁴ In contrast, we have not found in this study any relationship between dyadic adjustment and the incorporation of a new member into the family.

A lack of relationship between dyadic adjustment and FLC stage has also been identified in our study, except for the dimension consensus in the males. The literature reflects that this can be due to the fact that the couple themselves have the ability to adjust and adapt to crises, accepting and overcoming early, changeable stages of the life cycle.³² Other authors state that, in stages with infants and school-age children, the structure of the couple relationship is put to the test and potential conflicts and stress characteristic of triangular relationships can appear; the couple has to be capable of being flexible and adaptable to avoid the crises and having the relationship end.³³ The same thing can occur with the beginning and ending of school, in which the couple

is capable of circumventing the difficulties, even though couple cohesion is reduced.

Previous studies have found that the level of education of the couple is a conditioning factor for dyadic adjustment, specifically in couple satisfaction.³² It is also closely tied to equitable distribution of and participation in household tasks, to taking care of the progeny, and to the couple's level of conflict. As for the type of couple union, homogeneous groups were not available in this study to be able to establish what type of union brings about greater or lesser satisfaction. However, there are authors that indicate that getting married represents greater satisfaction in comparison with those who live together in a free union; in contrast, other authors find that, for couples that have previously lived together, when they get married the level of satisfaction decreases, with situations of physical and verbal abuse increasing, as well as non-equitable distribution of household tasks.³⁴

One limitation that must be pointed out is that this type of study, with a cross-sectional nature, does not allow controlling the factor time and its influence on the evolution of the facts analysed. Data gathering by questionnaires involves biases, although the presence of trained interviewers during the process avoided biases derived from the design, use or diagramming of the questionnaire. The inclusion criteria *heterosexual couples* and *of Spanish culture* leave a population that might be studied outside the study. The 2-by-2 analysis of the data, compared with the analysis of models of structural equations or of regression, does not allow proposing or ascertaining the direction of the relationships among the different variables. In future research, the sample size should be increased to achieve normality of the variables and the use of parametric statistics that would make it possible to extrapolate the results to the population, as well as to replicate the study in other populations so as to compare the results obtained, those that do not coincide with other authors and those for which similar studies do not exist.

In conclusion, social support and the number of children have been identified as the main factors that condition dyadic adjustment. It is essential to know the resources that each couple has available to face difficulties, where social support and the union between the couple can help them to face challenges. This study may serve to motivate nursing professionals to carry out strategies of counselling, education and support of the couples, as well as to respond to their needs and ensure and strengthen their skills so as to maintain or improve their couple dyadic adjustment. Nursing interventions aimed at the couple subsystem could achieve a greater family impact, considering that approaching the couple is easier than approaching the family as a whole. This might mean an improvement in health results, given that a couple relationship affected can impact the health of each member of the family and the health of the family itself. At any rate, new studies that allow deeper analysis of these findings should be carried out.

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Conflict of interests

The authors have no conflicts of interest to declare.

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References

- Anderson JR, Van Ryzin MJ, Doherty WJ. Developmental trajectories of marital happiness in continuously married individuals: A group-based modeling approach. *J Fam Psychol*. 2010;24:587–96. <http://dx.doi.org/10.1037/a0020928>.
- Duvall EM, Miller Brent C. *Marriage and Family Development*. New York: Harper & Row; 1985.
- Asen KE, Tomson P. *Intervención familiar. Guía práctica para los profesionales de la salud*. Barcelona: Ediciones Paidós; 1997.
- VanLaningham J, Johnson DR, Amato P. Marital Happiness, Marital Duration, and the U-Shaped Curve: Evidence from a Five-Wave Panel Study. *Soc Forces* [Internet]. 2001;79:1313–41. <http://dx.doi.org/10.1353/sof.2001.0055> [Accessed 22 November 2019]. Available from: .
- Strom JL, Egede LE. The Impact of Social Support on Outcomes in Adult Patients with Type 2 Diabetes: A Systematic Review. *Curr Diab Rep* [Internet]. 2012;12:769–81 [Accessed 22 November 2019]. Available from: <https://dx.doi.org/10.1007/s11892-012-0317-0>.
- Alonso A, Menéndez M, González L. Apoyo social: mecanismos y modelos de influencia sobre la enfermedad crónica. *Cad Aten Primaria* [Internet]. 2013;19:118–23 [Accessed 22 November 2019]. Available from: http://www.agamfec.com/wp/wp-content/uploads/2014/07/19_2_ParaSaberDe3.pdf.
- Dehle C, Larsen D, Landers JE. Social support in marriage. *Am J Fam Ther*. 2001;29:307–24. <http://dx.doi.org/10.1080/01926180126500>.
- Revilla Ahumada L, Luna del Castillo J, Bailón Muñoz E, Medina Moruno I. Validación del cuestionario MOS de apoyo social en Atención Primaria. *Med Fam* [Internet]. 2005;6:10–8 [Accessed 15 November 2018]. Available from: <http://www.samfyc.es/Revista/PDF/v6n1/03.pdf>.
- Spanier GB. Measuring Dyadic Adjustment: New Scales for Assessing the Quality of Marriage and Similar Dyads. *J Marriage Fam* [Internet]. 1976;38:15. <http://dx.doi.org/10.2307/350547>.
- Lucas-Thompson RG, Goldberg WA. Family Relationships and Children's Stress Responses. *Adv Child Dev Behav* [Internet]. 2011;40:243–99. <http://dx.doi.org/10.1016/b978-0-12-386491-8.00007-4> [Accessed 15 November 2018].
- Jager J, Yuen CX, Bornstein MH, Putnick DL, Hendricks C. The relations of family members' unique and shared perspectives of family dysfunction to dyad adjustment. *J Fam Psychol* [Internet]. 2014;28:407–14. <http://dx.doi.org/10.1037/a0036809>.
- Jiang H, Wang L, Zhang Q, Liu D-X, Ding J, Lei Z, et al. Family Functioning, Marital Satisfaction and Social Support in Hemodialysis Patients and their Spouses. *Stress Heal* [Internet]. 2015;31:166–74. <http://dx.doi.org/10.1002/smi.2541> [Accessed 1 April 2019]. Available from: .
- Robles TF, Slatcher RB, Trombello JM, McGinn MM. Marital quality and health: A meta-analytic review. *Psychol Bull* [Internet]. 2014;140:140–87. <http://dx.doi.org/10.1037/a0031859> [Accessed 10 April 2019]. Available from: .
- Proulx CM, Helms HM, Buehler C. Marital Quality and Personal Well-Being: A Meta-Analysis. *J Marriage Fam* [Internet]. 2007;69:576–93. <http://dx.doi.org/10.1111/j.1741-3737.2007.00393.x> [Accessed 10 April 2019]. Available from: .
- Karademas EC, Giannousi Z. Representations of control and psychological symptoms in couples dealing with cancer: A dyadic-regulation approach. *Psychol Health* [Internet]. 2013;28:67–83. <http://dx.doi.org/10.1080/08870446.2012.713954>. Available from: .
- Davins M, Bartolomé D, Salameo M, Pérez-Testor C. Mujeres maltratadas y calidad de la relación de pareja. Diferencias en la percepción de la satisfacción con la relación de pareja en un grupo de mujeres maltratadas en función de la duración y tipo de maltrato. *Aloma* [Internet]. 2010;27:265–78. Available from: <http://revistaaloma.net/index.php/aloma/article/view/18>.
- Goulart VR, Wagner A, Barbosa PV, Pereira Mosmann C. Repercussões do Conflito Conjugal para o Ajustamento de Crianças e Adolescentes: Um Estudo Teórico. *Interação em Psicol* [Internet]. 2016;19 [Accessed 10 April 2019]. Available from: <https://dx.doi.org/10.5380/psi.v19i1.35713>.
- Hayatbakhsh R, Clavarino AM, Williams GM, Bor W, O'Callaghan MJ, Najman JM. Family structure, marital discord and offspring's psychopathology in early adulthood: a prospective study. *Eur Child Adolesc Psychiatry* [Internet]. 2013;22:693–700. <http://dx.doi.org/10.1007/s00787-013-0464-0>.
- Schermerhorn AC, D'Onofrio BM, Turkheimer E, Ganiban JM, Spotts EL, Lichtenstein P, et al. A genetically informed study of associations between family functioning and child psychosocial adjustment. *Dev Psychol* [Internet]. 2011;47:707–25. <http://dx.doi.org/10.1037/a0021362>.
- Jiménez-Picón N, Lima-Rodríguez J-S, Lima-Serrano M. Relación entre variables familiares y el ajuste conyugal. *Atención Primaria* [Internet]. 2018;50:205–12. <http://dx.doi.org/10.1016/j.aprim.2017.02.012>.
- Cuenta Montesino M. Ajuste diádico en la pareja: revisión teórica. *Psicopatología Clínica Leg y Forense* [Internet]. 2013;13:177–89 [Accessed 22 November 2019]. Available from: <https://dialnet.unirioja.es/servlet/articulo?codigo=6380089>.
- Sanchez-Cantalejo E. Inferencia estadística. El error aleatorio. In: Burgos-Rodríguez R, editor. *Metodología de investigación y escritura científica en clínica*. 3ª ed. Granada: Escuela Andaluza de Salud Pública; 1998.
- Jenicek M, Clérout R. *Epidemiología: principios, técnicas, aplicaciones*. 1ª ed. Barcelona: Masson; 1993.
- García-García JA, Reding-Bernal A, López-Alvarenga JC. Cálculo del tamaño de la muestra en investigación en educación médica. *Inv Ed Med* [Internet]. 2013;2:217–24. [http://dx.doi.org/10.1016/S2007-5057\(13\)72715-7](http://dx.doi.org/10.1016/S2007-5057(13)72715-7). [Accessed 30 October 2020]. Available from: .
- Bartlett JE, Kotlik JW, Higgins C. Organizational research: Determining appropriate sample size in survey research. *Inf Technol Learn Perform J* [Internet]. 2001;19:43–50 [Accessed 30 October 2020]. Available from: <https://dx.doi.org/10.1.1.486.8295&rep=rep1&type=pdf>.
- de Revilla Ahumada L. *Conceptos e instrumentos de la atención familiar*. Barcelona: Doyma; 1994.
- Santos-Iglesias P, Vallejo-Medina P, Sierra JC. Propiedades psicométricas de una versión breve de la Escala de Ajuste

- Diádico en muestras españolas. *Int J Clin Heal Psychol*. 2009;9(3):501–17.
28. Rondón Bernard J, Reyes Fernández B. Introducción al modelo transteórico: Rol del apoyo social y de variables sociodemográficas. *Rev Electrónica Psicol Iztacala* [Internet]. 2019;22 [Accessed 22 November 2019]. Available from: www.revistas.unam.mx/index.php/rep/article/view/70932
 29. Hautsalo K, Rantanen A, Astedt-Kurki P. Family functioning, health and social support assessed by aged home care clients and their family members. *J Clin Nurs* [Internet]. 2013;22:2953–63, <http://dx.doi.org/10.1111/j.1365-2702.2012.04335.x> [Accessed 15 November 2018]. Available from:.
 30. Zapata Posada JJ, Castro Rodelo YY, Agudelo Bedoya ME. Abuelas antes de lo esperado: cambios, participación en la crianza y relaciones intergeneracionales. *Prospectiva* [Internet]. 2016;117, <http://dx.doi.org/10.25100/prts.v0i22.1239> [Accessed 22 November 2019]. Available from:.
 31. Ávila Santivañez R, Miranda Hernandez P, Juárez Segura A. Contribución del número de hijos a la magnitud de la satisfacción marital. *Int J Psychol Res*. 2009;2:35–43.
 32. Landwerlin GM. El reparto desigual del trabajo doméstico y sus efectos sobre la estabilidad de los proyectos conyugales. *Rev Esp Invest Sociol* [Internet]. 2005;111:163–79.
 33. Campo C, Linares JL. *Sobrevivir a la pareja. Problemas y soluciones*. Barcelona: Editorial Planeta; 2002.
 34. Amador D, Bernal R. ¿Unión libre o matrimonio? *Trimest Econ* [Internet]. 2012;79:529–73 [Accessed 22 November 2019]. Available from: <http://www.scielo.org.mx/pdf/ete/v79n315/2448-718X-ete-79-315-00529.pdf>.