UNIVERSITY OF CINCINNATI

May 23, 2003

I, Anna Marie Drury,

hereby submit this as part of the requirements for the degree of:

Master of Arts

in Psychology

It is entitled Symptoms of Depression, Negative Life Events, and the Role of Perceived Social Support

Approved by:

SYMPTOMS OF DEPRESSION, NEGATIVE LIFE EVENTS, AND THE ROLE OF PERCEIVED SOCIAL SUPPORT

A thesis submitted to the

Division of Graduate Studies and Research
of the University of Cincinnati

in partial fulfillment of the
requirements for the degree of

MASTER OF ARTS

In the Department of Psychology
of the College of Arts and Sciences

2003

by

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Abstract

Risk and protective factors related to the presence of depressive symptoms in youth were examined. Negative life events (NLE) are often considered a risk factor for depressive symptoms, although research has not fully delineated the direction of influence in this association (Cohen, Burt, & Bjorck, 1987). Social support has been examined as a possible protective factor by having a direct beneficial effect on a child's well-being or by serving as a buffer between the experience of NLE and occurrence of depressive symptomatology (Cohen & Wills, 1984). The current study independently assessed a child's controllability of NLE to help clarify the directionality of the relationship between NLE and depressive symptomatology. NLE (total, controllable, and uncontrollable) were hypothesized to be associated with depressive symptomatology, with controllable events having a stronger relationship with depressive symptomatology. It was hypothesized that social support would associated with lower depressive symptomatology and this association would stronger when more NLE are reported.

Eighty-two children (ages 8 to 17) completed questionnaires that assessed life events, social support, and depressive symptomatology. Parents completed demographic questionnaires.

Examination of correlations indicated that NLE (total, controllable, and uncontrollable) were positively correlated with symptoms of depression, however there were no differences between dependent correlations of NLE and depressive symptomatology. Total support was negatively correlated with depressive symptomatology, but did not buffer the effects of NLE on depressive symptomatology.

Exploratory analyses revealed that support from parents, peers, and teachers was negatively associated with depressive symptomatology, and high support from peers was beneficial when NLE were low, but it did not buffer the effects of high levels of NLE. There were no differences in the associations of NLE and social support with depressive symptomatology as a function of age and gender.

The controllability distinction did not clarify directionality between NLE and depressive symptomatology. A high correlation between controllable and uncontrollable NLE was found, suggesting the occurrence of these events may have been influenced by systematic factors in the child's life. Social support appeared to have a direct beneficial effect on a person's well-being; however, it did not buffer the effects of NLE on depressive symptoms.

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Symptoms of Depression, Negative Life Events, and the Role of Perceived Social Support

Understanding the risk and protective factors that are associated with the presence of depressive symptoms in children is important given the association of these symptoms with current and future difficulties. Children's depressive symptoms have been associated with a variety of concurrent psychosocial problems including emotional (Cole, Peeke, Martin, Truglio, & Seroczynski, 1998; Herman-Stahl & Peterson, 1999), academic (Nolen-Hoeksema, Girgus, & Seligman, 1992), and behavioral problems (Wierzbicki & McCabe, 1988; Windle &Windle, 2001). Children's depressive symptoms have also been associated with increased risk of future maladjustment including continued depression (Ialongo, Edelsohn, & Kellam, 2001; Nolen-Hoeksema et al., 1992; Pine, Cohen, Cohen, & Brook, 1999), emotional problems (Aronen & Soininen, 2000; Ialongo et al., 2001; Johnson, Cohen, Kotler, Kasen, & Brook, 2002), academic difficulties, and behavioral concerns (Aronen & Soininen, 2000; Ialongo et al., 2001). Greater clarity about risk and protective factors associated with the occurrence of depressive symptoms may provide an opportunity for prevention and early intervention efforts that can avert harm to children. The focus of the current research is to further investigate negative life events (NLE) as risk factors for depressive symptoms and the role of social support as a protective factor.

Models reflecting varying theoretical perspectives have been developed to better understand the etiology and course of depressive symptoms for children. The socio-environmental model emphasizes that the occurrence of depressive symptoms can be understood by focusing on how social or environmental factors may influence the onset or emergence of symptoms of depression. One example of this approach examines the

occurrence of stressful life events and a person's appraisal of events in understanding the emergence of depression (Kazdin, 1990). That is, it incorporates views from cognitive models, such as Beck's (1987), that explain the occurrence of depressive symptoms as a result of systematic errors in thinking (e.g., focusing on negative aspects of an experience, over-generalizing discrete events, and misinterpreting experiences). The socio-environmental view suggests that stressful life events are a significant risk factor that contributes to the emergence and maintenance of depressive symptoms.

This approach is in contrast to the stress-generated model that suggests it is a depressed person's perceptual and attributional style that precipitates the occurrence of more stressful life events (Hammen, 1991). This model suggests that depressed persons shape their environments and that heightened stressful conditions and numbers of life events are a consequence rather than a cause of depressive symptoms. For example, a child experiencing depressive symptoms may feel too tired to attend school, resulting in missing important class lectures, and upon the child's return to school, he or she fails a test and receives a low grade. Additionally, a child may be irritable and this could lead to arguments with friends or family members.

Multiple studies have found that the occurrence of more NLE is associated with increased symptoms of depression when these associations are studied cross-sectionally (Cohen, et al., 1987; Dixon & Ahrens, 1992; Garrison, Jackson, Marsteller, McKeown, & Addy, 1990; Ge, Conger, & Elder, 2001; Nolen-Hoeksema et al., 1992; Swearingen & Cohen, 1985; Tram & Cole, 2000; Windle, 1992). Although these data support a link between NLE and symptoms of depression, the direction of influence accounting for this association is unclear. That is, the experience of NLE may lead to the onset of symptoms

of depression, or the presence of many symptoms of depression may lead to negative occurrences or the perception of life events as being more negative. Several longitudinal studies have suggested that NLE lead to increases in depressive symptoms in children (Cohen et al., 1987; Compas, Wagner, Slavin, & Vannatta, 1986; Garrison et al., 1990; Ge et al., 2001). Conversely, other longitudinal studies have demonstrated no association between NLE and subsequent depressive symptoms (Gersten, Langner, Eisenberg, & Simcha-Fagen, 1977; Swearingen & Cohen, 1985; Wagner, Compas, & Howell; 1988). Finally, additional longitudinal studies suggest that children with more symptoms of depression subsequently experience more NLE (Cohen et al., 1987; Compas, 1986; Swearingen & Cohen, 1985; Wagner et al., 1988).

Research has demonstrated mixed support for the stress-generated model and the environmental model; however, methodological issues limit conclusions that can be drawn from this research. Cohen and Wills (1984) suggested that prospective studies may not always be optimal when studying life events because the prospective design assumes that a predictor variable (e.g., life events) is stable over time. Studies of NLE have included the child's perspective of negativity and this may fluctuate over long periods of time. Specifically, children can experience an event and their perception of the negativity of that event may change when measured at a much later point in time. Additionally, measures of life events usually cover short intervals of time, and when measuring events over long intervals of time, significant events that occurred may not be identified. Thus, alternative research strategies are needed.

An alternative approach to understanding this relationship is to study controllable and uncontrollable NLE. Uncontrollable life events can be defined as events that are not

typically the direct result of the child's emotional and/or behavioral functioning such as the death of a family member, family divorce, or having a childhood chronic illness. Controllable life events can be defined as events that are commonly influenced by the child's emotional and/or behavioral functioning such as performance on classroom assignments, fights with others, or getting expelled from school. Controllable events are not necessarily intentionally caused by the child, but are events that are often influenced by the child's level of functioning. By differentiating controllable and uncontrollable NLE, it may be possible to understand more about the relationship between NLE and depressive symptoms. Symptoms associated with depression may influence or lead to the occurrence of certain NLE. Thus, one would find an association between controllable life events and symptoms of depression. Alternatively, an association between uncontrollable NLE and depressive symptoms might suggest that the occurrence of NLE influences the emergence or maintenance of depressive symptoms. Because children have minimal influence over the occurrence of uncontrollable negative events, it may be inferred that NLE lead to subsequent depressive symptoms when an association is observed between uncontrollable life events and depression.

A minimal amount of research has attempted to examine the issue of controllability. Cohen et al. (1987) found that both controllable and uncontrollable negative events are associated with concurrent depressive symptoms for a sample of school aged children and adolescents. However, Brown and Siegel (1988) found that uncontrollable negative events were associated with increases in depressive symptoms, whereas controllable negative events were not associated with increases in depressive symptoms. While these studies took into consideration the issue of controllability, Brown

and Siegel (1988) examined children's perceptions of event control; they did not use independent assessment of controllability. Perceptions of control may be confounded with depressive symptomatology (Beck, 1987) when a child experiencing depressive symptoms either over-generalizes NLE occurring due to his or her functioning or a child feels helpless and believes he or she does not have control over events occurring.

In addition to research examining risk factors such as NLE, other work has focused on protective factors that may influence symptoms of depression. Social support may be a protective factor by having a direct beneficial effect, or main effect, on a person's well-being. This idea suggests that social support is beneficial for any child, regardless of whether they are exposed to negative events. Another effect of social support may be less direct and only be seen when children are exposed to multiple or severely challenging life events. Social support would thus serve as a buffer between the experience of stressful life events and the occurrence of depressive symptoms. This would suggest an interaction between NLE and social support (Cohen & Wills, 1984). It is possible that social support can function in both of these roles concurrently.

In addition to examining overall support, research has also examined specific sources of social support from parents, peers, teachers, and friends. Social support from parents considers the child's perception of how much the parent listens to problems, understands the child, cares for the child, and accepts the child how they are. Social support from peers includes the child's perception of having friends in the classroom, the ability to join in games, acceptance for who the child is, and whether or not the child is made fun of by classmates. Social support from teachers considers the child's perception of how much the teacher helps when the child is upset, cares about the child, helps the

child to do his or her best, and is fair to the child. Social support from friends includes the child's perception of having a close friend the child can tell his or her problems to, who understands the child, who spends time with child, and who cares about the child's feelings.

Considerable research has examined how social support may have a direct beneficial effect on a person's well-being. Specifically, studies have consistently shown general social support (Demaray & Malecki, 2002; Jackson & Warren, 2000; Varni, Rubenfeld, Talbot, & Setoguchi, 1989) and parental social support (Demaray & Malecki, 2002; Licitera-Klecker & Wass, 1993; Sim, 2000; Varni, Katz, Colegrove, & Dolgin, 1994; Windle, 1992) are associated with fewer symptoms of depression. However, research has been inconclusive with regard to other specific sources of support (e.g., teacher or peer social support). For example, research found a direct effect for teacher social support (Varni et al., 1989) and peer social support (Demaray & Malecki, 2002; DuBois, Felner, Brand, Adan, & Evans, 1992; Licitera-Klecker & Wass, 1993; Varni et al., 1989; Windle, 1992), whereas other research did not reveal a direct effect for teacher social support (Demaray & Malecki, 2002; Sim, 2000; Varni et al., 1994) or peer social support (Sim, 2000; Varni et al., 1994). These findings suggest that social support may help to protect children from experiencing depressive symptoms, but results are inconclusive that social support outside of the family is consistently beneficial for children. One possibility is that these associations are weaker and do not reach a level of significance if there is a stronger association between social support and depressive symptoms under stressful conditions.

It is possible that social support may also have an indirect effect on symptoms of depression by decreasing the effect of negative events. Research indicates that general social support (Jackson & Warren, 2000), peer social support (Cheng, 1997), and parental social support (Cheng, 1997; Wenz-Gross, Siperstein, Untch, & Widaman, 1997) have a beneficial indirect effect on the relationship between NLE and symptoms of depression. That is, the association of NLE and depressive symptomatology is weaker in the context of high, as compared to low, levels of support, especially from parents and peers. However, other research has failed to find this beneficial effect for general social support (Varni et al., 1989), peer support (Sim, 2000; Varni et al., 1989; Windle, 1992), or teacher social support (Sim, 2000; Varni et al., 1989). Thus, further research is needed to better understand these relationships.

Previous research examining these issues has had numerous methodological problems that may have contributed to the variability of results. First, few studies have considered controllability an issue when examining the relationship between NLE and depressive symptomatology. Of the studies that have considered controllability, many have failed to clearly define controllable or uncontrollable events and some did not use an independent assessment of whether the child's level of functioning could influence the occurrence of the life event. Second, several studies examined samples that were homogeneous in their exposure to NLE. Examining a sample of children who have been exposed to a broad range of NLE, varying levels of social support, and differing levels of symptoms of depression increases the likelihood that significant relationships between variables will emerge when analyzed. Third, most studies were limited in the range of the children's ages, thus limiting the generalizability or the opportunity to explore variations

as a function of age or development. Finally, numerous studies have used measures with unknown psychometric properties. The use of measures that are not psychometrically sound reduces the probability of showing either main or interaction effects.

The aim of this study was to evaluate the associations between children's reports of NLE, social support, and symptoms of depression. It was hypothesized that NLE (total, as well as uncontrollable and controllable) would be positively associated with depressive symptomatology. Furthermore, it was expected that the association between depressive symptomatology and controllable events would be stronger than the association between depressive symptomatology and uncontrollable events. In addition, it was hypothesized that social support would be negatively associated with depressive symptomatology and that there would be a significant interaction between social support and NLE in the prediction of depressive symptomatology. Exploratory analyses regarding the role of specific sources of social support (parent, peer, friend, and teacher) as well as the differences in associations between depressive symptomatology, NLE, and social support as a function of age and gender were also planned.

Methods

This study is a secondary analysis of existing data that examines the social and emotional impact of chronic health conditions on children and their families. Data were collected over a five year period from 1998 to 2002. The original study was conducted in two phases. First, data were collected in classrooms, and second, data were collected in family homes (target and comparison samples) to assess emotional and behavioral functioning. Only the children and families from the comparison group (families not

affected by a chronic health condition) were examined in the current work. This research was approved by the local Institutional Review Board.

Participants

Participants were 82 children ranging in age from 8 years, 6 months to 17 years, 10 months (M = 12 years, S.D. = 2 years, 3 months) at the time of data collection. The sample was 48.8% (n = 40) male and 51.2% (n = 42) female with 91.5% (n = 75) of the families reporting their race as Caucasian and 8.5% (n = 7) as African American. The family socioeconomic status obtained from the Revised Duncan ranged from 15.0 to 96.0 (M = 52.24, S. D. = 19.9) indicating that parents held occupations in clerical or sales positions and/or skilled labor jobs. Occupations ranged from single-parent unemployed to two-parent households in which both parents worked in professional occupations. Household income per year ranged from less than $4,000 to greater than $100,000 ($M$ = 47,000, S.D. = $18,000). Data were collected in southwest Ohio, southeast Indiana, and northern Kentucky regions with families residing in urban, suburban, and rural locations.

These children and their families were recruited to be part of a comparison group in an ongoing investigation of the adjustment of families affected by a severe or chronic illness using procedures detailed in Noll et al. (1999). Parents from the families with a child or parent affected by a chronic illness gave permission for researchers to contact their child's school for the first phase of the study (school data collection). Classmates who were the same gender and race as the target child were identified. The family of the classmate from this group with the closest date of birth to the target child was contacted to serve as a comparison family for the second phase of the study. If this family declined, the child whose birthday was next closest was contacted and so on. Participation rates for

the classroom comparison peers were acceptable (>85%). Comparison families were screened for severe chronic health conditions prior to study entry.

Procedure

Data were collected individually in the 82 families' homes after informed consent and assent were obtained from parents and children. Trained members of the research team administered questionnaires individually to all participants over a 2-3 hour session. If a child or caregiver had any difficulties reading the materials, the examiners read questions to the respondents and recorded responses. Each family received monetary compensation for their participation.

Measures

Parent Measure

Demographic Background Questionnaire (Noll et al., 1996). This measure was designed to assess basic characteristics of the parent or guardian's background including age, race, education, marital status, and income. Data are also obtained about the parents' occupations in order to assess the socioeconomic status of each family with the Revised Duncan, with higher numbers indicating greater status (Nakao & Treas, 1992). Examining occupational status in addition to examining income improves the measurement of socioeconomic status of a family because occupational status varies much less in the short term than income does and socioeconomic status may be a better indicator of long term income (Hauser, 1994).

Child Measures

Adolescent Perceived Events Scale (APES, Compas et al., 1987). This is a 90-item self-report instrument that measures children's perceptions of events that have occurred

in the last four months. The child must first decide if he or she has experienced each event. If the event has occurred, then the child must decide whether the event was "positive" or "negative" on a Likert scale ranging from -4 (extremely bad) to 4 (extremely good). Adequate test-retest reliability for the ratings over a two-week period has been established (r = .86), and adequate concurrent validity has been assessed by comparing adolescents' responses with information provided by a close friend with an agreement rate of 82% (Compas et al., 1987). All events rated as -4 through -1 were added together resulting in a total weighted NLE score for each child. The NLE score includes the number of events and a weighting of events (e.g., 4 NLE rated as –1 are weighted the same as 1 NLE rated at –4). Total unweighted NLE scores were calculated by adding together the events indicated as negative by the child, without considering the rating of negativity. The unweighted NLE score includes the just the number of events rated as negative.

Five third-party raters (2 graduate students in psychology and 3 faculty members with Ph.D.s in psychology) independently examined and rated the list of events as either controllable or uncontrollable. Uncontrollable life events were defined as events that were not expected to be the direct result of the child's emotional and/or behavioral functioning. Controllable life events were defined as events that are commonly the direct result of the child's emotional and/or behavioral functioning. Controllable events were not necessarily intentionally caused by the child, but are events that might be expected to be influenced by the child's level of functioning. An agreement of at least 4 of 5 raters was required for items to be categorized as controllable or uncontrollable. Overall, there was 93.1% agreement between raters with 67 items having 100% agreement, 15 items

having 80% agreement, and 8 items having 60% agreement. The 8 items that did not meet the criteria were not considered in the analysis of uncontrollable and controllable events. The final overall agreement between raters after the 8 items were dropped was 96.3% with 46 items rated as controllable (e.g., spending time with friends, helping people, fighting with friends, negative feelings or worrying about appearance, etc) and 36 items rated as uncontrollable (e.g., death of a family member, family member moving out of the home, siblings getting engaged or married, friends getting drunk or using drugs, etc.). Total weighted NLE scores were calculated for each category (total NLE, controllable NLE, and uncontrollable NLE) by adding the negative rating given to each negative event as indicated by the child. The resulting scores represented the number of negative events reported as occurring and degree of negativity of each event with higher scores indicating either more events and/or greater negativity (e.g., 4 NLE rated as –1 are weighted the same as 1 NLE rated at –4). Total unweighted NLE scores were also calculated for each category (total NLE, controllable NLE, and uncontrollable NLE) by adding the number of events indicated as negative by the child. The resulting scores represented the number of negative events reported as occurring, with higher scores indicating either more events.

Block design and vocabulary subtests of the WISC-R (Wechsler, 1974). The vocabulary and block design subtests were administered to provide an estimate of the child's general intelligence for the purpose of further describing the participants in the sample. This abbreviated version of the WISC-R has been shown to be a reasonable index (r = .88) of full-scale IQ score (Silverstein, 1975).

Children's Depression Inventory (CDI, Kovacs, 1992). This is a 27-item self-report, symptom-oriented depression scale for children 6-17 years of age. The items are rated on a 3-point scale ranging from 0 to 2, with 2 indicating more severe symptoms. A score of over 19 has been used to indicate significant depression. The measure has relatively high levels of internal consistency, test-retest reliability (Ialongo et al., 2001; Smucker, Craighead, Craighead, & Green, 1986), concurrent (Ramano & Nelson, 1988), and predictive validity (Ialongo et al., 2001; Mattison, Hanford, Kales, Goodman, & McLaughlin, 1990). Additional work has suggested this measure has adequate construct (Worchel et al., 1990) and discriminate validity (Carey, Faulstick, Gresham, Ruggiero, & Enyart, 1987; Lobovits & Handal, 1985; Ramano & Nelson, 1988). A total score was calculated by multiplying the average rating of items by the total number of items on the questionnaire.

Social Support Scale for Children (SSSC, Harter, 1986). This is a 24-item self-report instrument that measures children's perception of social support available from parents, peers, friends, and teachers. Item responses range on a 4-point scale from 1 "not at all" to 4 "very much," with 4 indicating more support. Internal consistencies have shown to be adequate (.72 to .86; Harter, 1986). There is also adequate construct validity (Harter, 1986), concurrent validity (East & Hess, 1987; Harter, 1986), and predictive validity (LaGreca, Silverman, Vernberg, & Prinstein, 1996). Total social support was calculated as the average rating across all items. Parent, peer, friend, and teacher support were calculated as the average rating across items within each subscale.

Data Analysis Strategy

Correlational analyses were used to test hypothesis one, stating that NLE (total, as well as uncontrollable and controllable) would be associated with higher levels of depressive symptomatology. Steiger's (1980) test of the significance of the difference between dependent correlations was used to examine if the correlation between depressive symptomatology and controllable events was stronger than the correlation of depressive symptomatology and uncontrollable events. Correlational analysis were used to examine hypothesis two, stating that social support will be associated with lower levels of depressive symptomatology. Hierarchical multiple regression was used to examine the significance of interactions between social support and NLE in the prediction of depressive symptoms. Significant interactions were followed by post-hoc regression analyses (Aiken & West, 1991). Prior to regression analyses, all variables were centered, or put into deviation score form, by subtracting the respective sample means from the variables' value. This procedure produced a revised sample mean of 0. Centering reduces multicollinearity between the independent variables and interactions among them without altering the significance of the interaction or the values of the simple slopes.

Additional procedures employed during the data analysis stage included a power analysis and correction for Type I error. First, a power analysis using GPOWER (Faul & Erdfelder, 1992) indicated that for correlational analysis, with a sample size of N = 75, at a significance level of .05, a "medium" effect size (r = .3) could be detected with 85% power. Further, to avoid Type I error or spurious findings due to numerous tests, Holm's procedure (Holland & Copenhaven, 1988) was employed to control family wise error rate for each set of exploratory analyses. With this procedure, p-values are ranked from

smallest to largest. Significance levels are determined by testing the smallest p-value against the alpha level divided by the number of contrasts. If it is significant, the next smallest p-value will be tested against the alpha level divided by the number of contrasts minus the number of comparisons already tested. This process is continued until nonsignificance is attained.

Results

Demographic Characteristics

Demographic characteristics of the sample are presented in Table 1. There were approximately an equal number of males and females represented with a mean IQ score similar to that expected in the general population. Modal heads of the households held occupations in clerical or sales positions and/or skilled jobs. Occupations ranged from single-parent unemployed to two-parent households in which both parents worked in professional occupations. Families represented a broad range of demographic variables and lived in urban, suburban, and rural areas.

Outcome Measures

Means and standard deviations for measures of depressive symptoms, social support, and NLE are presented in Table 2. Data obtained on the SSSC and the APES are similar to data obtained on other nonclinical samples. However, means obtained on the CDI are lower than means obtained from other nonclinical samples. As well, only 4 participants reported enough symptoms to be considered significantly depressed. Thus, this sample had less depressive symptomatology than other nonclinical samples.

NLE and Depressive Symptoms

The relationship between NLE and depressive symptomatology were examined by calculating Pearson correlations. Results (Table 3) indicate that total weighted NLE are significantly correlated with depressive symptomatology, suggesting that children who are experiencing more NLE also report more depressive symptomatology. As expected, more depressive symptomatology was associated with both controllable and uncontrollable life events. Steiger's (1980) test of significance of the difference between dependent correlations was conducted to examine if these relationships were significantly different from each other. Results indicate that the correlation between uncontrollable NLE and depressive symptomatology was not significantly different from the correlation between controllable NLE and depressive symptomatology, t (79) = .5728, *ns*. Further examination of these associations revealed that controllable NLE and uncontrollable NLE were highly and significantly correlated. Subsequent analyses focus on total, rather than controllable versus uncontrollable, weighted event scores.

Social Support and Depressive Symptoms

A significant correlation was found between total social support and depressive symptomatology (Table 3), showing that children who report more overall social support report less depressive symptomatology. This result supports the hypothesis of a main effect or direct relationship between depressive symptomatology and overall social support. A multiple regression analysis (Table 4) was used to further clarify the nature of the relationships between total social support, NLE, and depressive symptomatology. The direct entry method was utilized with NLE and total social support entered in the first step, and the interaction term (NLE X total social support) entered in the second step. The

interaction term was not significant, lending no support for general social support as a buffer between NLE and depressive symptomatology.

Exploratory Analyses

Exploratory analyses were conducted to examine the association of specific sources of social support (parent, peer, friend, and teacher) and depressive symptomatology. Examinations of specific sources of social support (Table 3) indicate that parent, peer, and teacher social support are all significantly related to symptoms of depression. Social support from friends, however, was not significantly related to symptoms of depression. A multiple regression analysis (Table 5) was used to further examine the unique contributions of each type of social support. The direct entry method was utilized with parent, peer, teacher, and friend support entered into the first step. Results indicate that only peer social support significantly contributed a unique amount of variance.

Multiple regression analyses (Tables 6 and Appendices A and B) examined the interaction effect between specific sources of social support (parent, peer, and teacher) and NLE in predicting depressive symptomatology. Results indicate that only peer social support (Table 6) had a significant interaction with NLE. Post-hoc regression analyses (Figure 1) revealed that with low levels of NLE and high levels of peer social support, children report less depressive symptomatology as compared to low levels of peer social support. However, with high levels of NLE, the level of peer social support does not appear to change the relationship between NLE and depressive symptomatology.

Finally, exploratory analyses were conduced to examine differences in the associations of NLE and social support with depressive symptomatology as a function of

age and gender. Tests of differences between independent correlations among these variables were examined with Fisher's z' transformations (Cohen & Cohen, 1983). These tests revealed no significant differences in the associations between NLE and social support with depressive symptomatology as a function of age or gender.

Discussion

The purpose of the present study was to investigate risk and protective factors for the occurrence of symptoms of depression in children and adolescents by examining the relationships between NLE, social support, and symptoms of depression. It was hypothesized that NLE would be associated with more depressive symptomatology. It was expected that the association between controllable NLE and depressive symptomatology would be stronger than the association between uncontrollable NLE and depressive symptomatology. In addition, it was hypothesized that social support would be associated with less depressive symptomatology and there would be a significant interaction between social support and NLE in the prediction of depressive symptomatology. The current findings suggest that NLE (total, controllable, and uncontrollable) and social support are both associated with children's experience of symptoms of depression. These results did not support the model of the association of NLE and symptoms of depression varied as a function of levels of support, with the exception of social support from peers appearing to provide some benefit when there were low levels of NLE.

Results of the examination of NLE as a possible risk factor for the occurrence of depressive symptoms were consistent with previous research (Dixon & Ahrens, 1992; Nolen-Hoeksema et al., 1992; Tram & Cole, 2000; Windle, 1992) with a significant

positive association found between NLE and depressive symptomatology. Additionally, results of controllable and uncontrollable NLE and the association with depressive symptomatology were similar to those reported by Cohen et al. (1987), with both controllable and uncontrollable NLE significantly and positively associated with depressive symptomatology. While it appears that the association between uncontrollable NLE and depressive symptomatology supports the socio-environmental view with NLE negatively influencing the well-being of the child, and the association between controllable NLE and depressive symptomatology support the socio-environmental view with NLE negatively influencing the well-being of the child, it is possible these associations resulted from a third unknown variable (such as parenting style or an ongoing stressful process in the child's life). Additionally, it was anticipated that controllable NLE events would have a stronger association with depressive symptomatology than uncontrollable NLE association with depressive symptomatology by incorporating both views in the association, but this was not supported.

Further examination of the controllable and uncontrollable associations revealed that the controllable and uncontrollable NLE were highly correlated even though independent raters were used. Different methodological, statistical, and theoretical factors may have contributed to this high correlation and may help to explain why differentiating between controllability did not aid in understanding directionality. First, although independent raters did have high agreement on which items were controllable and uncontrollable, the rater's choice of controllable or uncontrollable events reflected events that they agreed could or could not have been influenced by the child's level of symptomatology. The raters did not rule out other influences such as random occurrence

of the events or systematic influence by additional factors (e.g. family dynamics, socioeconomic influences) beyond the child's level of functioning. Even though the child may have the ability to control or influence some events, the events may have occurred independent of the child's influence. Thus, measuring the causes of events may be more accurate and lead to different findings. Second, it is possible that there were overlapping causes for events occurring. While a child may have partially influenced the occurrence of an event, the event could have also been influenced by an outside factor. Third, it is feasible with a cross-sectional design that when life events and symptoms of depression were measured simultaneously pertaining to events that occurred in the past few months, an uncontrollable event could have occurred, lead to symptoms of depression, and resulted in further controllable negative events occurring, therefore changing the associations observed. Thus, some life events may be influenced by depressive symptoms. While this suggestion supports a reciprocating relationship between both the socioenvironmental model and the stress-generating model, a longitudinal design examining controllability over short periods of time would be best to help to sort out these issues.

Statistically, the use of the total weighted NLE may have influenced the high correlation between controllable and uncontrollable NLE. The child's mood state at the time of the study may have influenced how he or she selected and evaluated events that occurred. Research supports that children recall a greater percentage of experiences that are affectively congruent with the mood they were in during the time of recall (Bower, 1981). Additionally, negative mood states can result in more negative appraisals of life events (McCrimmon, Frier, & Deary, 1999). Thus, if the child has a positive or negative

mood at the time the measure was completed, he or she indicated more events that were congruent with their mood state and neglect to indicate some events that occurred. Additionally, the child may have rated some events more positively or negatively than when they actually occurred depending on the child's mood state. The resulting NLE scores for both uncontrollable and controllable events may reflect a response bias of the child. However, examination of numbers of events without inclusion of children's perceptions of negativity included still yielded a significantly high correlation between controllable and uncontrollable events ($r = .7$). It is still feasible that the child's mood at the time the measure was completed may have even influenced whether the child indicated an event occurred. However, Compas et al. (1987) found participants did accurately reported the occurrence of events by having a close friend also indicated events that occurred for that participant with high rate of agreement (82%).

Finally, it was assumed that uncontrollable NLE were occurring outside of a child's level of functioning and controllable events were influenced by a child's functioning. It is likely that the high correlation may be attributed to systematic factors in the child's life such as parenting styles, socioeconomic situation, or a chaotic life style that is independent of the child's functioning. Thus, conceptualizing uncontrollable and controllable events only in terms of influence from the child's level of functioning may be inappropriate especially when it is likely that random and system factors may be influencing these associations.

Social support serving a protective function with regard to symptoms of depression in children was consistent with previous research on social support (Demaray & Malecki, 2002; Jackson & Warren, 2000; Varni et al., 1989) with a significant negative

association found between overall social support and symptoms of depression. Specifically, children who reported more social support also reported fewer symptoms of depression. The same pattern was found for several specific sources of social support, including parents, peers, and teachers. Upon further examination of these relationships, it was found that only peer social support accounted for a significant amount of variance beyond the other sources of support, however it was very similar to parent social support. While these results pertaining to specific sources of social support are consistent with previous research on sources of support (Varni et al., 1989), it is unclear why support from friends did not have a direct effect on symptoms of depression. Given that the measurement of social support from friends focused on having support from a close friend, while social support from peers focused on having support or acceptance from one's peer group or classmates, it may be that it is more important for the child to perceive support or acceptance by his or her peers than for the child to perceive him or herself as having support from a close friend. Specifically, a child's peer group is composed of multiple individuals, while a friend refers to just one individual. Peer support may offer more of a direct benefit by allowing the child multiple sources of support within that domain while other domains are limited to one or two individuals. It should be noted that although friend social support was not found to be significant, the association was similar to peer, parent, and teacher support. Overall, these findings support a protective effect of social support for symptoms of depression.

Total social support did not serve as a buffer for NLE. Consistent with Varni et al. (1989), the association between NLE and symptoms of depression did not vary as a function of overall levels of social support. In contrast to previous research (Sim, 2000;

Varni et al., 1989; Windle, 1992), exploratory analyses did show that there was a significant interaction between peer social support and NLE in the prediction of depressive symptomatology. Further evaluation of this interaction revealed that that with low levels of NLE and high levels of peer social support children reported less depressive symptomatology as compared to low levels of peer social support. However, with high levels of NLE, the level of peer social support does not appear to change the relationship between NLE and depressive symptomatology. This suggests that support from peers provides a direct benefit but it does not buffer the effects of NLE. Additionally, lack of peer support may be a risk factor for depressive symptomatology. It is possible that under low levels of NLE, children are able to utilize their peer social support and thus avoid experiencing depressive symptoms. However, having too many NLE may become overwhelming for children and they are unable utilize their peer support. While Cheng (1997) also found an interaction with peer social support, the interaction opposes results from this study with peer social support only buffering the effects of NLE under high levels of stress. This inconsistency may be attributed to cultural differences of the samples; however, further research is needed.

In contrast to peer social support having an interaction effect, support from parents and teachers did not appear to provide protection to children experiencing NLE. Due to the smaller sample size of this study, statistical power was limited and additional buffering effects of different sources of social support may not have been detected. While some previous research has suggested various sources of social support interact with NLE to decrease the impact of NLE on the experience of symptoms of depression (Cheng, 1997; Jackson, 2000; Wenz-Gross et al., 1997), Alloway and Bebbington (1988) argue

that these findings are not of dramatic proportions in published literature. In general, results examining social support are consistent with main effect models of stress and social support. Social support appears to be beneficial to any child, but does not offer additional benefits during times of heightened stress. Overall, differential associations between sources of social support with depressive symptomatology have a similar magnitude as total social support. However, measuring multiple sources of perceived social support rather than simply reporting a global composite index of socials support may be important given inconsistency of findings in literature.

Although these findings are consistent with some previous research, there are several limitations that should be noted. First, this study had a small sample size, which resulted in only enough power to detect only medium effect sizes; a sample size of 354 would be needed to detect small differences. Second, this study was only examined children's reports at one point in time. Although this study took steps to look at directionality at one point in time by examining controllable and uncontrollable events, further research should be conducted to examine these issues over short intervals of time. Third, this study only examined participants from one area in the Midwest, which were mostly Caucasian. It is possible that there is a variable that was not examined that may make this sample is unique and different than the population. Replication with data from multiple regions and children of varying ethnicities would add credibility to these results. Finally, participants reported low levels of depressive symptomatology. A sample reporting more depressive symptomatology may reveal different associations.

Given these findings, it is important to consider possible theoretical implications of NLE and social support in relationship to symptoms of depression. In terms of NLE,

examining the controllability of events attempted to clarify the association between NLE and depressive symptomatology. The high correlation between controllable and uncontrollable events prevented drawing conclusions on the nature of the associations. The high correlation between controllable and uncontrollable events indicates that there may be another factor that may aid in the understanding of these associations that needs to be identified. It is also possible that there are not clear pathways between NLE and depressive symptoms, but instead, there may be a reciprocal relationship occurring between these variables. Specifically, recently published research has shown support for a reciprocal relationship between NLE and depressive symptoms (Kim, Conger, Elder, & Lorenz, 2003), however these findings should be replicated.

Clinically, it is important to realize that children may be at risk for experiencing depressive symptoms after the occurrence of NLE. Additionally, it is also possible that some children already experiencing depressive symptoms may unintentionally cause or influence more NLE, resulting in more negative experiences. Understanding that different factors may influence depressive symptoms and depressive symptoms may further influence NLE is important in order to alleviate symptoms and help children function in a more regular manner. Policy changes in schools and classroom may be appropriate for stopping or lessening these influences. For example, it may be important to make teachers aware of NLE occurring in a child's life so they may monitor and identify if the child is experiencing symptoms of depression. Directing the child towards appropriate services may alleviate the symptoms and help to prevent further occurrences of negative experiences (e.g., poor grades, fighting, etc.). Additionally, understanding children's perceptions of social support may be clinically beneficial. It appears that peer social

support is protective for children and a lack of peer social support may put children at risk for experiencing symptoms of depression. Identifying children who are left out or made fun at school and attempting to include children while stopping peer rejection may prevention of the onset of some depressive symptoms.

In summary, the results of this study provide further support for the association between NLE and symptoms of depression; however, the directionality of this association remains unclear. Additionally, total social support as well as the various sources of social support appears to be protective for children. A future study investigating a reciprocal model of depression and NLE longitudinally over short intervals of time would add support for findings from Kim et al. (2003). Exploring causes of events would help to clarify if a child's functioning is influencing future negative events, or if there are systematic factors occurring that account for the occurrence of NLE and symptoms of depression. Systematic factors that could be explored to see if they better account for these associations are parenting styles or socio-economic circumstances. Examining other sources of socials support, such as that from siblings or other extended family members should be included. Finally, examining a large sample including children of different ages, gender, and cultural backgrounds, would help to identify developmental trends and gender and cultural differences occurring that are related to NLE, symptoms of depression, and perceptions of social support.

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Table 1.

Descriptive Statistics of Demographic Characteristics of Participants

Variable	Mean	SD	Range
Child's Age	12.27	2.22	8-6 – 17-10
Child's Estimated IQ	106.43	16.03	62 - 146
Income[a]	47	18.2	<4 - < 100
Family Socioeconomic status[b]	52.24	19.9	15.0 – 96.0
Father's Age	42	6.5	28-58
Mother's Age	39.49	6.48	26-54
Father Education[c]	13.98	2.91	9-20
Mother's Education	14.01	2.43	7-20

[a]Income presented per $1,000.

[b]Based on Duncan TSEI2. Higher scores represent greater occupational attainment.

[c]Education presented as highest grade completed. 10 = completed 10th grade, 14 = completed

2nd year of college or equivalent training, etc.

Table 2.

Means, Standard Deviations, and Ranges of Depression, Social Support, and NLE (N=82).

Variable	Mean	SD	Range
Depression (CDI)	5.77	5.63	0-27
Social support (SSSC)			
Total	3.52	.35	2.58-4
Parent	3.64	.4	2.33-4
Peer	3.36	.43	2.17-4
Teacher	3.5	.49	1.83-4
Friend	3.58	.5	1.67-4
Negative Life Events (APES)[a]			
Total NLE	27.32	23.08	0-116
Total Uncontrollable NLE	11.6	11.73	0-64
Total Controllable NLE	12.66	10.47	0-52

[a]Total NLE numbers represent the number of events and rating of negativity of those events.

Table 3

Correlations of Depressive Symptomatology, NLE, Social Support, Age, and Gender for Children (N=82).

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) Depression (CDI)	---										
Negative Life Events (APES)											
(2) Total	.31**	---									
(3) Uncontrollable	.27*	.94**	---								
(4) Controllable	.31**	.93**	.77**	---							
Social Support (SSSC)											
(5) Total	-.39***	.09	.08	.11	---						
(6) Parent	-.36***	.01	.01	.02	.78**	---					
(7) Peer	-.37***	.13	.10	.15	.73**	.46**	---				
(8) Teacher	-.28*	.03	.07	.01	.76**	.49**	.40**	---			
(9) Friend	-.17	.11	.07	.15	.74**	.46**	.37**	.36**	---		
Demographics											
(10) Age	.00	-.13	-.12	-.10	-.04	.02	.03	-.18	.04	---	
(11) Gender	.19	-.05	-.09	-.00	.24*	.23*	.11	.08	.29**	.06	---

* $p < .05$, two-tailed.

** $p < .01$, two-tailed.

*** $p < .001$, two-tailed.

Table 4

Summary of Multiple Regression Analysis for the Test of NLE X Total Social Support Interaction in the Prediction of Depressive Symptomatology (N=82).

Variable	R	F_{eq}	ΔR^2	$\beta_{step\ 1}$	$\beta_{step\ 2}$
Step 1 NLE	.47	11.16***	.22***	.27**	.26*
total social support				-.36***	-.36***
Step 2 events X support	.48	7.59***	.01		.07

Step 1 df (2, 79).

Step 2 df (3, 78).

* $p < .05$, two-tailed.

** $p < .01$, two-tailed.

*** $p < .001$, two-tailed.

Table 5

Summary of Multiple Regression Analysis Examining Unique Contributions of Specific Sources of Social Support (N=82).

Variable		R	F_{eq}	ΔR^2	$\beta_{step\ 1}$
Step 1	parent social support	.371	12.76***	.13***	-.22
	peer social support				-.25*
	teacher social support				-.09
	friend social support				.06

Step 1 df (1, 80).

Step 2 df (2, 79).

* $p < .05$, two-tailed.

** $p < .01$, two-tailed.

*** $p < .001$, two-tailed.

Table 6

Summary of Multiple Regression Analysis for the Test of NLE X Peer Social Support Interaction in the Prediction of Depressive Symptomatology (N=82).

Variable	R	F_{eq}	ΔR^2	$\beta_{step\ 1}$	$\beta_{step\ 2}$
Step 1 NLE	.45	10.13***	.20***	.26*	.31**
peer social support				-.34***	-.36***
Step 2 events X support	.53	9.94***	.07**		.27**

Step 1 df (2, 79).

Step 2 df (3, 78).

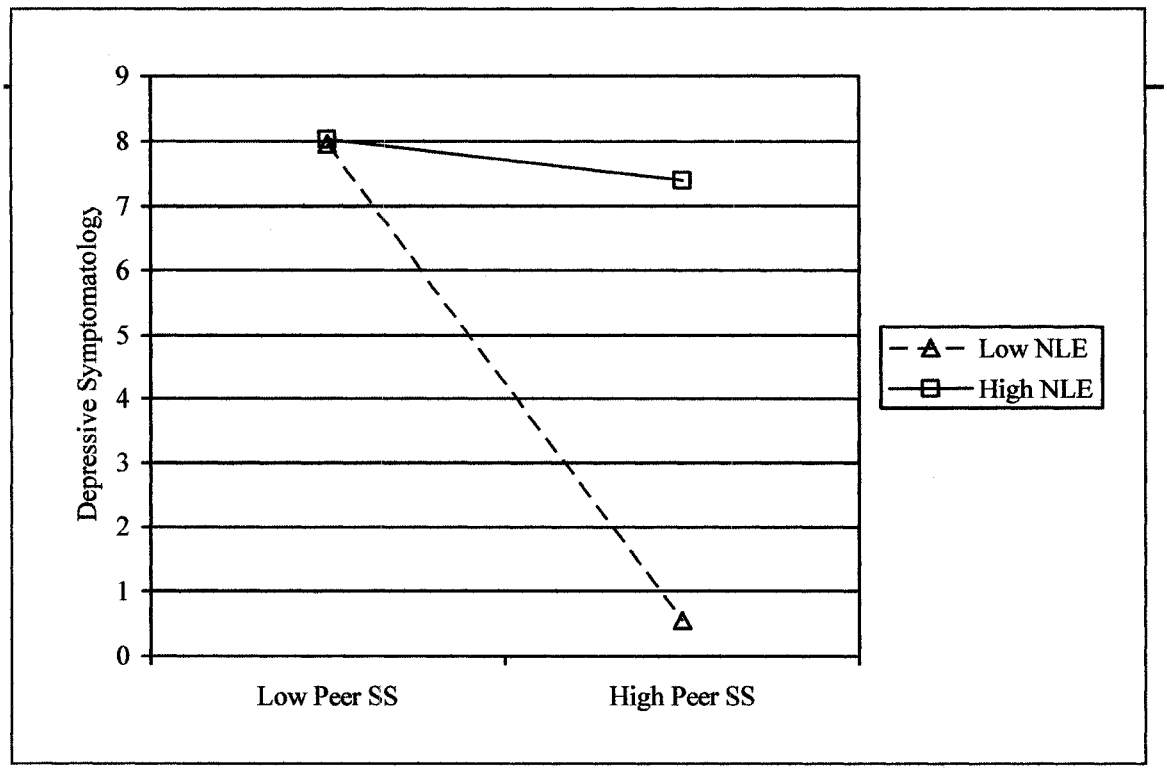
* $p < .05$, two-tailed.

** $p < .01$, two-tailed.

*** $p < .001$, two-tailed.

Figure 1.

Graph of Post-hoc Regression Analysis of the Significant Interaction between Peer Social Support and NLE in the Prediction of Depressive Symptomatology.



Note: Highs and lows were graphed one standard deviation above and below the mean. Children who reported high peer social support and low NLE reported less depressive symptomatology than children who reported low peer social support. Children who reported high NLE reported similar levels of depressive symptomatology regardless of their report of high or low peer social support.

Appendix A

Summary of Multiple Regression Analysis for the Test of NLE X Parent Social Support Interaction in the Prediction of Depressive Symptomatology (N=82).

Variable		R	F_{eq}	ΔR^2	$\beta_{step\ 1}$	$\beta_{step\ 2}$
Step 1	NLE	.47	11.02***	.22***	.30**	.33**
	parent social support				-.35***	-.36***
Step 2	events X support	.48	7.76***	.01		-.11

Step 1 df (2, 79).

Step 2 df (3, 78).

* $p < .05$, two-tailed.

** $p < .01$, two-tailed.

*** $p < .001$, two-tailed.

Appendix B

Summary of Multiple Regression Analysis for the Test of NLE X Teacher Social Support Interaction in the Prediction of Depressive Symptomatology (N=82).

Variable		R	F_{eq}	ΔR^2	$\beta_{step\ 1}$	$\beta_{step\ 2}$
Step 1	NLE	.41	7.99***	.17***	.30**	.32**
	teacher social support				-.28**	-.28**
Step 2	events X support	.41	5.38**	.01		-.06

Step 1 df (2, 79).

Step 2 df (3, 78).

* $p < .05$, two-tailed.

** $p < .01$, two-tailed.

*** $p < .001$, two-tailed.

Appendix C

Background Information

Subject # _____

Date _____

Examiner _____

Instructions:
This questionnaire asks for some general background information about you and your family. The questions ask about your educational background, religious beliefs, and current work. Please answer all of the questions as completely as possible.

1a. What is your gender? _____

1 = female
2 = male

1b. What is your marital status? _____

1 = single 4 = separated
2 = married 5 = remarried
3 = divorced 6 = widowed

2. What was the highest grade of school you completed?

Elementary	1	2	3	4	5	6	7	8
High school	9	10	11	12				
Post high school (vocational tech.)	1	2	3	4				
College	1	2	3	4	degree?_____			
Graduate/professional	5	6	7	8	degree?_____			

3. What is your date of birth? _____ / _____ / _____
month day year

4. Where were you born? _____ / _____ / _____
city/town state country

5. How would you describe your current residence? (circle one)

rural suburb urban

6a. What kind of work are you doing (what is your occupation)?

_____

(For example: home maker, retail sales, machinist, stock clerk, farmer)

6b. What are your most important activities or duties?

_____

(For example: selling merchandise, filing, supervising assembly line)

6c. What kind of business or industry is this?

_____

(for example: retail shoe store, automobile manufacturing, state labor department)

7. Approximately what is your present annual family income (circle one)

1. under $4,000
2. $ 4,000-- $ 7,000
3. $ 7,001-- $10,000
4. $10,001-- $13,000
5. $13,001-- $20,000
6. $20,001-- $30,000
7. $30,001-- $40,000
8. $40,001-- $60,000
9. $60,001-- $75,000
10. $75,001--$100,000
11. Over $ 100,000

8a. What is your religious preference now? _____

1 = Protestant
2 = Roman Catholic
3 = Jewish
4 = none, no religion
5 = other, please specify

_____

8b. About how often did you attend religious services in the past year? _____

1 = several times per week
2 = about once a week
3 = 2-3 times per month
4 = once a month or less
5 = never

8c. Regardless of your attendance at religious services, how religious do you consider yourself to be?

_____

1 = not religious at all
2 = not very religious
3 = fairly religious
4 = very religious

9a. Please list all of your children, starting with the oldest, and include birth date, sex, check if the child lives with you now, and check if the child was delivered by Cesarean Section.

First Name (do not write last names)	Birth Date (mo/day/year)	Sex	Living with you now (yes or no)	Delivered by Cesarean section? (yes or no)
1. _____	_____	____	_____	_____
2. _____	_____	____	_____	_____
3. _____	_____	____	_____	_____
4. _____	_____	____	_____	_____
5. _____	_____	____	_____	_____
6. _____	_____	____	_____	_____

9b. Now please circle the names of the children you listed in Question 9a above who are from your present marriage/relationship. If all are from your present marriage/relationship just place a check here _____.

10. What is your ethnic background? _____

1 = Black, not Hispanic
2 = Hispanic
3 = Asian or Pacific Islander
4 = Native American
5 = White, not Hispanic
6 = other, please specify _____

Thank you for filling out this questionnaire.

Appendix D

Adolescent Perceived Events Schedule

Subject # _____

Date _____

Examiner _____

Instructions:
Below is a list of events which may or may not have happened to you. Some of these are events which have happened to nearly everybody, others are events which only happen once in awhile and not to everybody. I want you to decide whether you have had each of these experiences in the past four months. If the event has happened to you in the pas four months, please place an "X" on the line on the left side of the page marked "EVENT HAS HAPPENED" at the top.

For each event that has happened to you, we would like to know how desirable the was – that is how good or bad it was when it happened to you. Good (desirable) events are ones which are pleasant or make us happy. Bad (undesirable) events are ones that upset us or make us feel scared, sad, or angry. Use the numbers on this scale to tell me the number which best describes how good (desirable) or bad (undesirable), each event was when it happened to you. Place the number on the line to the right side of the page marked "GOOD-BAD RATING" at the top.

Extremely bad	*Very bad*	*Somewhat bad*	*Slightly bad*	*Neither good or bad*	*Slightly good*	*Somewhat good*	*Very good*	*Extremely good*
-4	*-3*	*-2*	*-1*	*0*	*1*	*2*	*3*	*4*

EVENT HAS HAPPENED IN PAST 4 MONTHS	GOOD-BAD RATING
1. _____ Hobbies or activities (watching T. V., reading, etc)	_____
2. _____ Doing things/spending time with family members	_____
3. _____ Spending time talking with boyfriend/girlfriend	_____
4. _____ Dating or doing things with people of the opposite sex	_____
5. _____ Feeling pressured by friends	_____

EVENT HAS HAPPENED IN PAST 4 MONTHS	GOOD-BAD RATING
6. _____ Family members, relatives, step-parents moving in or out of house	_____
7. _____ Helping other people	_____
8. _____ Fight with or problem with a friend	_____
9. _____ Restrictions at home (having to be home at a certain time, etc.)	_____
10._____ Death of a family member	_____
11._____ Family member becoming pregnant or having a baby	_____
12._____ Attending school	_____
13._____ Hospitalization of a family member or relative	_____
14._____ Falling in love or beginning a relationship with a boyfriend/girlfriend	_____
15._____ Poor relationship between family members and friends	_____
16._____ Doing poorly on an exam or paper	_____
17._____ Talking or sharing feelings with friends	_____
18._____ Being around people who are inconsiderate or offensive	_____
19._____ Arrest of a family member	_____
20._____ Getting into trouble or being suspended from school	_____
21._____ Hassles, arguments or fights with peers or other students at school	_____
22._____ Financial troubles or worries about money	_____
23._____ Getting bad grades or progress reports at school	_____
24._____ Having bad classes or teachers	_____
25._____ Emotional worries (feeling depressed, moody, angry, etc.)	_____
26._____ Going to church	_____
27._____ Meeting new people	_____

EVENT HAS HAPPENED IN PAST 4 MONTHS	GOOD-BAD RATING
28._____ Parent getting married	_____
29._____ Having few or no friends	_____
30._____ Arguments or fights between parents	_____
31._____ Getting good grades or progress reports at school	_____
32._____ Having good classes or teachers	_____
33._____ Drinking or drug use	_____
34._____ Understanding classes or homework	_____
35._____ Change in relationship with boyfriend/girlfriend	_____
36._____ Change in relationship(s) with family members	_____
37._____ Change in relationship(s) with friend(s)	_____
38._____ Pressures or expectations of parents	_____
39._____ Visiting a parent who doesn't live with you	_____
40._____ Having plans fall though (not going on a trip or getting something)	_____
41._____ Visiting with relatives	_____
42._____ Going to parties, dances, concerts	_____
43._____ Friends getting drunk or using drugs	_____
44._____ Death of a relative	_____
45._____ Obligations at home (things you have to do at home)	_____
46._____ Spending time alone	_____
47._____ Family member or relative having emotional problems	_____
48._____ Friend or family member recovering from being sick or injured	_____
49._____ Arguments or problems with boyfriend/girlfriend	_____

EVENT HAS HAPPENED IN PAST 4 MONTHS	GOOD-BAD RATING
50._____ Something bad happens to a friend	_____
51._____ Changes in privileges or responsibilities at home	_____
52._____ Changes in health of a family member	_____
53._____ Changes in health of a friend	_____
54._____ Changes in number of friends (make new friends or lose friends)	_____
55._____ Parents discovers something you don't want them to know	_____
56._____ Brother or sister getting engaged or married	_____
57._____ Brother or sister getting separated or divorced	_____
58._____ Not spending enough time with family members or friends	_____
59._____ School or job change of a family member	_____
60._____ Advancing a year in school (starting a new grade)	_____
61._____ Living with only one parent	_____
62._____ Talking on the phone	_____
63._____ Discussions or long talks with parents	_____
64._____ Homework or studying	_____
65._____ Taking care of younger brother(s) or sister(s)	_____
66._____ Problems or arguments with parents, siblings, or family members	_____
67._____ Problems or arguments with teachers or principal	_____
68._____ Spending time at home	_____
69._____ Changes in your alcohol or drug use	_____
70._____ Making honor roll or some other school achievement	_____
71._____ Negative feelings or worrying about appearance	_____

EVENT HAS HAPPENED IN PAST 4 MONTHS	GOOD-BAD RATING
72._____ Negative feelings or worrying about personal health or fitness	_____
73._____ doing household chores	_____
74._____ Something good happens to a friend	_____
75._____ Alcohol or drug use by family members or relatives	_____
76._____ Breaking up with or being rejected by boyfriend/girlfriend	_____
77._____ Death of a friend	_____
78._____ Family moves (to new home)	_____
79._____ Parent loses a job	_____
80._____ Returning to school after time off	_____
81._____ Parents getting a divorce	_____
82._____ Not getting along with the parents of your friends	_____
83._____ Doing well on an exam or paper	_____
84._____ Spending time (relaxing or going out) with friends	_____
85._____ Friend(s) move away or you move away from friends	_____
86._____ Getting punished by parents	_____
87._____ Being in love or having a relationship with a boyfriend/girlfriend	_____
88._____ Not having a boyfriend/girlfriend	_____
89._____ Friend having emotional problems (being upset, sad, etc.)	_____
90._____ Friend becoming pregnant or having a child	_____

Appendix E

Children's Depression Inventory

Subject # _____

Date _____

Examiner _____

Instructions:
Kids have different feelings and ideas. This form lists feelings and ideas in groups. From each group, pick one sentence that describes you best for the past two weeks. After you pick a sentence from the first group, go on to the next item. There are no right or wrong answers. Just pick the sentence that best describes the way you have been recently. Put a mark like this "X" next to your answer. Put a mark in the box next to the sentence you pick.

Here is an example:

_____ *I read books all the time*

_____ *I read books once in a while*

_____ *I never read books*

---

1. _____ I am sad once in a while

   _____ I am sad many times

   _____ I am sad all the time

2. _____ Nothing will ever work out for me

   _____ I am not sure if things will work out for me

   _____ Things will work out for me okay

3. _____ I do most things okay

   _____ I do many things wrong

   _____ I do everything wrong

4. _____ I have fun in many things

   _____ I have fun in some things

   _____ Nothing is fun at all

5. _____ I am bad all the time

   _____ I am bad many times

   _____ I am bad once in a while

6. _____ I think about bad things happening to me once in a while

   _____ I worry bad things will happen to me

   _____ I am sure that terrible things will happen to me

7. _____ I hate myself

   _____ I do not like myself

   _____ I like myself

8. _____ All bad things are my fault

   _____ Many bad things are my fault

   _____ Bad things are not usually my fault

9. _____ I do not think about killing myself

   _____ I think about killing myself but I would not do it

   _____ I want to kill myself

10._____ I feel like crying everyday

_____ I feel like crying many days

_____ I feel like crying once in a while

11._____ Things bother me all the time

_____ Things bother me many times

_____ Things bother me once in a while

12._____ I like being with people

_____ I do not like being with people many times

_____ I do not want to be with people at all

13._____ I cannot make up my mind about things

_____ It is hard to make up my mind about things

_____ I make up my mind about things easily

14._____ I look okay

_____ There are some bad things about my looks

_____ I look ugly

15._____ I have to push myself all the time to do my school work

_____ I have to push myself many times to do my school work

_____ Doing school work is not a big problem

16._____ I have trouble sleeping every night

_____ I have trouble sleeping many nights

_____ I sleep pretty well

17._____ I am tried once in a while

_____ I am tired many days

_____ I am tired all the time

18._____ Most days I do not feel like eating

_____ Many days I do not feel like eating

_____ I eat pretty well

19._____ I do not worry about aches and pains

_____ I worry about aches and pains many times

_____ I worry about aches and pains all the time

20._____ I do not feel alone

_____ I feel alone many times

_____ I feel alone all the time

21._____ I never have fun at school

_____ I have fun at school only once in a while

_____ I have fun at school many times

22._____ I have plenty of friends

_____ I have some friends but I wish I had more

_____ I do not have any friends

23._____ My school work is alright

_____ My school work is not as good as before

_____ I do very badly in subjects I use to be good in

24._____ I can never be as good as other kids

_____ I can be as good as other kids if I want to

_____ I am just as good as other kids

25._____ Nobody really loves me

_____ I am not sure if anybody loves me

_____ I am sure that somebody loves me

26._____ I usually do what I am told

_____ I do not do what I am told most times

_____ I never do what I am told

27._____ I get along with people

_____ I get into fights many times

_____ I get into fights all the time

Appendix F

Social Support Scale for Children

Subject # _____

Date _____

Examiner _____

Instructions:
We have some sentences here and we are interested in several kinds of people in your life. This is a survey, not a test; there are no right or wrong answers. Read the sentence sample sentence here.

This question talks about two kinds of kids, and we want to know which kids are most like you. First I want you to decide whether you are more like the kids on the left side who would rather do fun things with a lot of other people, or whether you are more like the kids on the right side who would rather do fun things with just a few people. Don't mark anything yet, but first decide which kind of kid is most like you, and go to that side of the sentence.

Now, the second thing I want you to think about, now that you have decided which kind of kids are most like you, is to decide whether that is only "sort of true for you" or if it is "really true for you" then put an "X" in that box.

For each sentence you only check one box. Sometimes it will be on one side of the page, another time it will be on the other side of the page, but you can only check on box for each sentence. You don't check both sides, just the side most like you.

Okay, this first one is for practice. Then we have some more sentences which you can read. For each one, just check one box, the one that goes with what is true for you, what you are most like.

Sample Item

Really True For me	Sort of True For me		Sort of True For me	Really True For me
a. ____	____	Some kids like to do fun things with a lot of other people **BUT**	Other kids like to do fun things with just a few people	____ ____

Really True For me	Sort of True For me			Sort of True For me	Really True For me
1. ____	____	Some kids have parents who don't really understand them	**BUT**	Other kids have parents who really do understand them	____ ____
2. ____	____	Some kids have class-mates who like them the way they are	**BUT**	Other kids have class-mates who wish they were different	____ ____
3. ____	____	Some kids have a teacher who helps them if they are upset and have a problem	**BUT**	Other kids don't have a teacher who helps them if they are upset and have a problem	____ ____
4. ____	____	Some kids have a close friend who they can tell problems to	**BUT**	Other kids don't have a close friend who they can tell problems to	____ ____
5. ____	____	Some kids have parents who don't seem to want to hear about their children's problems	**BUT**	Other kids have parents who really do want to listen to their children's problems	____ ____
6. ____	____	Some kids have class-mates that they can become friends with	**BUT**	Other kids don't have classmates that they can become friends with	____ ____
7. ____	____	Some kids don't have a teacher who helps them to do their very best	**BUT**	Other kids do have a teacher who helps them to do their very best	____ ____
8. ____	____	Some kids have a close friend who really understands them	**BUT**	Other kids don't have a close friend who really understands them	____ ____
9. ____	____	Some kids have parents who care about their feelings	**BUT**	Other kids have parents who don't seem to care very much about their children's feelings	____ ____

Really True For me	Sort of True For me			Sort of True For me	Really True For me
10.____	____	Some kids have class-mates who sometimes make fun of them	**BUT**	Other kids don't have classmates who make fun of them	____ ____
11.____	____	Some kids do have a teacher who cares about them	**BUT**	Other kids don't have a teacher who cares about them	____ ____
12.____	____	Some kids have a close friend who they can talk to about things that bother them	**BUT**	Other kids don't have a close friend who they can talk to about things that bother them	____ ____
13.____	____	Some kids have parents who treat their children like a person who really matters	**BUT**	Other kids have parents who don't usually treat their children like a person who matters	____ ____
14.____	____	Some kids have class-mates who pay attention to what they say	**BUT**	Other kids have class-mates who usually don't pay attention to what they say	____ ____
15.____	____	Some kids don't have a teacher who is fair to them	**BUT**	Other kids do have a teacher who is fair to them	____ ____
16.____	____	Some kids don't have a close friend who they like to spend time with	**BUT**	Other kids do have a close friend who they like to spend time with	____ ____
17.____	____	Some kids have parents who like them the way they are	**BUT**	Other kids have parents who wish they were different	____ ____
18.____	____	Some kids don't get asked to play in games with classmates very often	**BUT**	Other kids often get asked to play in games by their classmates	____ ____
19.____	____	Some kids don't have a teacher who cares if they feel bad	**BUT**	Other kids do have a teacher who cares if they feel bad	____ ____

Really True For me	Sort of True For me			Sort of True For me	Really True For me
20.____	____	Some kids don't have a close friend who really listens to what they say	**BUT**	Other kids do have a close friend who really listens to what they say	____ ____
21.____	____	Some kids have parents who don't act like what their children do is important	**BUT**	Other kids have parents who do act like what their children do is important	____ ____
22.____	____	Some kids often spend recess being alone	**BUT**	Other kids spend recess playing with their classmates	____ ____
23.____	____	Some kids have a teacher who treats them like a person	**BUT**	Other kids don't have a teacher who treats them like a person	____ ____
24.____	____	Some kids don't have a close friend who cares about their feelings	**BUT**	Other kids do have a a close friend who cares about their feelings	____ ____