

Parent and Child Reporting of Negative Life Events: Discrepancy and Agreement across Pediatric Samples

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Objective To examine the consistency in child and parent reporting of child's negative life events across child/pediatric samples. **Methods** A total of 613 child-parent dyads provided independent reports of negative life events. The pairs included three groups consisting of children who were healthy ($n = 362$), diagnosed with cancer ($n = 130$), and diagnosed with a chronic illness (juvenile rheumatoid arthritis, diabetes, or cystic fibrosis; $n = 121$). **Results** Children reported significantly more negative life events than their parents reported for them. Additionally, children in the chronically ill group self-reported significantly fewer negative life events than the other groups. However, parents of children with cancer reported significantly more negative life events than the other groups. Although discrepancies exist in all three samples, parents and children in the healthy group were significantly more discrepant than the other groups. **Conclusions** These results suggest that communication of children's life events between parent and child may increase during children's experience of cancer or a chronic illness. However, significant discrepancies remain in child and parent report of negative life events. Because of this, clinicians are encouraged to recognize the strengths and limitations of using multiple reporters in assessing negative life events in children.

Key words negative life events; parent-child agreement; child self-report; chronic illness.

Negative life events have been associated with many consequences in children, including an increase in behavior problems (MacLean, Perrin, Gortmaker, & Pierre, 1992), a decrease in physical and psychological functioning (Gersten, Langner, Eisenberg, & Simcha-Fagan, 1977; Heisel, Ream, Raitz, Rappaport, & Coddington, 1973; Sandler & Ramsey, 1980), and an overall decrease in adjustment in both school and home settings (Hodges, London, & Colwell, 1990). Examples of such negative life events include divorce, severe accidents or illnesses, and problems with school.

Bailey and Garralda (1990) reported that the majority of studies examining the impact of stressful life events of children have used primarily parent report as the method for data collection. Despite the preponderance of studies utilizing parent report, child self-report of negative life events has also been used with acceptable reliability and validity (Jackson & Warren, 2000; Johnson & McCutcheon,

1980; Kager & Holden, 1992). When child or adolescent reports are examined, negative life events have been shown to predict internalizing disorders (Vinnick & Erickson, 1992), substance abuse (Dinges & Duong-Tran, 1992), and number of school days missed (Swearingen & Cohen, 1985).

Discrepancy in Parent and Child Report

One finding that has emerged from the literature involves the discrepancy between parent and child reports of negative life events. This discrepancy has greatest relevance in clinical settings, where the use of both child and parent report may impact areas to be addressed in therapy. In fact, Yeh and Weisz (2001) reported that parents and children demonstrated poor agreement regarding the child's target problem being addressed in therapy and that agreement between parents and children was lowest for life stres-

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sors. Although current data do not indicate the reason for the poor agreement of the parent-child pair, Yeh and Weisz (2001) hypothesized that parents and children do not effectively communicate about the reason the child is in treatment. They further encouraged future research to address possible influences on parent-child discrepancy.

Specific discrepancies for children's negative life events have been shown to exist between child and parent report, including differences in the number of events reported, the impact of events, and the reported onset of events. For example, Bailey and Garralda (1990) demonstrated that children report significantly more negative life events than their parents report for them. Similarly, Rende and Plomin (1991) found that children reported a greater frequency of events than their parents. However, parental ratings of life event-related stress for their child were significantly higher than their child's ratings of stress. Sandberg, Rutter, Pickles, McGuinness, and Angold (2001) also demonstrated that parent-reported onset of life events was statistically different than child-reported onset. One hypothesized explanation of these findings is that children's episodic memory is relatively immature, compromising their abstractions of timing (Bailey & Garralda, 1990). Because of potentially compromised appreciation of time, children's reports of negative life events may differ from their parents', particularly when the occurrence of events to a specific time frame (e.g., the last 6 months) is queried. To date, investigations of discrepancies between parent and child reports of negative life events have not included multiple time frames as an objective test of this hypothesis.

Differences in Reporting of Life Events by Pediatric Samples

In addition to the discrepancy found between parent and child reporting of negative life events, frequency of life events has also been shown to differ as a function of different child illnesses or medical conditions. For example, using parent report, Jacobs and Charles (1980) found that certain negative life events (e.g., marital separation, death of a family member) occurred more frequently for children with cancer than healthy children. Yet Bailey and Garralda (1990) reported that children with chronic illnesses other than cancer reported *fewer* negative life events than healthy children. This may suggest that childhood cancer is unique in comparison with other chronic illnesses, or it may reflect different outcomes as a function of informant: parents in the Jacobs and Charles (1980) study, and children in the study by Bailey and Garralda (1990). Although these findings might suggest that children with

cancer would report more negative life events than children with other chronic illnesses, such comparisons have not been conducted.

Researchers have suggested a causal link between the reported occurrence of negative childhood life events among these samples and subsequent health problems (e.g., cancer; Forsen, 1991; Mandal, Ghosh, & Nair, 1992), and similar explanations have been offered for the higher self-reported negative life events among pediatric cancer patients (e.g., Jacobs & Charles, 1980). While this is certainly a possibility, other explanations also have merit, e.g., individuals with recently diagnosed cancer may be more likely to recall negative events than individuals with no recent diagnosis. This explanation is also consistent with Bailey and Garralda's (1990) findings, in that children with lifelong chronic illnesses (e.g., cystic fibrosis, as opposed to children with cancer) would have no *recent* diagnosis to impact their recall. To date, no examination of self-reported negative life events has been conducted across illness groups.

Goals of the Study

The present investigation was designed around three primary goals. First, we examined the discrepancy in the reporting of negative life events by parent-child dyads, in order to replicate previous findings. Consistent with Bailey and Garralda (1990), we hypothesized that children would self-report more negative life events than their parents report for them.

Second, we compared the number of negative life events across groups of children with various health/illness conditions. Specifically, we included healthy children, children on active therapy for one of three different chronic illnesses, and children on active therapy for cancer. Consistent with Mandal et al. (1992) and Jacobs and Charles (1980), we hypothesized that children in the cancer group and their parents would report significantly more negative life events than the healthy group. Furthermore, based on results by Bailey and Garralda (1990), we hypothesized that children with other chronic illnesses would report significantly fewer negative life events than healthy children or children with cancer. While some investigations have examined children with medical conditions relative to healthy children, this is the first examination of child- and parent-reported negative life events among groups of children with different illnesses.

Finally, we examined the reporting of life events across two specific time frames (i.e., events over the past year and events over the lifetime of the child). Previous investigations have examined negative life events in only a

single time period (e.g., 3 months; Bailey & Garralda, 1990). Because of the likelihood of inaccuracies in children's memories for the timing of events (McCormack & Hoerl, 1999), we hypothesized that parent-child agreement will be higher for events occurring over the child's lifetime relative to events in the past year. That is, we expect higher agreement *that an event occurred*, and lower agreement that the event occurred *within the past year*.

Methods

Participants

Negative life events were examined among 613 parent and child dyads. However, 85 dyads were excluded because the relationship of the caretaker to the child was unknown. Only caretakers reported as mothers or fathers were retained for this study. An additional 12 participants were excluded because of incomplete data. For the analyses, a total of 66 fathers and 430 mothers were included in this sample.

Children were divided into three groups: those on active treatment for long-term chronic illnesses ($n = 91$), those on active treatment for cancer ($n = 116$), and healthy children with no known chronic or serious illness ($n = 287$). The chronically ill group comprised children diagnosed with cystic fibrosis (CF), diabetes mellitus (DM), and juvenile rheumatoid arthritis (JRA). Children with these diagnoses were grouped together for two reasons. First, CF, DM, and JRA are long-term illnesses that are usually diagnosed early in a child's life, whereas the children with cancer received their diagnoses more recently. Second, preliminary analyses indicated no differences in the total number of events endorsed between the subsamples in the chronically ill group, $F(2, 82) = 1.84, ns$. Children ranged in age from 7 to 18 years.

Participants in the chronically ill group were contacted at their respective specialty clinics at a local pediatric hospital during a routine office visit. Participants in the cancer group were contacted at routine clinic visits during the active stage of therapy at a large children's hospital with a national catchment area. Parental consent was obtained by graduate research assistants contacting families at random from a list of eligible patients. A total of 126 children with cancer and their parents were approached, and 116 (92%) agreed to participate. A total of 100 children with a chronic illness and parents were approached, and 91 (91%) agreed to participate.

The healthy control sample was recruited from four schools (two public and two private) from the same metropolitan area as the chronically ill and cancer samples. Letters explaining the purpose and requirements of the

study were distributed by teachers among designated second- to twelfth-grade classes and sent home for parental consent. Students returning the letter with parental consent were considered eligible for the study. In addition to providing informed consent, parents were asked to confirm that their child was in good health and not undergoing treatment for any significant illness. Data were obtained from 287 healthy children, representing just under half (43%) of the 670 letters distributed. This represents an approximate rate of participation because an exact rate of refusals was not available due to student absences. The purpose and requirements of the investigation were explained to all parents (i.e., parents of children in the cancer, chronically ill, and healthy groups), and informed consent was obtained in accordance with institutional review board and American Psychological Association guidelines.

For the total sample, the mean age was 12.64 years ($SD = 2.96$) with 206 male (42%) and 288 female children. Of the child participants, 403 (81%) were white, 72 (15%) were African American, and 17 (3%) were from other racial and ethnic backgrounds. The socioeconomic status (SES) of the families, as measured by the Hollingshead (1975) four-factor index, ranged from major business/professional to unskilled laborers, with a majority of the families falling in the middle-class range. For the present analyses, socioeconomic categories were collapsed into three levels (i.e., lower income, middle income, and higher income). Demographic variables for each group of children are listed in Table 1.

Instruments

A modified version of the Coddington Life Events Questionnaire (CLEQ; Coddington, 1972) was used to assess life events experienced by the child. This measure was chosen because of the relevance of the specific item content. However, two significant modifications were made. First, because we were specifically interested in the reporting of *negative* life events, we excluded items that referred to positive events (e.g., "Outstanding personal achievement"). Second, some items on the Coddington focus specifically on events relating to medical illness (e.g., "Serious illness requiring hospitalization"). Because inclusion of these items would necessarily differ across groups in our sample, items pertaining to the target child's illness were removed. Our modified version of the instrument consisted of 22 items that focused on major negative events (see Table II). All items required only a "yes" or "no" response. Each item required two responses: once for whether the event had occurred at any point in the child's life, and once for whether the event had occurred

Table 1. Demographic Characteristics of Sample, by Group

	<i>n</i>	Age		Ethnicity			SES Group
		<i>M (SD)</i>	Females	White	African American	Other	<i>M (SD)</i>
Cancer	116	13.08 (3.09)	47 (40.5%)	91 (78.4%)	21 (18.1%)	4 (3.4%)	3.07 (1.19)
Chronic illness	121	12.22 (3.09)	72 (59.5%)	88 (72.7%)	33 (27.3%)	0 (0.0%)	2.64 (1.27)
Healthy	287	12.59 (2.90)	184 (64.1%)	245 (85.4%)	27 (9.4%)	13 (4.5%)	1.93 (0.82)

SES = socioeconomic status (Hollingshead, 1975).

in the past year. Scale-level reliability statistics (e.g., coefficient alpha, split-half reliability) usually are not reported for the Coddington, since individual items would not be expected to covary with one another.

Procedure

For healthy children, measures were administered in a group format in their classrooms during regular school hours. In elementary school classes, the items were read aloud by research staff. In middle and high school classes, the measures were distributed, and students completed them independently during designated class time set aside for this task. Directions were presented orally, and participants were allowed to work at their own pace. A research assistant was available to answer questions. Parents of children in the healthy group completed a modified version of the CLEQ with instructions to complete the information regarding their child's experiences and return the measure via mail.

For children in the chronically ill group, research assistants individually administered the self-report measures during routine clinic visits, and for participants in the cancer group, research assistants individually administered the self-report measures to the participants during clinic visits while the child was on active therapy. Parents and children in the chronically ill and cancer groups were administered the measures independently. All parents and children were administered the same version of the CLEQ with instructions to complete the information regarding the child's experiences. These procedures, and all aspects of participant recruitment, data collection, and data management were approved by the institutional review board.

Results

Analyses were organized by four study questions. First, demographic variables (i.e., age, race, SES, and gender) were examined to determine their influence on the reporting of negative life event. Second, analyses were conducted to determine whether children reported a different number of negative life events than their parents. Next, we compared the number of events reported by children and

their parents across the three groups (i.e., cancer, chronically ill, healthy). Finally, the percent agreement of child and parent reports were compared across the three groups.

Demographic Variables

A total of three multivariate analyses of variance (MANOVAs) were conducted to determine the impact of the demographic variables of race, age, and SES on the reporting of negative life events. First, three groups (i.e., white, African American, and other) were compared based on race. The omnibus MANOVA was significant, $F(4, 946) = 3.82, p < .01$. Univariate analysis of variance (ANOVA) indicated that children's reporting of life events was significant across race for both child, $F(2, 474) = 7.27, p < .001$, and adult report, $F(2, 474) = 4.75, p < .01$. Specifically, post hoc analyses (Tukey's least significant difference [LSD]) indicated that white children reported significantly fewer negative life events than African American children ($p < .05$). Similarly, parents of African American children reported significantly more negative life events than parents of white children ($p < .05$).

Next, three groups (i.e., children, preadolescents, and adolescents) were compared based on the child's age. Age was also significantly related to the reporting of negative life events, $F(4, 944) = 5.12, p < .001$. Univariate ANOVA indicated that children's reporting of life events was significantly different across three age groups, $F(2, 473) = 10.34, p < .01$. Specifically, post hoc analyses (Tukey's LSD) indicated that adolescents (aged 13 to 18) reported significantly more negative life events than preadolescents (aged 10 to 12) and children (aged 7 to 9, $p < .05$). Similarly, parents reported differences in their child's negative life events across their child's age, $F(2, 473) = 5.35, p < .01$. Post hoc analyses again revealed that parents reported significantly more negative life events for adolescents than for preadolescents and children ($p < .05$). However, SES did not significantly influence reporting of negative life events, $F(4, 950) = 2.07, ns$.

Additionally, two independent-sample *t* tests were conducted to determine whether gender had a significant effect on parent and child report of negative life events. No differences were found in child reports of negative life

events, $t(478) = 1.45, ns$. Similarly, parents did not report different numbers of negative life events based on gender, $t(477) = 0.55, ns$. Fourth, an independent-sample t test was conducted to determine if the gender of the parent had a significant effect on parent reporting of child negative life events. No differences were found in parent report of negative life events, $t(477) = 0.91, ns$. Finally, a correlation was conducted to determine whether time since diagnosis was correlated with the number of events reported. Time since diagnosis was not related to the total number of events reported, $r = -.03, ns$.

Based on the above findings, the child's age and race/ethnicity were used as covariates for all subsequent analyses conducted on children's reports of negative life events.

Parent-Child Agreement on the Number of Life Events

Dependent-sample t tests were conducted to compare the total number of negative life events reported by the child and his or her parent for the past year and for the lifetime of the child. A statistically significant difference was found for the number of events reported for the past year,

$t(478) = 5.36, p < .001$, and for the child's lifetime, $t(478) = 3.26, p < .01$, with children reporting more events in each of these instances. The mean number of events in the past year reported was 2.04 ($SD = 1.89$) for children's reports and 1.58 ($SD = 1.82$) for parents' report. The mean number of events in the lifetime of the child reported was 5.68 ($SD = 3.32$) for children's reports and 5.31 ($SD = 3.39$) for parents' report.

Number of Reported Life Events in Children's Groups

A multivariate analysis of covariance (MANCOVA) was conducted to compare the total number of events reported by children and parents in the past year and in the lifetime of the child. With children's group (cancer, chronically ill, and healthy) as the independent variable, the omnibus MANCOVA was significant, $F(8, 932) = 2.73, p < .01$, multivariate $h^2 = .023$. Specific significant differences were found for children's report of negative life events occurring in the past year, $F(2, 469) = 3.15, p < .05$, partial $h^2 = .013$, but not for children's report of occurrence in the child's lifetime, $F(2, 469) = 2.07, ns$. Next, significant differences were found for parents' reports of their child experiencing

Table II. Kappa Statistics for Child and Parent Agreement, by Group

Item	Lifetime			Year		
	Cancer	Healthy	Chronic Ill	Cancer	Healthy	Chronic Ill
Sibling was born	.82*	.69*	.81*	.66*	.41*	.65*
Parents were separated	.86*	.76*	.72*	.64*	.48*	.88*
Parents were divorced	.94*	.83*	.76*	.56*	.39*	.74*
Parent remarried	.81*	.84*	.59*	.49*	.28*	.02
Serious illness of parent	.79*	.48*	.52*	.76*	.38*	.58*
Serious illness of sibling	.75*	.48*	.63*	.67*	.42*	.64*
Parent died	.79*	.52*	.48*	1.00*	<i>a</i>	.02
Grandparent died	.73*	.55*	.62*	.59*	.63*	.41*
Relative or close friend died	.61*	.32*	.49*	.56*	.36*	.62*
Discovery of being adopted	1.00*	.76*	<i>a</i>	<i>a</i>	<i>a</i>	<i>a</i>
Loss of job by parent	.61*	.52*	.53*	.61*	.34*	.58*
Parent obtained a job	.62*	.39*	.56*	.63*	.46*	.79*
Parent spent less time at home	.46*	.30*	.36*	.51*	.28*	.40*
Family member moved in	.71*	.64*	.69*	.43*	.57*	.48*
Sibling left home	.85*	.71*	.73*	.72*	.64*	.75*
Child was abused	.79*	.58*	1.00*	<i>a</i>	.50*	<i>a</i>
Parents fought more	.49*	.29*	.43*	.24*	.26*	.18*
Parent had to go to jail	.42*	.54*	<i>a</i>	.66*	.32*	<i>a</i>
Family moved school districts	.70*	.43*	.40*	.85*	.33*	.02
Family moved to a new city	.82*	.58*	.76*	.71*	.66*	.52*
Parents worried more about money	.55*	.26*	.29*	.44*	.18*	.30*
Substance abuse by family member	.66*	.32*	.71*	.60*	.29*	<i>a</i>
M	.72	.54	.60	.62	.41	.48

*a*Denotes no variability, making a Kappa calculation unattainable. In these cases, all respondents answered "no" (i.e., no variability in response).

* $p < .05$.

Table III. Means and Standard Deviations of Number of Events Reported, by Group

	Parent		Child	
	M	SD	M	SD
Reported for the past year				
Cancer	2.14	2.06	2.26	2.12
Chronic illness	1.25	1.43	1.62	1.65
Healthy	1.45	1.78	2.09	1.84
Reported for the child's lifetime				
Cancer	6.04	3.59	5.97	3.46
Chronic illness	4.56	2.91	5.02	2.98
Healthy	5.23	3.40	5.76	3.33
Lifetime reported events across race/ethnicity				
White	5.12	3.19	5.43	3.14
African American	6.47	4.27	7.00	3.96
Other	5.40	3.40	6.40	3.33
Lifetime reported events across child's age group				
Children (7–9 y)	4.69	3.60	4.79	3.47
Preadolescents (10–12 y)	4.84	3.34	5.10	2.97
Adolescents (13–18 y)	5.78	3.29	6.32	3.32
Lifetime reported events across family SES				
Low income	5.06	3.12	5.43	3.24
Middle income	5.84	3.90	6.07	3.54
High income	5.70	3.61	6.63	2.75
Lifetime reported events across child's gender				
Male	5.21	3.12	5.42	3.01
Female	5.38	3.58	5.87	3.51

SES = socioeconomic status (Hollingshead, 1975).

negative life events occurring in the past year, $F(2, 469) = 6.60$, $p < .01$, partial $h^2 = .027$, and for parents' reports of negative life events occurring in the child's lifetime, $F(2, 469) = 4.28$, $p < .05$, partial $h^2 = .018$.

Post hoc analyses (Tukey's LSD) indicated that children in the chronically ill group reported significantly fewer negative life events occurring in the past year when compared with the healthy and cancer groups. However, children in the healthy and cancer groups reported statistically the same amount of negative life events for the past year ($p > .05$). In contrast, parents with children in the cancer group reported significantly more negative life events for their child in the past year than parents with children in the healthy and chronically ill group. Furthermore, parents with children in the cancer group reported their child as experiencing significantly more negative life events in the child's lifetime than children with a chronic illness ($p < .05$). Means and standard deviations are listed in Table III.

Parent and Child Report Correlations

Significant Pearson product-moment correlations were found for parent and child report of the child's negative life

events in the last year, $r(480) = .49$, $p < .01$, and in the child's lifetime, $r(480) = .72$, $p < .01$. A post hoc r to z transformation indicated that these correlations were statistically different ($z_{\text{obt}} = 14.92$, $p < .01$), indicating that the correlation between parent and child reported life events was significantly stronger than for events in the past year.

Percent Agreement

A MANCOVA was conducted comparing the three groups of children (cancer, chronically ill, and healthy) on the percent agreement of reported negative life events for the past year and for the lifetime of the child. Percent agreement was calculated by dividing the number of items agreed upon by the parent and the child by the total number of events (items agreed / total number of items). Percent agreement was examined in addition to the total number of life events in order to obtain a fine-grained comparison of child and parent report.

The omnibus MANCOVA was significant, $F(4, 938) = 7.87$, $p < .001$, partial $h^2 = .032$. Univariate analyses indicated that there was a significant difference between children's groups for percent agreement of negative life events in the last year, $F(1, 470) = 36.62$, $p < .001$, partial $h^2 =$

.072; and in the lifetime of the child, $F(1, 470) = 17.44, p < .001$, partial $h^2 = .036$. Post hoc analyses indicated that healthy children and their parents exhibited significantly lower percent agreement in their reports for the child's lifetime than the cancer and chronically ill groups. Regarding the past year, parents of healthy children exhibited higher agreement than parents of children with a chronic illness. Additionally, in order to determine parent and child agreement based on age, a one-way MANOVA was conducted comparing children, preadolescents, and adolescents. No differences in percent agreement were found based on the age of the child, $F(4, 946) = 1.87, ns$. Means and standard deviations are listed in Table IV.

To account for chance in percent agreement, Kappa statistics for each item were analyzed comparing child and parent report. Basically, Kappa is an index that compares agreement between reporters against that which might be expected by chance alone. Significant Kappas were found for all question items regardless of children's group. This finding indicates that child and parent report of negative life events are relatively consistent. A mean Kappa was calculated for each group to more effectively describe agreement across groups.

For lifetime report of negative events, the mean Kappas were .72 for the cancer group, .60 for the chronically ill group, and .54 for the healthy group. An ANOVA revealed that the mean Kappa for lifetime report of events differed by group, $F(2, 55) = 5.84, p < .01$, partial $h^2 = .18$. Similarly, for events reported as occurring in the last year, the mean Kappas were .62 for the cancer group, .48 for the chronically ill group, and .41 for the healthy group. An ANOVA revealed that the mean Kappa for events reported in the past year differed by group, $F(2, 61) = 6.51, p < .01$, partial $h^2 = .18$. Specifically, post hoc analyses (Tukey's LSD) revealed that the cancer group had a higher Kappa than the chronically ill group and the healthy group ($p < .05$) for events reported in both the past year and the lifetime of the child. Although these results should be interpreted with caution, they suggest that the cancer group

differed with regard to parent-child agreement in reporting negative life events. Individual item and group mean Kappas for the three children's groups are listed in Table II.

Additionally, three dependent-sample t tests, based on children's group, were conducted to examine total child report of life events and total parent report of life events. Overall, children in the healthy group reported significantly more negative life events than their parents reported for them, $t(279) = 3.35, p < .01$, but children and parents in the cancer and chronically ill groups did not report statistically differing amounts of negative life events, $t(114) = -.39, ns$, and $t(83) = 1.76, ns$, respectively. Means and standard deviations are reported in Table III.

Discussion

Negative life events, whether reported by children or their parents, have been associated with negative developmental outcomes and consequences (Gersten et al., 1977; Heisel et al., 1973; Hodges et al., 1990; MacLean et al., 1992; Sandler & Ramsey, 1980). Unfortunately, discrepancies have been demonstrated between parents and children regarding the occurrence of the events (Bailey & Garralda, 1990; Rende & Plomin, 1991; Sandberg et al., 2001), and such disagreement may impact the quality of care that children receive in response to the negative event (Yeh & Weisz, 2001). The goals of the present investigation were (1) to examine parent-child agreement on one measure of negative life events in healthy and pediatric samples, (2) to examine differences in the frequency of negative life events across pediatric illness conditions, and (3) to examine parent-child agreement across specific time frames.

Previous investigations have demonstrated that children report significantly more negative life events than their parents report for them (e.g., Bailey & Garralda, 1990). Consistent with these results, we found that children reported more negative life events than their parents reported. However, to extend the literature, we examined these data from a number of different standpoints. Although the absolute number of events reported by children and parents differed, we also examined the correlation between number of events and found significant positive correlations between child and parent reports both for number of events reported for the past year and for events reported over the child's lifetime.

As a more conservative (and more clinically relevant) examination of agreement, we calculated Kappa for specific negative life events: Whether parents and child agree on a *total number* of events may be of less clinical importance than whether they agree on specific life events. Further, our

Table IV. Means and Standard Deviations of Percent Agreement, by Group

	<i>M</i>	<i>SD</i>
Percent agreement for the past year		
Cancer	.93	.08
Chronic illness	.94	.08
Healthy	.92	.09
Percent agreement for the child's lifetime		
Cancer	.90	.10
Chronic illness	.88	.11
Healthy	.85	.10

use of Kappa represents a methodological advantage in that chance agreement between respondents is taken into account when determining significance. As indicated in Table IV, most items yielded relatively high Kappa coefficients, suggesting that even fairly young children (e.g., age 7) appear able to provide reasonably consistent responses with their parents on measures of life events.

Anecdotally, we noted that several items exhibited particularly low agreement. For example, agreement in reporting of the death of a relative or close friend was particularly low. Additionally, items such as “parents spending less time at home” and “parents fighting more” also demonstrated low agreement across reporters. Finally, reporting on items regarding the serious illness of a family member (e.g., parent, sibling) also exhibited low agreement between parent and child report. These findings were consistent across groups and time periods. Because these items may represent events that are particularly distressing to children, the possibility of defensive responding on the part of children should not be ruled out (see Phipps & Steele, 2002). However, since child-reported distress was not evaluated, this explanation remains speculative. Future research on specific items that exhibit lower percent agreement is suggested.

A second goal of our study was to examine child- and parent-reported negative life events across three groups representing healthy children, children with lifelong medical conditions (i.e., CF, JRA, and DM), and children undergoing treatment for a serious but relatively time-limited illness (i.e., cancer). Previous investigations have examined reports of negative life events among some of these groups, but no investigations, to date, have directly compared all three groups. Results were partially consistent with our hypotheses: Children with a chronic illness reported fewer negative life events in the past year than healthy children or children with cancer. Unexpectedly, no significant differences were obtained between children with cancer and healthy children for child-reported events in the past year or the lifetime of the child. Consistent with Jacobs and Charles (1980), however, parents of children with cancer reported more negative life events occurring in the past year than parents of healthy children or parents of children with long-term illnesses.

To address the obvious inconsistency in the reports of absolute numbers of events reported by children and parents in each children’s group, we also examined parent-child agreement in each group. After accounting for chance agreement, we found that children with cancer and their parents were the most consistent in their reporting. Unexpectedly, children with a chronic illness and children who were healthy did not differ in the level of parent and

child agreement. The finding that children with cancer and their parents were most consistent in their reporting is difficult to interpret. On the one hand, higher agreement with parents may suggest better communication between parents and children, which may be considered a protective factor for children’s mental health (Whelan & Kirkby, 2000). On the other hand, increased agreement may suggest fewer available coping strategies to defend against the distress associated with these life events (cf. depressive realism; Vazquez, 1987). The current literature does not allow conclusions regarding the relative impact of negative events (i.e., as would be assessed through parent report or actuarial data) versus child’s perceptions of the event (i.e., as would be assessed through child self-report). Thus, the psychosocial correlates of negative life events as well as children’s knowledge of negative life events deserve further evaluation.

In light of the relatively modest effect sizes exhibited when the total number of life events was examined across illness groups, the veracity of these results may be questioned. However, a unique strength of this study was that chance agreement was accounted for by calculating Kappa for each item. Unlike the findings that did not account for chance agreement (e.g., comparison of absolute numbers of events), analyses using Kappa to examine differences across groups produced relatively robust findings (partial $h^2 = .18$) for both life events and past-year events. Based on this difference, we suggest that future investigations employ statistical means to control for chance agreement (e.g., Kappa) when investigating differences in parent- and child-reported life events. Previous investigations have examined only correlations and mean numbers of events reported; we feel that our results are an important contribution to this literature.

Finally, we examined parent-child agreement for negative life events across two distinct time frames (i.e., the past year and over the child’s lifetime). Consistent with our hypothesis, a stronger relationship was found between parent and child report for events occurring in the child’s lifetime as compared with events occurring in the past year. This finding is particularly interesting because children may have limited access to events that occurred in their preverbal ages. Because children should have limited access to these events, we would expect less agreement between the parent and the child for life events. However, this was not the case. Overall, a likely interpretation of this finding is that parents and children may agree that an event occurred but disagree on the specific time of occurrence (e.g., 10 vs. 14 months ago). This view is consistent with literature suggesting that children have a decreased ability to correctly recall information in a tem-

poral framework (McCormack & Hoerl, 1999), but not necessarily decreased ability to recall the event itself. Previous investigations have not been able to make this distinction when reporting disagreement for life events.

Two specific clinical implications are noted in light of the present findings. First, clinicians are urged to recognize the strengths and limitations of multiple reporters of negative life events. Consistent with the literature, our results suggest that children report significantly more life events than parents report for them. Our results indicate that this is true across illness categories, as well as across time frames. The relative merit of examining the perception of negative life events (i.e., self-report) versus objective (e.g., actuarial) data regarding the occurrence of the event is left for future researchers to address.

Second, our results suggest that the use of a chronological time frame in the assessment of negative life events may reduce parent-child agreement for the events. We see this as a reflection of children's immature cognitive capacity to appreciate events in the context of time. Thus, we suggest that assessments query the *event* rather than the event *during a specific time frame*. However, if information on events within a specific time frame is essential, clinicians are encouraged to use concrete time prompts (e.g., calendars) or clear temporal benchmarks (e.g., "Did _____ happen before your last birthday?") in these instances.

The results from this investigation are somewhat mixed: Children with long-term chronic illnesses reported fewer negative life events than children with cancer or healthy children, while parents of children with cancer reported more negative life events than parents of children in the two other children's groups. Further, children with cancer appear to report negative life events in a manner more consistent with their parents. Although this study replicates some findings (Bailey & Garralda, 1990; Jacobs & Charles, 1980), future research is needed to better understand the differences in reporting between children and their parents. Specifically, the literature on life events is much broader than that concerning only negative life events, which were the sole focus of the current investigation. Positive life events also provide valuable information regarding the child's overall quality of life, and represent an area toward which future research should be directed. Additionally, the current study focused on the number of events and the agreement on whether these events occurred. Future research examining the reported impact of the events may provide valuable information as well. Finally, research on the psychosocial correlates or consequences of parent-child agreement for life events is also encouraged. Specifically, the relative impact of com-

munication about the event vis-à-vis the impact of the event itself is unknown. This distinction may have significant implications regarding children's coping strategies and resilience.

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