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Positive Events as a Stress Buffer for Children and Adolescents in Families in Transition

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This study examined whether positive events mitigated the relation between negative events and maladjustment in samples of children and adolescents experiencing family transitions. The study examined this relation in two samples, used multiple reporters of maladjustment, and employed “tailor-made” checklists to measure events. The first sample included 86 stepfamilies with adolescents 10 to 17 years of age. The second sample included 171 divorced families with children 8 to 15 years of age. Evidence that positive events are protective for children and adolescents experiencing high levels of negative events was found across the 2 samples and across mother and child report of adjustment. These findings have implications for theory and intervention development.

A significant number of children and adolescents under the age of 18 undergo at least one family transition. Parental divorce occurs to about 1.5 million American children and adolescents each year (National Center for Health Statistics, 1995), and 23% to 33% of children and adolescents under 18 years spend some time in a stepfamily, depending on whether cohabitating families are included in the estimate (Bumpass, Raley, & Sweet, 1995). A large body of research suggests that children and adolescents who undergo family transitions are at greater risk for maladjustment than their counterparts in two biological parent families (e.g., Amato & Sobolewski, 2001; Ganong & Coleman, 1993), and they exhibit marked variability in their adjustment. Although some children and adolescents adapt well, others experience short-term distress and enduring negative effects into adulthood (e.g., Amato & Sobolewski, 2001; Chase-Lansdale, Cherlin, & Kiernan, 1995).

One theory that explains this variability is the transitional events theory (Felner, Farber, & Primavera, 1983). This model proposes that posttransition adjustment is related to the number and nature of events children experience following the transition in family structure, as well as the resources they possess to adapt to these experiences. Several researchers have shown

that children who experience more negative events during a family transition have more adjustment problems (Doyle, Wolchik, & Dawson-McClure, 2002; Hetherington, Cox, & Cox, 1985; Sandler, Wolchik, & Braver, 1988). However, divorce and remarriage involve positive, as well as negative, events and relatively little empirical work has focused on positive events. This study examines whether positive events that occur during a family transition are a protective resource.

Theorists (e.g., Luther, Cicchetti, & Becker, 2000) have articulated two models of protective effects: main effect and interactive. In the main effect model, a variable exerts a direct, independent influence on the outcome of interest. This influence can be present across different levels of stress. In the interactive model, a protective factor and a risk factor interact to affect outcomes. The risk factor is more strongly related to outcomes at lower levels of a protective factor than at higher levels of a protective factor.

Research has shown inconsistent evidence of the main effects of positive events on child and adolescent outcomes (e.g., depression, anxiety, low self-esteem, externalizing problems, and poor social and academic skills). Most of the studies that have utilized positive-event checklists have found that positive events are directly related to better outcomes (e.g., Cohen, Burt, & Bjorck, 1987; Doyle et al., 2002; Kanner, Feldman, Weinberger, & Ford, 1987; Sandler, Wolchik, Braver, & Fogas, 1991; Swearingen & Cohen, 1985b). However, several studies have found nonsignificant relations (e.g., Jackson & Warren, 2000; Sandler & Ramsey, 1980; Swearingen & Cohen, 1985a). Most of the studies only included child or adolescent report of outcomes; however, two of the studies

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that found nonsignificant effects only included parent report of child outcomes (Jackson & Warren, 2000; Sandler & Ramsey, 1980). In the studies that have found significant relations, except for Cohen et al. (1987), events were nomothetically classified as positive by independent raters. In the studies that did not find a significant main effect of positive events, the events were classified as positive either by the children or adolescents (e.g., Jackson & Warren, 2000; Swearingen & Cohen, 1985a) or the parents (Sandler & Ramsey, 1980). It is also notable that most of the studies that did not find significant relations used positive-event checklists that assessed limited domains of children's lives (e.g., school and peers) and did not extensively assess positive events involving the family or broader society (e.g., Jackson & Warren, 2000; Swearingen & Cohen, 1985a, 1985b).

Only two studies have assessed main effects models for positive events specific to children and adolescents undergoing family transitions, and these studies assessed both parent and child or adolescent report of maladjustment. Doyle et al. (2002) found that positive events (e.g., stepdad told you he liked something you did or things about you; stepdad gave mom money for bills) were directly negatively related to both adolescent and parent report of lower internalizing problems but not externalizing problems for adolescents in stepfamilies. Sandler et al. (1991) found that positive events reported by children of divorce (e.g., dad does extra nice things for you that you like; you had free time to do things you liked) were directly negatively related to parent but not child report of behavioral problems.

There are two studies of adolescent adjustment that have shown support for positive events interacting with negative events, such that negative events are more strongly related to outcomes at lower levels of positive events than at higher levels. In a community sample, Swearingen and Cohen (1985b) found that self-rated positive events interacted with negative events in predicting state anxiety. Significant interactions were not found when predicting trait anxiety or depression. In a larger community sample, Cohen et al. (1987) found that self-rated positive events similarly moderated the relation between negative events and anxiety; the interaction between positive events and negative events was nonsignificant when predicting depression and self-esteem. No study to date has tested interactive models with positive events for children or adolescents in families in transition.

This study examined whether positive events mitigate the relation between negative events and maladjustment for children and adolescents undergoing two family transitions, parental divorce and repartnering. This study extends previous research in several ways. It is the first study to examine whether positive events have a stress-buffer function for children and adoles-

cents undergoing a family transition. Further, this study utilizes positive-events checklists that sample events across numerous domains of functioning (e.g., family, peers, society). Similar to previous research that has found significant main effects of positive events on maladjustment, this study assessed positive events nomothetically. Nomothetic classifications are made by expert raters, such as members of the target group and experts who work with the target population, rather than by the study participants themselves. These classifications have the advantage of reducing common influences of response sets to rate things positive or negative that might artificially increase the correlation between event scores and measures of mental health problems (Sandler & Guenther, 1985). Further, unlike much prior research on the protective nature of positive events, multiple reports of maladjustment were used to examine the robustness of the findings across reporter and type of behavior problem.

Study 1

Method

Participants

Participants were 86 adolescents living in repartnered families and their biological mothers. The adolescents were equally distributed across sex (54% male, 46% female) and, on average, 12.9 years of age ($SD = 2.13$, range = 10 to 17 years). Ethnicity was European American (86%), African American (1%), Hispanic (5%), and other (8%). Ninety-two percent of the repartnered couples were married; 8% co-resided. Residential family composition included the adolescent (17%) or the adolescent and biological siblings (41%), stepsiblings (14%), half-siblings (4%), stepsiblings and biological siblings (17%), half-siblings and biological siblings (4%), stepsiblings and half-siblings (1%), and stepsiblings, half-siblings, and biological siblings (2%). Median family income was \$60,000 to \$70,000 per year (range = <\$10,000 to >\$90,000). Of the mothers, 50% had some college education, 12% had a high school education or less, and 18% had obtained an advanced degree. Almost two thirds of the mothers were employed full-time (65%); 23% were employed part-time, 8% were unemployed, 1% were disabled, and 3% were other.

Procedure

Repartnered families were recruited through a variety of methods. Almost half (49%) were recruited through two national organizations: the Stepfamily Foundation ($n = 17$) and the Stepfamily Association of America ($n = 31$). The remaining 51% were recruited through advertisements on Internet Web sites targeting

stepfamilies ($n = 18$), divorce records ($n = 12$), word of mouth ($n = 4$), and flyers ($n = 4$).

Eligibility criteria included that the adolescent (a) was between the ages of 10 and 17, (b) had a stepfather or co-residing male partner of his or her female biological parent who had lived with him or her for at least 3 months but not more than 6 years, (c) joined a stepfamily following the divorce of a biological parent, and (d) understood and spoke English. Families were required to have co-resided for 3 months so the new partners had enough time to become an integral member of the family and had lived with the family during the time about which the adolescent reported. A cutoff of 6 years was based on research suggesting that a stepfamily can take more than 5 years to form and stabilize (Bray, 1988).

Letters were sent to families that requested information from the Stepfamily Foundation's Web site, were members of the Stepfamily Association of America, were identified through the divorce records, or contacted us about the project. The letters described the study and asked mothers to fill out the informed consent, have eligible adolescents sign an assent, and return the forms. The mothers often chose an adolescent to participate prior to talking with project staff, making it difficult to randomly select an eligible adolescent to participate. To use consistent methodology across the study, all mothers chose one eligible adolescent to participate.

Research assistants administered the assessment battery via telephone. The mother and adolescent interviews were completed on the same day for most families. In all families, the mother and adolescent interviews occurred within 8 days of one another. Families were compensated with \$20.

Measures

Demographics. Mothers completed questions about (a) family structure; (b) their education, income, and occupation; (c) age, sex, and ethnicity of the interviewed adolescent; and (d) members of their household and the noncustodial fathers' household.

Predictors: Stepfamily Events Profile. The Stepfamily Events Profile is a tailor-made, qualitatively derived checklist that includes 129 events (Doyle et al., 2002). These events were nominated by knowledgeable informants (i.e., adolescents in stepfamilies, biological and stepparents in stepfamilies, mental health professionals and researchers who work with stepfamilies) as meaningful to minors in stepfamilies. The events span 14 domains (e.g., mother-child relationship, societal attitudes, financial resources). The events were rated by experts as positive, negative, or ambiguous in valence (intraclass correlation = .98). Sixty-two events were rated as negative and 37 events

as positive. Adolescents indicated whether each event had occurred in the past month. Items endorsed were summed to create a total negative and positive events score (possible range: 0 to 62 for negative events, 0 to 37 for positive events). One-week test-retest reliability was .83 for positive events and .74 for negative events. Sample positive events are as follows: "stepdad told you he liked something you did or things about you" and "stepdad gave mom money for bills." Sample negative events are as follows: "dad ignored attempts to contact him" and "stepsibling was mean to mom or said mean things about her." See Doyle et al. (2002) for more information on the Stepfamily Events Profile or contact the lead author for a copy of the measure.

Outcomes: Internalizing problems. Mothers completed the 31-item Child Behavior Checklist internalizing subscale for problems during the past month (current $\alpha = .86$). This subscale discriminates between clinic-referred and non-clinic-referred adolescents on internalizing behavior problems and has adequate reliability (Achenbach, 1991a). Items were scored on a 3-point scale of 0 (*not true*), 1 (*somewhat or sometimes true*), and 2 (*very often true*). Items were summed so that higher scores reflected more internalizing problems (possible range = 0 to 62).

Adolescents completed a composite measure of internalizing problems. This measure was constructed using the 27-item Children's Depression Inventory (Kovacs, 1981; current $\alpha = .78$) and the 28-item Revised Children's Manifest Anxiety Scale (Reynolds & Richmond, 1978; current $\alpha = .90$). The Children's Depression Inventory has been shown to discriminate clinically depressed and nondepressed psychiatric patients (Kovacs, 1985) and has demonstrated adequate internal consistency and test-retest reliability (Kovacs, 1992). Items on this scale include three descriptive statements coded 0, 1, or 2. Respondents choose which of the three statements best describes them. Items on this scale are summed so that higher scores reflect greater depression (possible range = 0 to 54). The Revised Children's Manifest Anxiety Scale also has adequate internal consistency and test-retest reliability (Reynolds & Richmond, 1978) and construct validity (King, Gullone, Tonge, & Ollendick, 1993). Items on this scale are coded 1 (*true*) or 2 (*false*). These items are recoded when appropriate so that higher scores reflect more anxiety. The total scale score is computed by summing the items (possible range = 28 to 56). Reports of anxiety and depression were correlated highly ($r = .56$); thus, the two scores were standardized and averaged to create a composite variable with a mean of $-.02$ ($SD = .89$, range = -1.3 to 2.3). A composite score was used to (a) reduce the number of outcome measures, therefore reducing concerns about alpha inflation, and (b) create an adolescent report of internalizing problems similar to the mother report of internalizing prob-

Table 1. Descriptive Data and Zero Order Correlations Between the Study Variables—Parental Repartnering Sample

	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. Negative events–A	17.14	7.97	1.00				
2. Positive Events–A	25.50	5.81	.35**	1.00			
3. Internalizing–A ^a	–.02	.89	.34**	–.11	1.00		
4. Externalizing–A	13.71	8.82	.35**	–.17	.54**	1.00	
5. Externalizing–M	10.11	7.11	.01	–.24*	.13	.30**	1.00
6. Internalizing–M	10.67	9.02	.06	–.25*	.36**	.15	.62**

Note: *n* = 86. M = mother report; A = adolescent report.

^aComposite of *z* scores: (a) Children's Depression Inventory, (b) Revised Children's Manifest Anxiety Scale.

lems. Weighted alpha for the composite is .60 (Lord & Novick, 1968).

Externalizing problems. Mothers completed the 33-item Child Behavior Checklist externalizing subscale for problems during the past month (Achenbach & Edelbrock, 1983). This subscale discriminates between clinic- and non-clinic-referred adolescents (Achenbach, 1991; current $\alpha = .91$) and has demonstrated reliability (Achenbach, 1991). Items were scored on a 3-point scale of 0 (*not true*), 1 (*somewhat or sometimes true*), and 2 (*very often true*). Items were summed so that higher scores reflected more externalizing problems (possible range = 0 to 66). The 28-item Divorce Adjustment Project Externalizing Scale (Program for Prevention Research, 1985; current $\alpha = .88$) assessed adolescent report of aggression and hostility. This scale has been reported to have adequate reliability ($\alpha = .88$; Hipke, Wolchik, Sandler, & Braver, 2002) and is shown to be sensitive to detecting intervention-induced change in relation to aggression and hostility (Hipke et al., 2002). Items were scored on a 3-point scale of 0 (*not true*), 1 (*somewhat or sometimes true*), and 2 (*very often true*). Items were summed so that higher scores reflected more externalizing problems (possible range = 0 to 56).

Results

Descriptive data and zero-order correlations for the study variables are presented in Table 1. Within-reporter correlations between internalizing and externalizing problems were significant (adolescent report, $r = .54$; mother report, $r = .62$). Across-reporter correlations of these measures were also significant but relatively smaller in magnitude (internalizing, $r = .36$; externalizing, $r = .30$). The number of negative events was significantly related to the number of positive events ($r = .35$). There was a significant negative correlation between positive events and mother report of internalizing ($r = -.25$) and externalizing problems ($r = -.24$). Negative events were significantly correlated with adolescent report of internalizing ($r = .34$) and externalizing problems ($r = .35$).

Four simultaneous multiple regressions were run to test if positive events mitigated the relation between negative events and maladjustment. Five covariates shown to be associated with maladjustment in previous research on repartnered families were included: adolescent's sex, age, and ethnicity; and mother's education and occupational rating (Amato & Ochltree, 1987; Baydar, 1988; Collins, Newman, & McKenry, 1995; Ellerman, 1993; Hetherington, 1993; Zill, 1988). Noncategorical variables were centered as suggested by Aiken and West (1991). Interaction terms were computed as the product of the centered positive and negative events scores.

Results of the regressions are presented in Table 2. Significant interaction terms were found for the regressions predicting adolescent report of internalizing and externalizing problems. Although the interaction terms were not significant in the regressions predicting mother report of internalizing or externalizing problems, the main effects of positive events were significant for both. For the models predicting adolescent report of internalizing and externalizing problems, simple slopes were computed at points 1 standard deviation above and below the mean of positive events. These results were plotted using the technique suggested by Aiken and West (1991) and are presented in Figure 1. As predicted, positive events mitigated the relation between negative events and maladjustment. For adolescents reporting a high number of positive events, the relations between negative events and both internalizing and externalizing problems were nonsignificant. For adolescents reporting few positive events, the relations between negative events and internalizing and externalizing problems were positive and significant.

Study 2

Given the promising results of Study 1, data from a sample of divorced families were analyzed to evaluate whether the stress-buffering effects of positive events occurred for children experiencing a different family transition.

Table 2. *Simultaneous Regression of Outcomes on Covariates, Negative Events, Positive Events, and Their Interaction for Parental Repartnering Sample*

	Adolescent Report				Mother Report			
	Internalizing ($R^2 = .295$)		Externalizing ($R^2 = .401$)		Internalizing ($R^2 = .155$)		Externalizing ($R^2 = .261$)	
	β	SE	β	SE	β	SE	β	SE
Covariates ($R^2 \Delta$)	(.08)		(.23)**		(.09)		(.22)**	
Education 1 ^a	-.11	.16	-.03	.15	.34+	.17	.22	.17
Education 2 ^a	-.23	.16	-.24	.15	.19	.17	-.03	.17
Education 3 ^a	-.15	.14	-.21	.13	.03	.15	-.12	.15
Occupation ^b	.08	.11	.08	.10	-.01	.11	-.01	.11
Ethnicity ^c	.03	.10	.23*	.10	-.02	.11	.08	.11
Sex ^d	.01	.10	-.13	.10	-.06	.11	-.29**	.11
Age	-.18+	.11	.01	.10	-.01	.12	.13	.11
Main effects ($R^2 \Delta$)	(.15)***		(.16)***		(.07)+		(.04)	
Negative events	.46**	.11	.43**	.11	.12	.12	.01	.12
Positive events	-.42**	.12	-.44**	.12	-.33*	.13	-.26*	.13
Interaction ($R^2 \Delta$)	(.07)**		(.09)***		(.002)		(.01)	
	-.29**	.11	-.30**	.10	-.05	.12	-.11	.11

Note: $n = 86$. β = standardized regression coefficient.

^aEducation was dummy coded to account for differences between levels. ^bBased on 1990 Census Bureau code. Low scores reflect greater prestige. ^cEthnic categories: 0 = European American; 1 = other. ^d1 = male; 2 = female. ^eComposite of z scores: (a) Children's Depression Inventory, (b) Revised Children's Manifest Anxiety Scale.

+ $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Method

Participants

Participants were 171 children whose parents had divorced and their residential mothers. The average age of the target children in this sample was 10.68 ($SD = 2.11$, range = 8 to 15 years); 50% were female. Ninety percent of the mothers were European American, 6% were Hispanic, 1% were African American, 1% were American Indian, and 2% were other. Seventy-four percent of the mothers worked 40 hr a week or more; 5% did not work outside the home. Seventy-seven percent of the mothers had obtained some college education or an associate of arts degree; 25% had a high school education or less; 7% had obtained an master of arts or higher degree. The families were divorced an average of 10 months (range = <1 to 27). Most mothers had sole legal custody (73%); 27% had joint legal custody. Median family income was \$20,001 to \$25,000 (range = <\$5,000 to >\$50,000).

Procedure

Mothers and one of their randomly selected, residential children between the ages of 8 and 15 years of age were recruited to participate in a study to evaluate an intervention for custodial mothers that focused on facilitating children's postdivorce adjustment (Wolchik et al., 1993). Families, who were identified through random sampling of court records of filings for divorce, media articles, and school presentations ($N = 2,224$), were sent a letter about the program and, when possible, were contacted by telephone. Of

these, 495 declined to participate, 120 were not able to be contacted despite verified phone numbers, 1,142 did not respond to the letter and had unverifiable phone numbers, and 254 were ineligible. Eligibility criteria were (a) mother was divorced within the previous 2 years, (b) family had a residential child between the ages of 8 and 15, (c) mother was the primary residential parent, (d) neither the mother nor the child was currently in treatment for psychological problems, (e) mother had not remarried and did not plan to do so in the next several months, (f) changes in custody were not expected in the next several months, and (g) mother and child spoke English as their primary language. Of the 213 families who were eligible and agreed to participate, 190 completed the pretest interview. Of these 190 families, 16 families were recruited through the media and school presentations; 174 were recruited via court records. One hundred seventy-one of the 190 interviewed families had complete pretest data on all of the measures included in this study.

Interviews were conducted by trained interviewers who met with the mother and child separately in the family's home. Informed consent was obtained from the mother and assent was obtained from the child.

Measures

Demographics. Mothers completed a demographic questionnaire about their age, ethnicity, education, and income; family composition; and child's age and sex.

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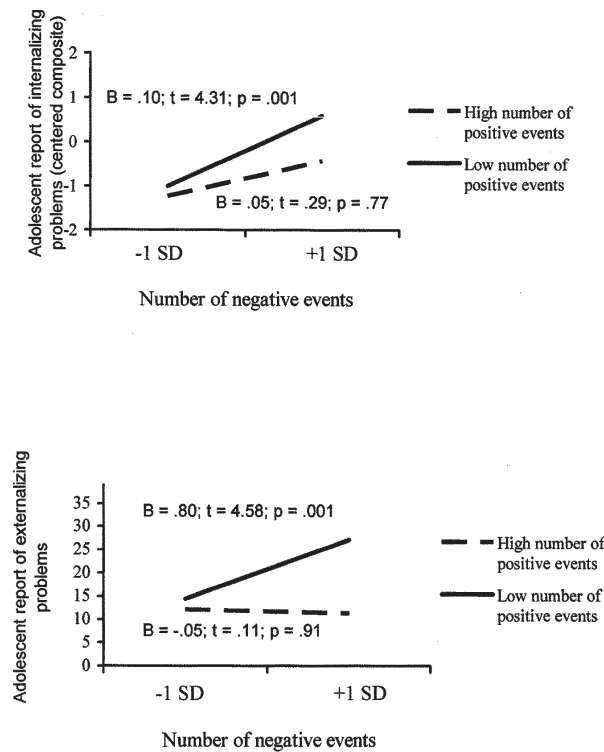


Figure 1. Plots of simple slopes of positive events for the regression of adolescent report of internalizing and externalizing problems on the number of negative events experienced by adolescents in repartnered families.

Predictors: Divorce Events Schedule for Children. The Divorce Events Schedule for Children is a 62-event tailor-made checklist of divorce-related events (Sandler, Wolchik, Braver, & Fogas, 1986). In constructing this scale, a representative sample of events was developed by interviewing key informants (i.e., parents and children who had experienced a divorce, mental health professionals and lawyers who had worked with divorcing families) about events that may happen to a child or in a child's environment following parental divorce. A separate sample of children who experienced parental divorce rated whether each event occurred within the past 3 months and whether the event was positive, negative, or neither. Based on a consensus of 80%, events were categorized as positive or negative; if lacking a consensus, they were categorized as ambiguous (Sandler et al., 1986). Sixteen events were classified as negative and 12 were classified as positive. Endorsed items were summed to obtain total negative and positive event scores (possible range: negative events = 0 to 16, positive events = 0 to 12). A significant correlation was shown between the rank ordering of the stressfulness of events on this measure by parents, children, and clinicians (Wolchik, Sandler, Braver, & Fogas, 1985) and number of stressors endorsed has been shown to relate to measures of maladjustment in patterns consistent with stress theory (Wolchik et al., 1989). Events tap a variety of domains, including mother-child and father-child relationships, environmental changes, and the interparental relationship. Test-retest reliability for

positive ($r = .65$) and negative ($r = .85$) events was acceptable (Sandler et al., 1986). Sample positive events are: "you spend time with your mother's family" and "dad does extra nice things for you that you like." Sample negative events are: "your dad moved" and "mom and dad argue in front of you." See Sandler et al. (1986) for more information about the Divorce Events Schedule for Children.

Outcomes: Internalizing and externalizing problems. Measures of internalizing and externalizing problems are identical to those used in Study 1. Internal consistency reliability in this sample is $\alpha = .89, .92, .92$, and $.91$ for mother report of internalizing and externalizing problems and child report of internalizing and externalizing problems, respectively.

Results

Descriptive data and zero-order correlations are presented in Table 3, respectively. Within-reporter correlations between internalizing and externalizing problems were significant (child report, $r = .67$; mother report, $r = .64$). Across-reporter correlations of these measures were generally smaller in magnitude but also significant ($r = .19$, internalizing; $r = .31$, externalizing). Negative events were not significantly related to positive events. A significant negative correlation was found between positive events and child report of externalizing problems ($r = -.22$). Significant positive correlations were

Table 3. Descriptive Data and Zero Order Correlations Between the Study Variables for Divorced Sample

	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. Negative events–C	3.62	2.51	1.00				
2. Positive events–C	9.01	1.99	.04	1.00			
3. Internalizing–C ^a	.01	1.84	.40**	–.09	1.00		
4. Externalizing–C	13.07	7.85	.40**	–.22**	.67**	1.00	
5. Externalizing–M	12.09	8.06	.20**	.04	.12	.31**	1.00
6. Internalizing–M	11.80	8.99	.15+	.01	.19*	.10	.64**

Note: *n* = 90. *M* = mother report; *C* = child report.

^aComposite of *z* scores: (a) Children's Depression Inventory, (b) Revised Children's Manifest Anxiety Scale.

+*p* < .10. **p* < .05. ***p* < .01.

Table 4. Simultaneous Regression of the Outcomes on the Covariates, Negative Events, Positive Events, and the Interaction Between Negative and Positive Events for Divorced Sample

	Child Report				Mother Report			
	Internalizing (<i>R</i> ² = .170)		Externalizing (<i>R</i> ² = .244)		Internalizing (<i>R</i> ² = .031)		Externalizing (<i>R</i> ² = .070)	
	β	<i>SE</i>	β	<i>SE</i>	β	<i>SE</i>	β	<i>SE</i>
Covariates (<i>R</i> ² Δ)	(.08)*		(.03)		(.05)		(.05)+	
Education 1 ^a	.05	.08	.01	.08	–.10	.09	–.16+	.09
Education 2 ^a	.15+	.08	–.02	.08	–.17+	.09	–.24**	.09
Education 3 ^a	–.04	.08	–.02	.07	–.13	.08	–.09	.08
Gender ^b	–.19**	.07	–.02	.07	–.15*	.08	.10	.08
Age	.01	.07	.14*	.07	–.12	.08	–.11	.07
Main effects (<i>R</i> ² Δ)	(.15)***		(.21)***		(.02)		(.05)*	
Negative events	.39**	.07	.43**	.07	.16*	.08	.23**	.07
Positive events	–.14*	.07	–.25**	.07	–.01	.08	.01	.08
Interaction (<i>R</i> ² Δ)	(.02)*		(.03)**		(.01)		(.02)*	
	–.14*	.07	–.18**	.07	–.09	.08	–.15*	.08

Note: *n* = 171. β = standardized regression coefficient.

^aEducation was dummy coded to account for differences between levels. ^b1 = male; 0 = female.

+*p* < .10. **p* < .05. ***p* < .01.

found between negative events and child (*r* = .40) and mother (*r* = .20) report of externalizing problems and child report of internalizing problems (*r* = .40).

As in Study 1, simultaneous multiple regressions were run to determine if positive events mitigated the relations between negative events and maladjustment. The following covariates were used: child age and sex, and mother education.

As shown in Table 4, significant interaction terms were found for the regressions predicting child report of internalizing and externalizing problems and mother report of externalizing problems. For the models finding significant interaction terms, simple slopes were computed for positive events at points 1 standard deviation above and below the mean, and the results were plotted. As predicted, positive events mitigated the relation between negative events and child report of both internalizing and externalizing problems, such that the relation was weaker for children reporting high positive events than for children reporting low positive events (Figure 2). Similarly, as shown in Figure 3, the relation between negative events and mother report of externalizing problems was stronger for children re-

porting low positive events than those reporting high positive events.

Discussion

This is the first study to examine whether positive events that occur in the context of family transitions mitigate the effects of family transition related negative events on maladjustment. The relation between negative events and maladjustment was weaker for children, especially, and adolescents experiencing a high number of positive events than for those experiencing few positive events. An important strength of the study is that convergent evidence was found of this protective effect across two samples that experienced different family transitions. Two other methodological strengths include (a) the use of tailor-made life event checklists to ensure that the positive and negative events represented the kind of events that occur during these transitions and (b) the use of both mother and adolescent or child report of maladjustment.

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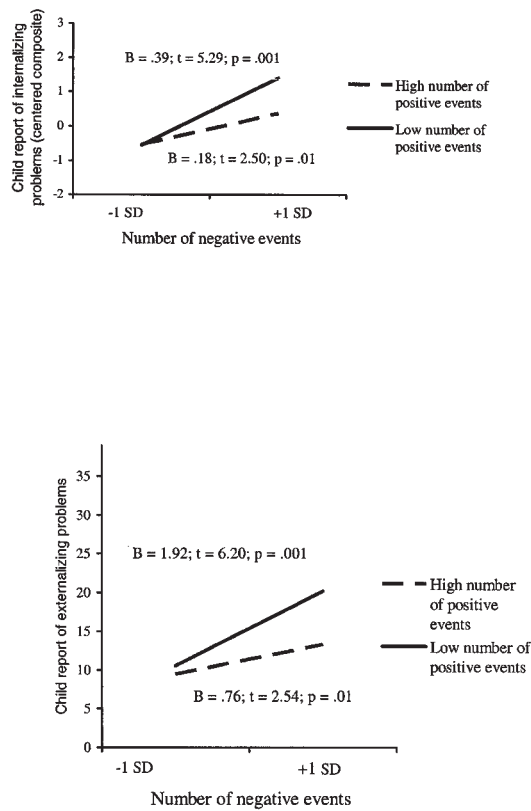


Figure 2. Plots of simple slopes of positive events for the regression of child report of internalizing and externalizing problems on the number of negative events experienced by children in divorced families.

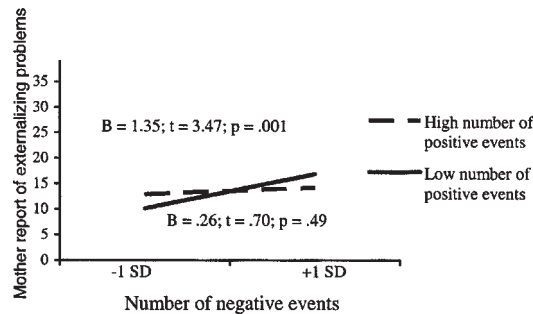


Figure 3. Plots of simple slopes of positive events for the regression of mother report of externalizing problems on the number of negative events experienced by children in divorced families.

Positive events interacted with negative events to predict child and adolescent report of internalizing and externalizing problems in adolescents and children from repartnered and divorced families. Although interactive effects were not as consistently found when mother report of maladjustment was used, it is notable that significant main or interactive effects of positive events were found for three of the four regressions predicting mother report of maladjustment. In three of the five significant interactions, the pattern reflected a stress-buffering effect (i.e., experiencing a high number of positive events was associated with a nonsignificant relation between negative events and maladjustment). In the interaction predicting mother report of externalizing problems in children of divorce, a crossover effect occurred. This pat-

tern is similar to that observed by Wolchik, Ruchman, Braver, and Sandler (1989) for social support received from nonparental adults by children in divorced families.

Several mechanisms might explain why positive events are protective for children and adolescents undergoing high levels of negative events. It is possible that positive events activate positive emotions, which may facilitate a person's return to baseline physiological functioning in the face of negative emotions caused by negative events and thus reduce the impact of the negative emotions on adjustment problems (Fredrickson & Levenson, 1998). Positive emotions may also enhance sustained coping efforts (Folkman & Moskowitz, 2000) and broaden scopes of attention, cognition, and action (Isen, 2002). Alternatively, positive events may bolster

mediating self-system beliefs threatened by negative events, such as control or esteem (Sandler, 2001).

The significant interactions accounted for 2% to 9% of the variance beyond that accounted for by the main effects. The small magnitude of the interaction effects is consistent with prior research (Champoux & Peters, 1987) and may reflect the fact that, even when reliable moderator effects are present, variance can be a poor measure of effect size for interaction effects (McClelland & Judd, 1993).

This study adds to the limited knowledge about protective resources for children and adolescents experiencing family transitions by identifying another potential target for interventions. As noted earlier, Wolchik et al. (1989) reported interactive effects for negative divorce events and nonparental adult support in predicting child adjustment. More recently, Wolchik, Wilcox, Tein, and Sandler (2000) reported interactive effects between negative events and maternal warmth in a sample of children of divorce. In concert, these findings suggest that clinicians should be particularly sensitive to augmenting these resources for children and adolescents who are experiencing many negative events.

It is interesting to speculate about the difference in the pattern of relations between positive and negative events across the two samples. In the divorce sample, positive and negative events were not significantly related, whereas, in the repartnered sample, positive and negative events were positively, significantly correlated. This differential pattern of relations may reflect the different kinds of events for the two transitions. Given that more people are often involved in children's and adolescent's lives in a repartnered family (e.g., stepparents, stepsiblings, more extended family), there may be more opportunities for the occurrence of both positive and negative events. Alternatively, differences in the pattern of relations may be due to differences in the measures used to assess positive events, numbers of positive and negative events on the checklists, and age ranges of the samples.

The limitations of this study suggest several areas for future research. First, given the method of recruitment in Study 1, it is impossible to define the population that was sampled, which significantly limits the generalizability of the findings. Although these limits on generalizability are tempered by the consistent pattern of effects found in Study 2 that used court records as the primary method of recruitment, future research should examine whether these findings replicate in other samples of stepfamilies that are recruited using a specific sampling frame. Second, both samples were largely European American and middle class. Replication of these results in samples with greater cultural, economic, and ethnic diversity would allow greater generalizability of the results. Other directions for future studies include examination of possible mecha-

nisms through which positive events exert their protective effects, such as enhancing positive emotions and self-systems beliefs. Also, future studies that test these relations longitudinally would satisfy the condition of temporal precedence necessary for drawing causal inferences about the relation between positive events and maladjustment. Finally, although the valence of events was assessed using nomothetic categorization for methodological reasons, future studies should assess the influence of the meanings that individuals give to events.

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