Effects of Divorce and Family Environment in Adolescents' Attachment to Parents

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ABSTRACT

Literature concerning the effects of parental divorce in quality of family relationships has been presenting inconsistent results, in part due to different methods of collecting data, in part due to the difficulty in identifying relevant personal and relational variables that mediate this process. This study intends to identify variations in quality of adolescents' attachment to parents as a function of parental divorce, analysing the contribution of interparental conflict dimensions (conflict properties, threat and self-blame), and family systemic dimensions (family conflict, cohesion and expressiveness) to the understanding of this association. The sample consists of 310 adolescents, 14 to 18 aged, from both genders and from intact and divorced families. Participants responded to the Attachment to Father/Mother Questionnaire (Matos & Costa, 2001, revised version), the Family Environment Scale (Moos & Moos, 1986), and the Children's Perception of Interparental Conflict Scale (Grych, Seid, & Fincham, 1992). As expected, results indicated that interparental conflict is a better predictor of quality of parental attachment than divorce. In addition, quality of emotional bond to mother is higher correlated with the family systemic dimensions, whereas quality of emotional bond to father is higher (negatively) correlated with parental conflict.

I. OBJECTIVE AND HYPOTHESES

The main objective is to evaluate the effects of parental divorce, family relationships dimensions (cohesion, expressiveness and family conflict) and interparental conflict on the quality of adolescents' attachment to parents. Three hypotheses are tested based on literature review:

H1: Adolescents from divorced families are expected to present lower quality of attachment to father but not to mother, more interparental and family conflicts, and less family cohesion and expressiveness comparatively with adolescents from intact families (Dunlop, Burns, & Bermingham, 2001; Emery, 1988; Henry & Holmes, 1998).

H2: Associations between interparental conflict and quality of attachment to parents are expected to be found independently of family structure (intact vs. divorced families) (Buchanan & Heiges, 2001; Cummings & Davies, 1994; Owen & Cox, 1997; Richardson & McCabe, 2001; Zill, Morrison, & Coiro, 1993).

H3: Interparental conflict is expected to be a better predictor of quality of parental attachment than family structure (Buchanan & Heiges, 2001; Forehand, Neighbors, Devile, & Armistead, 1994; Richardson & McCabe, 2001).

II. SAMPLE

N = 310 Portuguese adolescents
Age = 14 to 18 years old (Mean = 15.7; SD = 1.13)
Gender:
>   Male = 140 (45.2%)
>   Female = 170 (54.8%)

School grade = 9th to 12th recruited from the Portuguese regular educational system
Family structure:
>   Intact families = 263 (84.8%)
>   Divorced families = 47 (15.2%)
>   - Custodial parent: mother = 44 (93.7%); father = 2 (4.2%); join-custody = 1 (2.1%)
>   - Time since parental separation: M = 6.81; SD = 4.35; Median = 6
>   - Adolescents' age at parental separation: M = 8.74; SD = 4.33; Median = 10

This two sub-sample (adolescents from intact and divorced families) only differ in three demographic variables, in school grade of father [$\chi2$ (4) = 11.540, p < .05] , mother [$\chi2$ (4) = 11.389, p < .05] and adolescent [$\chi2$ (3) = 14.208, p < .05].

III. INSTRUMENTS

Father-Mother Attachment Questionnaire – FMAQ (Matos & Costa, 2001, revised version)

Self-report questionnaire assesses attachment to mother and to father separately using a Likert type scale with 6 alternatives, organized around three dimensions:

- Inhibition of exploration and individuality (IEI – 10 items);
- Quality of emotional bond (QEB – 10 items);
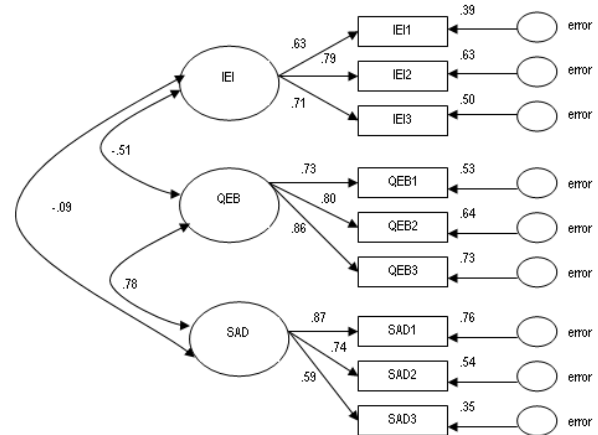- Separation anxiety (SAD – 10 items)

Psychometric Properties
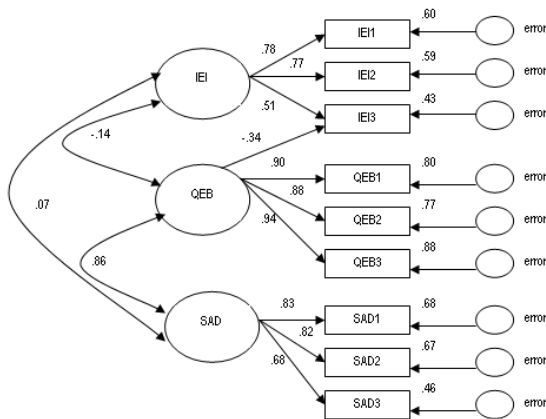
Confirmatory factor analysis of FMAQ

Father version
RMR= .049; GFI= .959; AGFI= .919; CFI= .978; RMSEA= .072
χ^2 (23) = 59.630, *p* = .000

Confirmatory factor analysis of FMAQ

Mother version
RMR= .052; GFI= .950; AGFI= .907; CFI= .954; RMSEA= .085
χ^2 (24) = 76.229, *p* = .000

Table 1
Internal Consistency of FMAQ – Cronbach Alpha

	Present study N = 310	Matos (2002a) N = 441
Inhibition of exploration and individuality – Father	.79	.89
Quality of emotional bond – Father	.94	.86
Separation anxiety and dependence – Father	.86	.80
Inhibition of exploration and individuality – Mother	.80	.88
Quality of emotional bond – Mother	.87	.81
Separation anxiety and dependence – Mother	.82	.76

Family Environment Scale – FES (Moos & Moos, 1986)

Only the Relationship Dimension of the FES were used for the present study, and participants were asked to respond about their present family environment using a Likert type scale of 6 alternatives along the following subscales:

- Cohesion (COH – 9 items)
- Expressiveness (EXP – 9 items)
- Conflict (CON – 9 items)

Psychometric Properties

RMR = .029
GFI = .968
AGFI = .940
CFI = .983
RMSEA = .055
$\chi 2\ (24) = 45.996,\ p = .004$

Confirmatory factor analysis of FES
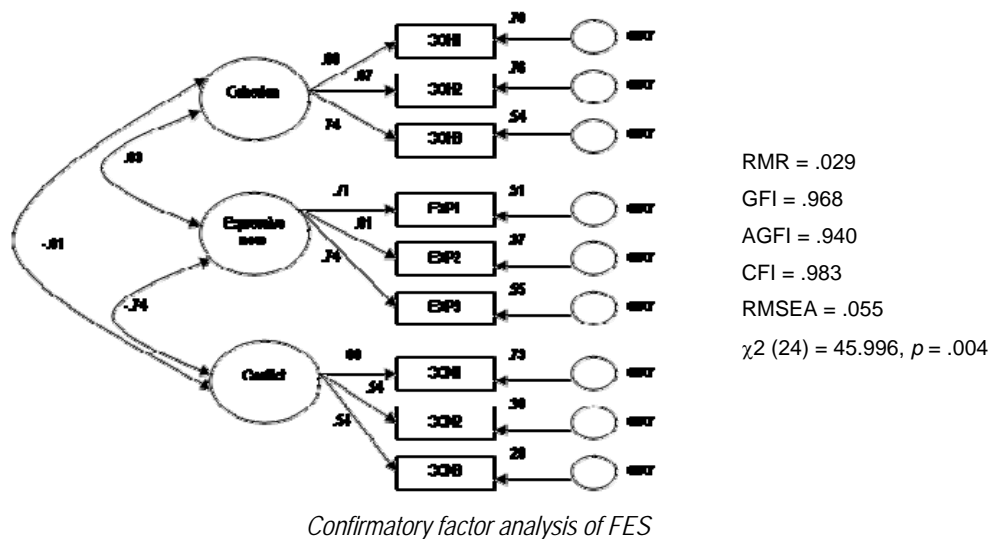
Table 2
Internal Consistency of FES – Cronbach Alpha

	Present study N = 310	Moos & Moos (1986) N = 1067
Cohesion	.87	.78
Expressiveness	.73	.69
Conflict	.71	.75

The Children´s Perception of Interparental Conflict Scale – CPIC (Grych, Seid, & Fincham 1992)

Self-report scale that assesses interparental conflict with a Likert type scale of 6 alternatives along 3 dimensions:

- Conflict properties (Con_Prop – 19 items)
- Self-blame (12 items)
- Threat (9 items)

Psychometric Properties

RMR = .037
GFI = .964
AGFI = .909
CFI = .965
RMSEA = .095
$\chi^2 (11) = 41.132$, $p = .000$

Confirmatory factor analysis of CPIC
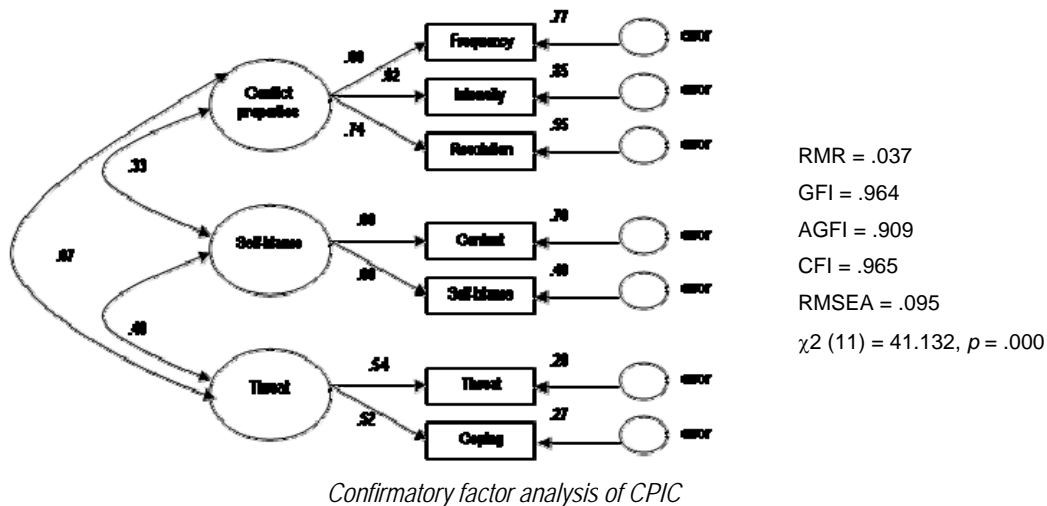
Table 3
Internal Consistency of CPIC – Cronbach Alpha

	Present study	**Grych, Seid & Fincham (1992)**	
	N = 310	Sample 1 N = 222	Sample 2 N = 114
Conflict properties	.92	.90	.89
Threat	.78	.83	.83
Self-blame	.79	.78	.84

IV. RESULTS

Differential Analyses – Differences according to family structure

Multivariate analyses of variance (Manova; Pillai's trace) revealed a significant family structure effect across attachment to father [F (3, 305) = 17.698, p < .001], but not across attachment to mother [F (3, 306) = 1.492, p = .217]. Adolescents from intact families have higher levels of *quality of emotional bond* [F (1, 309) = 48.071, p < .001] and *separation anxiety* [F (1, 309) = 27.057, p < .05] to father than adolescents from divorced families. Only the significant effects are reported in the Table 4.

Table 4
Means and standard deviations for attachment to father dimensions

	Mean	S.D.	Sig.
IEI			.751
Intact families	3.028	.86	
Divorced families	2.982	1.05	
QEB			**.000**
Intact families	**5.074**	**.81**	
Divorced families	**4.028**	**1.49**	
SAD			**.000**
Intact families	**3.954**	**.89**	
Divorced families	**3.167**	**1.20**	

No significant effects are observed between adolescents from intact and divorced families in relation to current perceived family relations (*cohesion*, *expressiveness* and *family conflict*) [F (3, 306) = 1.410, p = .240]. Family structure has a significant effect on the adolescents' perceived interparental conflict [F (3, 302) = 7.035, p < .001], but only in the *conflict properties* dimension [F (1, 306) = 19.636 p < .05]. Adolescents from divorced families have reported more interparental conflicts than adolescents from intact families.

Table 5
Means and standard deviations for CPIC dimensions

	Mean	S.D.	Sig.
CONF_PROP			**.000**
Intact families	**2.655**	**.82**	
Divorced families	**3.291**	**1.13**	
THREAT			.185
Intact families	3.208	.80	
Divorced families	3.389	.99	
SELF-BLAME			.303
Intact families	2.365	.79	
Divorced families	2.498	.75	

No interaction (bifactorial multivariate analysis of variance) was found between gender and family structure in the prediction of attachment to parents ([F (3, 303) = .818, p = .485 to father and [F (3, 304) = .253, p = .859] to mother), in the family relations [F (3, 304) = 1.447, p = .229] and in the interparental conflict [F (3, 300) = .879, p = .452].

Differential Analyses – Interparental Conflict x Family Structure

Interaction between family structure and interparental conflict was used to create 4 different groups of families: (1) intact families with low interparental conflict (n=157); (2) intact families with high interparental conflict (n= 106); (3) divorced families with low interparental conflict (n= 19); and (4) divorced families with high interparental conflict (n= 28). Categorization in low and high was obtained using the mean point of *interparental conflict properties* dimension for the total sample (low = M ≤ 2.76; high = M > 2.76).

This independent variable has produced a significant effect on quality of attachment to father [F (9, 903) = 9.887, p < .001] and to mother [F (9, 906) = 5.586, p < .001]. *Post-hoc tests* indicate that adolescents from intact families with high interparental conflict have more *inhibition of exploration and individuality* and less *quality of emotional bond* to both parents than adolescents from intact families with low interparental conflict. Adolescents from divorced families with low interparental conflict show more *quality of emotional bond* to mother when compared to adolescents from high interparental conflict independently of family structure (intact or divorced families). Considering adolescents from low interparental conflict families, those subjects that live in intact families have higher *quality of emotional bond* to father than subjects that live in divorced families.

Table 6
Means and standard deviations for FMAQ dimensions

	Intact families with low conflict		Intact families with high conflict		Divorced families with low conflict		Divorced families with high conflict		
	M	S.D.	M	S.D.	M	S.D.	M	S.D.	
FMAQ									
IEI father*	2.81	.77	3.35	.89	2.78	1.07	3.17	1.05	2>1
QEB father*	5.30	.65	4.73	.90	4.45	1.29	3.86	1.56	1>2; 1>3; 1>4; 2>4
SAD father*	4.06	.82	3.79	.97	3.67	1.04	2.92	1.24	1>4; 2>4
IEI mother*	2.92	.80	3.50	.95	3.05	.86	3.42	.86	2>1
QEB mother*	5.43	.52	5.05	.66	5.49	.67	4.95	.70	1>2; 1>4; 3>2; 3>4
SAD mother	4.16	.80	4.03	.89	4.52	.97	3.97	1.03	

* = p < .001

A significant multivariate effect [$F_{(9, 906)} = 8.807$, $p < .001$] was found for family systemic relationships. Adolescents from intact families with low interparental conflict perceive more *family cohesion* and *family expressiveness* and less *family conflict* than adolescents from high interparental conflict in the same family structure. For other hand, comparing adolescents from intact family with high conflict with adolescents from divorced families with low conflict, the first show less *family cohesion* and more *family conflicts.*

Table 7
Means and standard deviations for FES dimensions

	Intact families with low conflict		Intact families with high conflict		Divorced families with low conflict		Divorced families with high conflict		
	M	S.D.	M	S.D.	M	S.D.	M	S.D.	
FES									
Cohesion*	4.84	.75	4.09	.85	4.92	.74	4.45	.90	1>2; 3>2
Expressiveness*	4.47	.68	3.94	.70	4.41	.51	4.19	.74	1>2
Conflict*	2.32	.59	3.04	.70	2.35	.73	2.93	.89	2>1; 4>1; 2>3

* = $p < .001$

Contribution of all dimensions for explaining attachment to parents

To understand what variables most contribute to explain attachment *to* both parents we conducted a hierarchical multiple regression with each dimension separately. Due to space limitations we present only the results obtained with *quality of emotional bond* with detail. Family structure was entered in *block 1,* interparental conflict in *block 2* and family relations in *block 3.*

For *quality of emotional bond* to father the block that most contributes to explain the model is *interparental conflict* [R2change= .249, with $F_{(4, 300)} = 46.876$, $p < .001$], the second one is *family relations* [R2change= .137, with $F_{(7, 297)} = 46.231$, $p < .001$], and the last block is *family structure* [R2change= .135, with $F_{(1, 303)} = 47.445$, $p < .001$]. The model as a whole explains 52.1% of the total variance. The independent variable that most contributes is *interparental conflict properties* (β= -.360). However, for mother the block that most contributes is *family relations* that explains 28.5% of the total variance [R2change= .285, with $F_{(7, 298)} = 34.860$, $p < .001$], next is the *interparental conflict* [R2change= .158, with $F_{(4, 301)} = 14.870$, $p < .001$] and the *family structure* is not significant to explain the model [$F_{(1, 304)} = 2.066$, $p = .152$]. The model as a whole explains 45.0% of the total variance. The independent variable that most contributes is *family cohesion* (β= -.319).

For *inhibition of exploration and individuality* the block that most contributes is *interparental conflict* for both parents (father: [$F_{(4, 300)} = 17.918$, $p < .001$], R2change= .193; mother: [$F_{(4, 301)} = 16.551$, $p < .001$],

R2change= .179). For *separation anxiety* the variable that most contributes to explain the model is *family systemic relationships* for both parents (father: [F (7, 297) = 22.265, p < .001]; R2change= .137; mother: [F (7, 298) = 11.505, p < .001], R2change= .164).

As expected, results indicated that interparental conflict is the variable that most contributes to explain quality of attachment to parents. Whereas interparental conflict seems to be the better predictor for the emotional bond to father, family relations seems to be the variable most important for explaining the variation in the emotional bond to mother.

Table 8
Hierarchical multiple regression for the quality of emotional bond

		R^2	R^2 change	B	SE	β
FATHER	**BLOCK 1**	.135	.135	-.424	.060	-.301
	BLOCK 2	.385	.249			
	Conflict Prop.			-.406	.066	-.360
	Threat					
	Self-blame					
	BLOCK 3	.521	.137			
	Cohesion			.352	.081	.303
	Expressiveness			.238	.086	.170
	Conflict					
MOTHER	**BLOCK 1**	.007	.007			
	BLOCK 2	.165	.158			
	Conflict Prop.					
	Threat			.111	.040	.145
	Self-blame					
	BLOCK 3	.450	.285			
	Cohesion			.231	.054	.319
	Expressiveness			.265	.057	.303
	Conflict					

Note: B, SE and β for a significant level p < .05. **Block 1** = Family Structure, **Block 2** = Interparental Conflict, **Block 3** = Family Relation.

V. DISCUSSION

H1: As predicted, results show that family structure (divorce/intact families) per se seems not to have an effect on quality of attachment to the mother, however it affects quality of attachment to father, because adolescents from divorced families report less *quality of emotional bond* and *separation anxiety* only to the father. However, contrary to expectation adolescents from divorced and intact families do not differentiate

themselves in family systemic dimensions (*cohesion, expressiveness* and *family conflict*). This result can be explained by the fact that adolescents were asked to report on the present family relationships when they responded to the FES. It is suggested that the new family was able to reorganize itself into a new system, where *cohesion, expressiveness* and absence of significant *conflict* is present. Note that, as predicted, when adolescents are asked to report on the family situation previous to the divorce, they perceive higher levels of interparental conflict compared to intact families.

H2: As expected, associations were found between interparental conflict and quality of attachment to parents independently of family structure. The adolescents from divorced families with low interparental conflict revealed higher *quality of emotional bond* to mother and perceived their family has being more *cohesive* and with less *conflicts* than the adolescents from intact families with high interparental conflict. Within adolescents from intact families, those reported higher levels of interparental conflict have more *inhibition of exploration* and *quality of emotional bond* to both parents, less *family cohesion* and *expressiveness*, and more *family conflicts*.

H3: As expected, results indicated that interparental conflict is the variable that most contribute to explain the quality of attachment to parents than family structure. Whereas interparental conflict seems to be the better predictor for the emotional bond to father, family relations seems to be the variable most important for explaining the variation in the emotional bond to mother.

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