BRIEF REPORT

Long-Term Impact of Parental Divorce on Intimate Relationship Quality in Adulthood and the Mediating Role of Psychosocial Resources

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The purpose of this 16-year prospective follow-up study was to investigate the association between parental divorce in childhood and intimate relationship quality in adulthood. The mediating role of psychosocial resources (parent-child relationships at 16 years, self-esteem and social support at 32 years) in this association was also studied. All 16 year olds of one Finnish city completed questionnaires at school and were followed up by postal questionnaires at 32 years of age (n = 1,471). Results showed that women and men from divorced families were more often divorced or separated at the age of 32 years than those from nondivorced families. However, parental divorce was associated with poorer intimate relationship quality only among women. Women from divorced families also had poorer relationships with their father and mother in adolescence, and they had lower self-esteem and satisfaction with social support in adulthood than women from intact families. No such associations were found among men. The impact of parental divorce on intimate relationship quality among women was partially mediated by mother-daughter relationship, self-esteem, and satisfaction with social support. The mediating role of mother-daughter relationship was not direct, however, but was mediated via self-esteem and satisfaction with social support. Our findings indicate that parental divorce affects daughters more than sons. In the context of parental divorce, the mother-daughter relationship in adolescence is important for the development of later psychosocial resources and, via them, for intimate relationship quality.

Keywords: parental divorce, quality of intimate relationships, psychosocial resources

Several studies have shown that parental divorce affects offspring's marriages by increasing the risk for divorce (Amato & Keith, 1991). Further, parental divorce relates to

relationship satisfaction and less optimism, trust, and commitment in offspring's intimate relationships (Franklin, Janoffbulman, & Roberts, 1990; Whitton, Rhoades, Stanley, & Markman, 2008), especially among women (e.g., Jacquet & Surra, 2001). Different factors, such as sociodemographic (Feng, Giarrusso, Bengtson, & Frye, 1999) and interaction patterns (Story, Karney, Lawrence, & Bradbury, 2004), have been offered for the mediators in the association between parental divorce and offspring's intimate relationships.

Few longitudinal studies have examined the mediating role of children's perceptions of the quality of their relationships with parents. This is somewhat surprising given the crucial role of parent-child relationships in the transmission of interaction patterns from childhood to adulthood (Whitton, Waldinger, et al., 2008). Parental divorce may affect the nature of parent-child relationships by disturbing the attachment bond between parent and child, which, in turn, negatively influences the general representations of

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close relationships (Crowell, Treboux, & Brockmeyer, 2009) and places adult offspring, for example, at risk for low self-esteem (Amato & Sobolewski, 2001). It is possible that parent-child relationships have no direct impact on intimate relationships but affect other elements in personal and social development of adolescence, which then may reduce the quality of intimate relationships in adulthood. For example, the father-child relationship has shown to be instrumental toward self-esteem (LeCroy, 1988), which, in turn, has a positive impact on marital quality (Barelds, 2005). Parent-child relationships have also been found to be important for perceptions of social support in adulthood (Riggio, 2004), and social support has been linked to marital functioning (Bradbury, Fincham, & Beach, 2000), especially to women's marital satisfaction (Acitelli & Antonucci, 1994).

The aim of this 16-year population-based follow-up study was to examine the impact of parental divorce on off-spring's quality of intimate relationships and the role of psychosocial resources as mediators in this context. We especially focused on the mediational role of parent-child relationships, both by themselves and further through adult self-esteem and social support. As far as we know, there are no previous studies in which parent-child relationships have been studied as mediators in a prospective setting. Based on previous studies, we expected that parental divorce has a stronger impact on daughters' than those of sons' adulthood intimate relationships. As regards psychosocial resources as mediators, we were cautious to state any gender-specific hypotheses.

Method

The original study focused on adolescent health and included all ninth-grade pupils (N = 2,269) in secondary schools in the spring of 1983 in Tampere, Finland. The study was introduced by a research worker who delivered questionnaires and was available for any questions about the research. The response rate was 96.7% (N = 2,194). In 1999, postal questionnaires were mailed to the same study population when they were 32 years old. The response rate was 70.4% (N = 1,471). More detailed description of participants is presented in Huurre, Junkkari, and Aro (2006). The study protocol was approved by the Ethics Committee of the National Public Health Institute, Finland. Information on parental divorce was obtained via structured question ("Are your parents divorced?"; 1 = no, 2 = yes) in the first phase of the study at the age of 16 years. Those whose parents had died (n = 79) or whose information about parental divorce was incomplete (n = 5) were excluded. Of the eligible 1,387 participants, 1,143 (82%) reported having a current intimate relationship at age 32 years. Of these, 250 (148 women; 102 men) came from divorced, and 893 (498 women; 395 men) from intact, families.

Relationships with parents in adolescence (Pelkonen, Marttunen, Kaprio, Huurre, & Aro, 2008) were measured at 16 years with three statements on a 5-point scale (e.g., "I feel my mother/father is close to me"). Cronbach's alpha of the mother-child relationship index was .72 for girls and .64

for boys, and of the father-child relationship index, .68 for girls and .56 for boys. The concept of an intimate relationship at the age of 32 years refers to steady dating, living together, and marriage. Aspects of quality of intimate relationship covered sustained affection, mutual trust, and partner cohesiveness, as suggested by Prager (1995). In addition, problems and conflicts were included. The measure (Palosaari & Aro, 1995) consists of six items (e.g., "Our relationship is warm") scored on a 5-point Likert scale (1 = totally disagree, -5 = totally agree). Cronbach's alpha was .92 among women and .89 among men. Self-esteem at 32 years was assessed using a Finnish modification of Rosenberg's measure (Rosenberg, 1965), consisting of seven statements of self-worth on a 5-point scale (e.g., "I believe in myself and my possibilities"; Aro, 1988). Cronbach's alpha was .89 among women and .87 among men. Satisfaction with social support at 32 years was assessed with a modified version of the Social Support Resources (SSR) scale (Vaux & Harrison, 1985), measuring five types of social support (emotional, practical, financial, advice, and socializing) using a 5-point scale (1 = very unsatisfied, -5 = very satisfied). Cronbach's alpha for the overall index was .74 among women and .72 among men. Current marital status (unmarried, married, separated/divorced) was inquired at the age of 32 years. Parental socioeconomic status (1 = white collar, 2 = blue collar) was based on standard classification of occupations in Finland (Tilastokeskus, 1975).

Analyses were done separately among women and men. Means, standard deviations, and Pearson correlation coefficients among the study variables are given in Table 1. A mediational model of psychosocial resources was specified as a saturated path model (see Figure 1) and analyzed in Mplus 5.2 using maximum likelihood estimation. In the model, direct path from parental divorce to quality of intimate relationship, as well as all indirect paths through psychosocial resources, were estimated. The Model Indirect option (delta method) in Mplus was used to test the indirect effects. Parental SES was used as an adjusting variable in the model.

Results

Among the eligible subjects (N=1,387), 48% were currently married and 5% were separated/divorced. Parental divorce in childhood associated significantly with marital status at 32 years: Those from divorced families were currently more often separated/divorced than those from non-divorced families among women ($\chi^2=11.2, df=1, 10\%$ vs. 4%, $p=.001, \eta^2=.12$) and among men ($\chi^2=9.7, df=1, 10\%$ vs. 4%, $p=.002, \eta^2=.13$). Women with a background of parental divorce were also currently less often married ($\chi^2=8.9, df=1, 40\%$ vs. 53%, $p=.003, \eta^2=.11$); among men, the difference was not statistically significant ($\chi^2=2.0, df=1, 42\%$ vs. 49%, $p=.150, \eta^2=.06$).

According to zero-order correlations (see Table 1), parental divorce had a negative correlation with mother-child relationship, self-esteem, satisfaction with social support,

Table 1 Correlations, Means, and Standard Deviations Among Study Variables

	Men							
Women	1	2	3	4	5	6	7	
1. Parental divorce, 16 years		06	.08	.03	05	01	.09	
2. Mother relationship, 16 years	17^{**}		.55**	.12*	.08	.15**	08	
3. Father relationship, 16 years	08	.37**		.16**	.07	.22**	04	
4. Self-esteem, 32 years	11**	.17**	.10**		.39**	.48**	03	
5. Satisfaction with social support, 32 years	11**	.19**	.16**	.39**		.39**	01	
6. Quality of intimate relationship, 32 years	17^{**}	.18**	.16**	.33**	.37**		.02	
7. Parental socioeconomic status, 16 years	.04	09^{*}	12**	14**	07	11**		

Mean (SD)/%	1	2	3	4	5	6	Blue collar	Currently married ^a	Currently divorced/ separated ^a
Women Men		3.9 (0.9) 4.0 (0.8)	()	()	()	4.2 (0.7) 4.2 (0.7)	49% 49%	50% 47%	5% 5%

Note. Women's correlations are presented below the diagonal; men's correlations are presented above the diagonal. *Ns* varied from 624 to 646 in women and from 469 to 497 in men due to missing data in some variables.

and quality of intimate relationships among women. Among men, these correlations were not statistically significant. Gender differences in these associations were analyzed in regression analyses using Gender x Parental Divorce interaction terms; of these, all but the one on social support were significant (p < .05).

Because there were no associations between parental divorce and quality of intimate relationships among men, the path model of psychosocial resources as mediators between parental divorce and quality of intimate relationships was only analyzed among women (see Figure 1). The model

accounted for 20% of the variance in intimate relationship quality among women. The total effect of parental divorce on quality of intimate relationships (-.153, p < .001) decomposed to a significant direct effect (-.088, p = .014) and significant total indirect effect through all psychosocial resources (-.065, p < .001), indicating that the effect of parental divorce on intimate relationship quality is partially mediated through these resources. The sum of indirect effects between parental divorce and intimate relationship quality going via mother-child relationship was -.021 (p = .013). Of the three separate effect, statistically significant

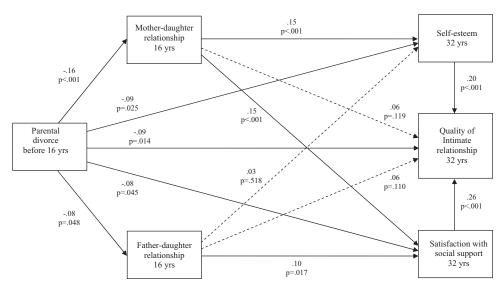


Figure 1. Path model of psychosocial resources mediating the effect of parental divorce on offspring's quality of intimate relationship among women. Standardized regression coefficients and their p values. Correlations between disturbances of concurrent psychosocial resources were estimated freely (not shown). Parental SES was used as an adjusting variable in the model (effects not shown). The specified model is saturated. Model fit with the three nonsignificant paths (dashed lines) removed: $\chi^2_{(df = 3, n = 646)} = 7.84, p = .049$; CFI = .99; RMSEA = .05, 95% CI [.00, .09].

 $^{{}^{}a}N = 1387.$ ${}^{*}p < .05.$ ${}^{**}p < .01.$

were the effects via mother-child relationship via self-esteem (p=.016) and via mother-child relationship via satisfaction with social support (p=.012), but the effect via mother-child relationship straight to the quality of intimate relationships was not significant (p=.145). The sum of indirect effects going via father-child relationship was not significant (-.007, p=.138). The sum of all indirect effects via self-esteem was -.022 (p=.011) and via satisfaction with social support was -.028 (p=.010).

Discussion

The goal of this study was to investigate the association between parental divorce and offspring's quality of intimate relationships and the mediational role of psychosocial resources in this association and gender differences. As expected, the impact of parental divorce under the age of 16 years on the quality of intimate relationships at the age of 32 years was stronger among women than men. This is in line with previous studies that have found that women from divorced families have more negative attitudes toward divorce (Kapinus, 2004), negative couple communication (Sanders, Halford, & Behrens, 1999), and less trust and satisfaction (Jacquet & Surra, 2001). One possible explanation for the gender divergence is that the primary caregivers for children (the residential parent) after divorce are, in most cases, the mothers (Forss & Säkkinen, 2009), and daughters may, by identifying with mothers, adopt their negative attitudes concerning marriage. Interestingly, there were no gender differences in the intergenerational transmission of divorce—an issue requiring further studies.

One possible explanation for gender divergence may be in differences in psychosocial resources. We found negative relation between parental divorce and parent-child relationships, self-esteem, and satisfaction with social support only among women. Further, we found mother-daughter relationship, self-esteem, and satisfaction with social support to partially mediate the association between parental divorce and intimate relationship quality. However, the mediating role of mother-daughter-relationship was not direct but was mediated, in turn, via self-esteem and satisfaction with social support. This suggests that, in our study, the childhood mother-daughter relationship primarily relates to personal and social development rather than having direct impact on adulthood quality of intimate relationships. This result is congruent with studies of Amato and Sobolewski (2001) and Riggio (2004). According to our study, it seems that adult daughters from divorced families do not just reproduce their childhood representations of close relationships in their adulthood intimate relationships. Despite the important role of psychosocial resources, parental divorce did appear to have an independent implication: Its significance still remained when the different psychosocial resources were in the model.

Although some measures of our prospective 16-year follow-up study, like relationships with parents and quality of intimate relationships, were unstandardized, their face validity was good and they behaved in a predictable way, as in the previous studies by Palosaari and Aro (1995) and

Pelkonen et al. (2008). The reliability coefficients of the parent-child relationship measures were only satisfactory, especially among boys, which might have attenuated this measure's associations with other variables and account for some of the null findings for boys. We only studied a subset of all possible mediators, and some other relevant factors might be absent from our model. The specified path model in our study is the one of many alternative models. For example, it is likely that the quality of intimate relationships affects self-esteem and social support. Although prospective in design, causality cannot be inferred from our model. Effect sizes in our model were relatively modest but comparable to other studies (Amato, 2001), especially given the long follow-up time. Sample attrition may have caused some bias in the results, as analyses of the dropouts (not shown) indicated that the nonparticipation among women was related to parental divorce.

The main strength of this study is the relative large and representative prospective follow-up sample with a reasonable low dropout rate. The contribution of this paper lies in studying psychosocial resources as mediators between parental divorce and intimate relationship quality in adulthood. Especially, the role of childhood parent-child relationships is relatively understudied in this context. Although children from both intact and divorced families were, on average, quite satisfied with their intimate relationships, differences between these groups highlight the need to pay more attention to children in the situation of parental divorce and to the development of parent-child relationships. Our results indicated that girls are more vulnerable to the negative impact of parental divorce and, among them, sustaining a good mother-daughter relationship is important for adulthood psychosocial adaptation.

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