EXAMINING THE CONTEXT-SPECIFICITY AND MULTIDIMENSIONALITY

OF SOCIAL SUPPORT FOR CHILDREN EXPERIENCING INTERPERSONAL

STRESS

By

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Submitted to the graduate degree program in Clinical Child Psychology and the
Faculty of the Graduate School of the University of Kansas
In partial fulfillment of the requirements for the degree of
Doctor of Philosophy

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Date defended: __5/13/2008___

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# ABSTRACT

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Although ample empirical evidence supports the unspoken popular and scholarly assumption that social support is beneficial for psychosocial functioning, the research findings are not consistent. The conflicting findings may, in part, be related to researchers' tendency to rely on methodologically narrow definitions of what is likely a multidimensional construct. Moreover, it may be that social support as a coping resource is context-specific and subsequently, more useful and effective in the context of particular stressor types. The present study, therefore, examined the role of different elements of social support as potential moderators of the relation between *interpersonal* stress and behavioral outcome in 276 school-age children. It was hypothesized that total social support would moderate the relation between children's interpersonal stress and outcome. It was also hypothesized that, while the elements of social support were predicted to collectively influence the psychosocial functioning of children exposed to interpersonal stress, the individual elements of social support would not be of equal importance in the moderating role. The results did not support the moderating role of social support—total or the individual elements of— but indicated a main effect of overall social support on children's adaptive behavior. Implications of the current results are discussed.

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Examining the Context-Specificity and Multidimensionality of Social Support for

Children Experiencing Interpersonal Stress

More than 2,500 years ago, prominent philosophers recognized the social

nature of human beings. For instance, Aristotle wrote, "without friends no one would

choose to live, though he have all other goods" (Aristotle, trans. 1985, p. 1155a5).

With the passage of time, interest in the inherent nature of humans as social beings

has not diminished. The field of psychology has broadened its once primary focus on

individual differences to account for the many social interactions influencing human

development. In doing so, the delineation between social science disciplines (e.g.,

psychology, sociology, anthropology) has attenuated, allowing for broader

conceptualization of individual processes and outcomes (Benson & Deal, 1995).

The widely accepted ecological theory proposed by Bronfenbrenner (1977) is

an important illustration of this shift to emphasize the role of social context on

development. Drawing on the transactional relations between the individual and the

environment, individuals are not only impacted by their surroundings, but

surroundings are impacted by individuals, lending to a dynamic interdependence

between the two (Tietjen, 1994). Logically, such ecological perspectives are

necessary considering that humans, young and old, spend the majority of their time

interacting with others at various levels (Moghaddam, 1998). The current study

continued along in this ecological vein and investigated the impact of social

influences, namely social support, on children's socioemotional adjustment after

exposure to social stressors. Specifically, the study attempted to piece out the

elements of the social support construct that might best serve a potential protective

role for children experiencing interpersonal stress.

*Social Support*

Simply being in the presence of other individuals impacts how persons behave

(Guerin, 1993). Attempts to understand the power of social connections have received

great attention in the psychological literature, particularly with regard to adult

psychosocial outcomes. Growing emphasis is now being placed on demonstrating the

protective role of the social support construct in the relation between negative life

events and behavioral and emotional outcomes for children (Ezzell, Swenson, &

Brondino, 2000; Quamma & Greenberg, 1994; Sandler, Miller, Short, & Wolchik,

1989).

*The protective role of social support.* The value of social support as a

protective factor for children experiencing negative life events is supported by

mounting empirical evidence. Research has specifically demonstrated that social

support moderates the negative impact of chronic illness (von Weiss et al., 2002),

school stress (Quamma & Greenberg, 1994), parent divorce and marital separation

(Drapeau & Bouchard, 1993), community violence (Hammack, Richards, Luo,

Edylynn, & Roy, 2004), and child maltreatment (Muller, Goebel-Fabri, Diamond, &

Dinklage, 2000). For example, Teja and Stohlberg (1993) examined the relation

between peer social support and adjustment of children whose parents were divorced.

The children who perceived themselves as having higher amounts of peer support

(i.e., acceptance), compared to children who perceived themselves as having lower

amounts of peer support, reported experiencing less behavioral and emotional difficulties following the divorce event. Additionally, a study of adolescents admitted to an inpatient psychiatric unit examined the role of social support in adjustment after exposure to family violence (Muller et al., 2000). The results suggested that support buffered the maladaptive effects of exposure. Namely, adolescents who endorsed the occurrence of more supportive behaviors in the past month, compared to those who endorsed fewer occurrences of supportive behaviors, reported fewer symptoms of psychopathology.

Findings related to the potential protective role of social support, however, are not entirely consistent. To illustrate, Graham-Bermann, Levendosky, Porterfield, and Okun (1997) examined the role of social support for children exposed to severe interparental conflict. Results of their study indicated that low levels of social support (i.e., relationships perceived as negative) contributed to children's risk of behavioral and emotional maladjustment. In contrast, the results did not suggest that high levels of support (i.e., relationships perceived as positive) predicted children's adaptive functioning (as cited in Graham-Bermann, 1998). Similar to Graham-Bermann and colleagues, White, Bruce, Farrell, and Kliewer (1998) did not find support for the moderating role of social support. Within their sample, children exposed to community violence with high perceived family social support (e.g., companionship, affection, intimacy) did not endorse significantly fewer symptoms of anxiety compared to children with low perceived family support.

While there is an unspoken popular and scholarly assumption that social support is beneficial for psychosocial functioning, such inconsistent empirical findings call into question its protective utility. Claims, however, rejecting the potential protective role of social support must be cautiously considered because researchers tend to rely on methodologically narrow definitions of what is likely a multidimensional construct. For instance, researchers often test the influence of general support from only one or two *sources of support* (e.g., parents, peers) in their studies on children experiencing a particular kind of stressor and neglect other possible sources of social support that might be impacting adjustment. To illustrate, Teja and Stohlberg (1993) measured children's perceived support from peers for children exposed to a form of family stress, whereas White and colleagues (1998) measured children's perceptions of family support for children exposed to community violence. Although the former study provided evidence for social support serving a moderating role, the latter study did not. In addition to contributing to the inconsistent findings found in the social support literature, White and colleagues concluded that the utility of social support as a protective factor is limited. This conclusion is problematic because it is based on the researchers' rather narrow conceptualization of the construct (i.e., support from only one source). Further, such a limited conceptualization of the social support construct does not reflect the real world experiences of children, who typically have some contact with a variety of family members, peers, and other adults during trying times in childhood.

Moreover, these studies highlight the tendency of social support researchers to rely on different, and non-overlapping, conceptualizations of the *elements of support* that may serve a protective function. That is, Teja and Stohlberg highlighted the role of acceptance, whereas White et al. emphasized companionship, affection, and intimacy. Different kinds of support likely serve different functions (Hammack et al., 2004; Helgeson, 1993) and it is possible that the varied methods for defining and measuring social support contribute to the discrepant results regarding the potential moderating role of the general construct of social support. The current study attempted to address these limitations by examining the potential protective role of social support by using a definition that appreciates and tests multiple sources and multiple elements of support for children experiencing negative interpersonal life events.

*Defining Social Support*

While continued attention is given to the potential protective role of social support, definitional clarity of the construct is lacking, likely contributing to the inconsistent findings related to its protective ability (Pryor-Brown & Cowen, 1989). For example, Williams, Barclay, and Schmied (2005), in a recent analysis of the literature, found 30 different definitions of social support with few studies measuring or operationalizing the construct in the same way. The results of their analyses, however, broadly suggest that researchers tend to conceptualize social support as either a qualitative or quantitative construct.

Qualitative social support emphasizes the dynamic nature and content of relationships and can be conceived as representing the subjective or evaluative dimensions of support (e.g., satisfaction, closeness; Wolchik, Beals, & Sandler, 1989). This particular conceptualization meshes well with Cobb's (1976) definition, which focuses on an individual's *interpretation* or *perception* of the kind of support received rather than simple estimates of the number of acts performed by network members (i.e., quantitative support). The majority of published research conceptualizes social support in terms of its perceived quality, rather than amount, likely because researchers acknowledge their inability to know that an individual's needs are being met simply because certain "supportive" behaviors are present (Helgeson, 1993). Additionally, there are several other concerns that make the use of the quantitative conceptualization less desirable.

First, studies using a quantitative index of support are rather limited in their method of measurement. As opposed to examining the numerical count of persons in a child's life, children are typically asked to self-report on the number of persons in their life who they can turn to when in distress. Although seemingly tapping into an objective component of social support, researchers may be inadvertently measuring children's subjective interpretation of the number of individuals perceived to be providing them with useful assistance.

Second, although some research supports a limited connection between network size (i.e., simple counts) and children's functioning (Drapeau & Bouchard, 1993; Pakenham & Bursnall, 2006; Torquati & Gamble, 2001), size of the child's

network is not equivalent to feeling more support. While logically it seems as if children who are surrounded by larger numbers of people would have access to increased social resources, the mere quantity of people in a child's life may not be of prime importance. Of more concern may be the child's perception of the individuals as being helpful no matter how many people are available. Inclusion of network size as a proxy for social support or for an individual's social connectedness, therefore, is not indicated as members of a network may also serve as sources of *stress* as well as sources of support (Andrews, Hops, & Duncan, 1997; Drapeau & Bouchard, 1993).

Finally, quantitative social support appears to be a less robust predictor of adjustment when both forms (i.e., qualitative and quantitative) are considered as potential buffers from negative adjustment (Thoits, 1995). For example, with a sample of children who have a parent with multiple sclerosis, Pakenham and Bursnall (2006) found that higher levels of qualitative social support (i.e., greater satisfaction with) were significantly predictive of higher adaptive functioning, lower levels of distress, and better health outcomes whereas higher levels of quantitative support (i.e., greater numbers of support persons) was only significantly predictive of higher life satisfaction. The preponderance of research endorses the qualitative operationalization of social support as a buffer against the negative effects of stress (Ezzell, Swenson, & Brondino, 2000; von Weiss et al., 2002), and to acknowledge the aforementioned concerns for using a quantitatively-based definition, the present study defined social support from a qualitative perspective.

*Specifying the Elements of Social Support*

While findings indicate that an individual's *perception* of different elements of support is a key factor to consider when examining a construct's protective ability after exposure to life stressors, studies investigating the role of social support have not yet led to a consensus on which particular elements of support may best moderate the relation between children's stress and psychosocial adjustment. The work of Hammack et al. (2004) provides an example of a recent study that focused primarily on the potential buffering role of qualitative social support. The authors hypothesized that children's perceptions of different elements of support would moderate the relation between community violence exposure and internalizing symptoms. Results partially supported their hypotheses and indicated that children's perceptions of the parent-adolescent relationship (i.e., maternal closeness) served a protective role for the sampled inner-city youths. That is, adolescents who reported being closer with their mothers, compared to those who reported not being as close, reported fewer internalizing symptoms. In contrast, the results suggested that children's perceptions of network member friendliness and helpfulness did not protect against negative psychosocial outcomes (i.e., anxiety and depression).

Quamma and Greenberg (1994) also focused on the possible protective role of qualitative support for children exposed to stressful life events. They, however, conceptualized perceived social support in a different manner than did Hammack and colleagues. That is, in place of maternal closeness and network member friendliness and helpfulness, Quamma and Greenberg defined supportiveness as consistency of

parent discipline, frequency of parental praise, and child comfort discussing emotions with parents. The findings indicated that children with parent-child relationships perceived as more supportive (e.g., more consistent discipline, higher frequency of praise), were described as having fewer behavior problems compared to children with parent-child relationships perceived as less supportive. The authors, however, chose to consolidate the elements of support they targeted to represent an overall measure of parental supportiveness and subsequently, did not explore the unique contributions of the various elements of support in protecting against negative outcomes.

These and similar studies have, to date, repeatedly focused on children's perceptions of various elements of support (e.g., comfort, closeness). Researchers, however, do not consistently measure the same elements, at the same time, allowing for strategic comparisons between the various elements of support. As a result, it is difficult to determine which "parts" of support are most important in buffering the negative effects of stress. Perhaps the protective function of support is accounted for by a child's perception of being emotionally validated more so than by the perception of having a companion. Further, it is not likely that all kinds of support are equal as the demands of any given stress event may require, for example, instructional aid (i.e., information) at one point and emotional comfort at another point. The role of certain elements of support may not only differ in relation to stressor characteristics, but also related to individual characteristics. To illustrate, research has demonstrated that male and female children differ in terms of what acts they report as being supportive and helpful in times of stress (Belle, 1989).What is needed now is a

comparative, comprehensive test of the different elements of support to better illuminate how social support functions. To address this particular limitation in the field, the current study investigated the moderating role of different elements of social support to test which aspects may be most beneficial for a child's functioning.

*Interaction between the elements and sources of support.* To add to the complexity of measuring social support and clarifying its potential protective role, it has also been proposed that different kinds of support come from different kinds of people (Furman & Buhrmester, 1985; Weiss, 1974). For example, Shute, De Blasio and Williamson (2002) examined the elements of support (i.e., emotional, instrumental, companionship, informational) most commonly provided by specific support sources in a school-based sample of Australian children. Results suggested that peers and siblings primarily provided companionship, whereas teachers provided informational support and parents provided emotional support. Similar endeavors to delineate the elements of support X source of support interaction, beyond more than one source of support at a time (e.g., peers providing informational support), are limited. While attempting to clarify the specific elements of support that may best protect against negative outcomes, inclusion of a variety of sources is also necessary to acknowledge the real life complexity of children's social worlds. That is, most children have access to a mother, father, siblings, peers, and other social contacts and research must begin to address the actual social experiences of children as they live them.

One specific benefit of simultaneously considering the role of multiple sources and multiple elements of support might be in clarifying the previously inconsistent results found on behalf of social support as a protective factor. For example, White et al. (1998) did not find evidence for the moderating role of family social support for children exposed to community violence while Hammack and colleagues (2004) did. Although examining the role of the same source of support for children exposed to the same kind of stressor, the two studies produced contrasting results. This is likely the case, in part, because the authors chose different elements of family support to investigate (i.e., maternal closeness vs. companionship, affection, and intimacy). Further, clarification of which elements of support, provided by various sources of support, may have the most protective ability for children experiencing stress will likely assist in both clinical and research arenas. Namely, intervention programs could be designed to target the identified support elements to facilitate adaptive outcomes after stress exposure, while researchers will be able to address the role of social support consistently and according to a more common conceptualization.

*Stress and Issues of Specificity*

To further clarify the role of stress on children's psychological functioning, Rutter (1988) suggested that attention shift toward differentiating the various kinds of life events in regard to their meaning and consequences. Given that humans are inherently social creatures, it may be particularly useful to examine interpersonally-based stressors on adjustment. Interpersonal stressors can be defined as events that

disrupt the equilibrium of existing relationships (Rudolph, Hammen, Burge, Lindberg, Herzberg, & Daley, 2000). Such events for children might include interparental conflict, parental separation or divorce, separation from or loss of a parent, and peer conflict. Ample evidence has accumulated pertaining to the negative childhood outcomes that may be associated with experiencing each of these forms of interpersonal stress.

*Interpersonal stress and child outcomes.* Specifically, research findings suggest that children experiencing various interpersonal stressors are at-risk for both externalizing and internalizing problems (Bancila, Mittelmark, & Hetland, 2006; Williamson, Birmaher, Dahl, & Ryan, 2005). For instance, children exposed to interparental conflict are at increased risk for displaying aggressive, depressive, and anxious symptomology (Fantuzzo & Lindquist, 1989; Marcus, Lindahl, & Malik, 2001). Similar results have been found for children who have experienced parental divorce (Hetherington, Stanley-Hagan, & Anderson, 1989), peer rejection (Gifford-Smith & Brownell, 2003), and the loss of a parent (Rudolph et al., 2000). Children, however, experiencing interpersonal stressors, while at-risk, are not predetermined to endure psychosocial difficulties. To illustrate, Hetherington and Kelley (2002) reported that 75% of their sample of children experiencing parental divorce was functioning within the expected ranges for emotional and behavioral adjustment. To address the heterogeneity of outcomes following exposure to stress, researchers have moved toward identifying how additional factors contribute to some children

adjusting adaptively and others, maladaptively (Liu, Kurita, Uchiyama, Liu, & Ma, 2000).

*Interpersonal Stress and Social Support*

The connection between interpersonal stress and social support seems rooted in their joint founding in the innate social tendencies of human beings. Because both constructs share this rudimentary tenet, it is seemingly logical to consider the possible protective role of social support in the relation between interpersonal stress and psychosocial outcomes. This logical connection between interpersonal stress and social support is further endorsed by empirical evidence that suggests different types of stressors place unique demands on an individual's ability to adapt effectively. That is, coping resources, such as social support, may be useful and effective in the context of one stressor but may be ineffective in another (Aneshensel, 1992).

Gore and Aseltine (1995) provide an illustration of a study that explored the potential protective ability of social support for different stressor types. Specifically, they examined the buffering roles of perceived peer and family support for adolescents experiencing family-related, peer-centered, or personal stress. The results suggested that perceived peer support only moderated the relation between peer stress and symptoms of depression, whereas family support only appeared to buffer the negative influence of family-based stress. The findings, however, also suggested that, when considered collectively, perceived family and peer support served as a moderator in the relation between *personal stress* (i.e., events that directly impacted the adolescent) and outcome. Therefore, the latter finding lends to the conclusion that

perceived support from multiple sources may serve a beneficial protective role when considering the impact of a broader notion of interpersonal stress.

Similar to other work in the social support literature, however, no attention was given by Gore and Aseltine (1995) to the specific elements of support received from both family and friends that were most beneficial when protecting against negative psychosocial outcomes for children experiencing interpersonal stress. Lack of emphasis on the elements of support that are likely most beneficial for protecting against negative outcomes may suggest that any and all assistance is useful. This is, however, not necessarily the case as social relationships may exacerbate the negative impact stress may have on an individual's functioning (Drapeau & Bouchard, 1993). The reciprocal nature of social support and interpersonal stress is an issue that complicates efforts to understand their true bearing on child psychological outcome. Therefore, use of analyses that examine the influence of the interaction between stress and social support on outcome may best address the challenge of teasing apart this bidirectional relationship.

The strong connection between interpersonal stress and social support is further upheld by Grant et al. (2006), who provided a review of the literature on the potential moderators for the relation between stress and child psychosocial outcome. With a review of more than 30 studies, the authors concluded that the empirical evidence for the buffering role of social support is more consistent when considering its influence on the relation between interpersonally-based stressors and child outcome, than when considering the impact of other types of stress on outcome. To

illustrate, 100% of the studies reviewed that examined the influence of social support for children who have been maltreated found significant evidence for its buffering role, whereas only 50% of reviewed studies found significant evidence for its moderating role for children experiencing economic strain. Although highlighting the potential for social support to be an important protective factor when considering the impact of interpersonally-based stressors, similar to Gore and Aseltine (1995), the review by Grant et al. did not discuss the specific elements of social support that contribute most to the construct's buffering potential. Such clarification is necessary as studies examining the buffering role of support for some interpersonal stressors (e.g., interparental conflict) are not as consistent as is the case with children who have been maltreated.

The reviewed evidence begins to suggest that coping resources, such as social support, are context-specific -- that is, the coping resource called upon is likely related to the demands set forth by a particular type of stressor. Perhaps because social support, as a resource, relies upon and draws from the members of an individual's social network, it may best address the needs of the same individual when faced with stress found in or caused by these interpersonal relationships. That is not to say, however, that other potential protective factors are not also influencing the relation between interpersonal stress and child psychosocial outcome. Rather, the examination of social support is but one step in understanding the interactive influence of multiple protective factors. The current study, subsequently, explored the potential protective role of social support for children experiencing interpersonal

stress. In doing so, particular attention was given to the specific elements of support

provided by a range of support sources that may optimally buffer against negative

psychosocial outcomes.

*Limitations of Past Research and the Current Study*

Despite the growing empirical evidence suggesting its potential to protect

against negative outcomes, there continues to be a lack of consensus in

conceptualizing the social support construct (Finfgeld-Connett, 2005). Because the

literature is lacking in an agreed upon definition of social support, researchers

continue to rely upon methodologically narrow definitions of the construct. That is,

studies to date, more often than not, have investigated the potential protective role of

different, and often nonoverlapping, elements of support or of general support

provided by isolated sources on children's outcome. While investigations addressing

the separate factors of social support are helpful, endeavors are needed to explore the

integrated relation of the elements constituting the construct (Pierce, Sarason,

Sarason, Joseph, & Henderson, 1996). The current study aimed to address this

limitation by examining the potential moderating role of multiple elements of

perceived social support, provided by a range of sources. Inclusion of more than one

or two elements of support in the current endeavor allowed for a strategic

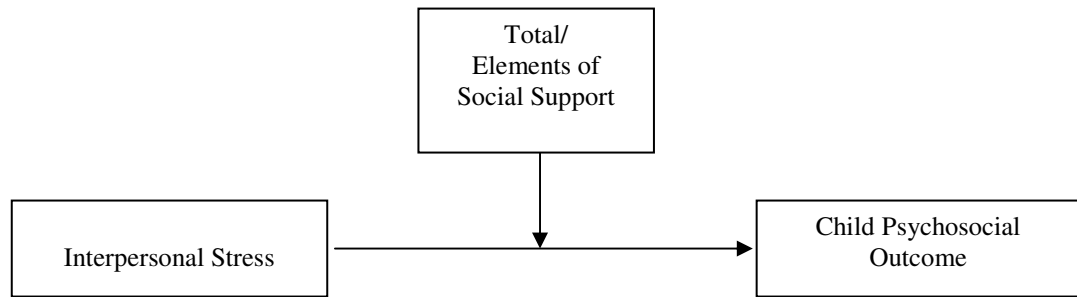comparison, clarifying which "parts" of support may have the most protective utility.

Additionally, when examining the potential protective role of social support,

researchers tend to focus on its impact for children experiencing general stress or, on

the other extreme, rather specific forms of stress (e.g., maltreatment). Perhaps the

inconsistent evidence for the moderating role of social support is partially related to researchers' focus on extreme forms of stress. The current study, therefore, investigated the potential protective role of multiple elements of social support specifically in the relation between *interpersonal stress* and child psychosocial outcome, serving as a middle-ground compared to past research.

*Hypotheses*

The current study aimed to address the aforementioned limitations by testing the moderating role of social support (i.e., perception of support elements from various sources) on the relation between interpersonal stress and child outcome. The study, therefore, tested the following hypotheses:

1. Children's levels of interpersonal stress would negatively predict their adaptive functioning and positively predict both their internalizing and externalizing problems.

2. The relation between children's interpersonal stress and psychosocial functioning would be moderated by social support (see Figure 1). That is, taken together, the elements of perceived social support would buffer the impact of interpersonal stress on children's internalizing, externalizing, and adaptive outcomes (e.g., children who reported more overall perceived support would display more adaptive behavior than children who reported less overall perceived support).

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                        ┌─────────────────┐
                        │      Total/     │
                        │   Elements of   │
                        │  Social Support │
                        └────────┬────────┘
                                 │
                                 ↓
┌──────────────────────┐                    ┌──────────────────────┐
│                      │                    │   Child Psychosocial │
│  Interpersonal Stress│ ─────────────────→ │       Outcome        │
│                      │                    │                      │
└──────────────────────┘                    └──────────────────────┘
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*Figure 1.* Model illustrating total support and the individual elements of social support serving as moderators in the relation between interpersonal stress and child psychosocial outcome.

3. While the elements of social support were predicted to collectively predict the psychosocial functioning of children exposed to interpersonal stress, it was also predicted that the individual elements would not be of equal importance in the moderating role. Therefore, the differential protective role of social support elements (i.e., companionship, instrumental aid, intimacy, nurturance, affection, admiration, and reliable alliance) for children experiencing interpersonal stress was also examined, but without establishing a priori the particular elements of support that would be most beneficial for children's outcome. To be consistent with the real life experiences of children, the potential moderating role of the collective and individual elements was tested by including multiple sources of support.

Method

*Participants*

The current sample included 276 parent-child dyads recruited from elementary schools in three small, semi-urban towns located in the Midwestern and Southern regions of the United States. The participating children (48.2% male, 51.8% female) ranged in age from 9 to 12 years old ($M = 10.32$, $SD = .99$). In terms of ethnic diversity, 82.9% were European American, 12.0% were African American, 1.6% were Native American, 1.2% were Hispanic American, and 2.4% were from two or more ethnic groups. Scores on Duncan's Socioeconomic Index (SEI; Hauser & Featherman, 1977) can range from 0 to 95. In this sample, SEI scores ranged from 0 to 80.53 ($M = 39.95$, $SD = 17.40$) suggesting that 38.9% of participants were from the lower socioeconomic status (SES), 57.2% were from the middle SES, and 3.9% were from the upper SES.

Based on $R^2$ values gathered from previous studies exploring the relation between stress, social support, and children's psychosocial outcome, it was determined with the statistical program *G-Power* (Faul & Erdfelder, 1992), that a minimum of 86 participants were needed for the current study. Criteria for participation in the study included: 1) parents and children who were native English speakers, and 2) children who reported exposure to at least one interpersonally-based stressor in the past year.

*Measures*

     *Demographic Information.* For sample description, parents were asked to provide general demographic information such as child age, gender, ethnicity, and parental income and education level (see Appendix A).

     *Interpersonal Stress.* Children were asked to provide information on the major life events they experienced and their subjective evaluation of these events using the *Life Events Checklist* (LEC; Johnson & McCutcheon, 1980). The LEC asks for participants to identify which of the 46 listed events have occurred during the past 12 months and subsequently, rate each event experienced as being either a positive or a negative event for him or her (see Appendix B). The current study utilized a modified version of the LEC. Specifically, seven of the original LEC items (e.g., "having an abortion," "losing a job") were deleted because they were age-inappropriate for the current sample. The seven items were replaced with more age-appropriate stressors (e.g., "getting braces," "moving to a foster home").

     Although the LEC is more commonly used for gathering data on the number of overall life events a child has experienced, included in the LEC are numerous interpersonal life events. All of the events on the LEC were evaluated prior to initiation of data analyses to identify those that may be specific to interpersonal life events by three independent raters (i.e., principal investigator and clinical child psychology doctoral students). For an event to be considered interpersonal, it had to meet at least one of the following criteria: 1) involves the direct interaction between two or more people (e.g., parents arguing) or 2) alters the nature of an existing

relationship (e.g., family member died). Initially 18 events were identified by the three raters as potentially meeting these criteria. Of the 18 items, 12 were agreed upon by all three raters while the remaining six items were identified by only two raters. To reconcile the status of the six potentially interpersonal items, raters met and discussed the fit with the listed criteria and three of the six potential items were agreed upon as qualifying as being interpersonal by all raters. Also, one of the initially identified items was removed from the list following additional discussion by the raters of its fit with the study criteria. Only the events with 100% agreement across all raters as being interpersonally-based were used in the current study. Therefore, a total of 14 items out of the 46 events listed in the LEC were identified as interpersonal (e.g., questions 5, 6, 8, 9, 10, 12, 19, 22, 23, 30, 34, 35, 36, 43). The interpersonal stress score was therefore, the total number of the possible 14 interpersonal events the child endorsed and indicated as being a negative event. Although total interpersonal stress scores could range from 0 to 14 in the present study, scores ranged from 1 to 6 ($M =$ 2.01, $SD = 1.07$; see Table 1).

Several previous studies have yielded preliminary support for the validity of the LEC as a measure of the amount of life events experienced by children (Greene, Walker, Hickson, & Thompson, 1985). The test-retest reliability of the LEC has also received empirical support ($r = .72$, $p < .001$; Brand & Johnson, 1982). The overall coefficient alpha for the LEC in the present study was 0.67, while the coefficient alpha for the interpersonal items was 0.39.

Table 1

*Descriptive Statistics for Study Variables (N = 276)*

|  | *Minimum* | *Maximum* | *M (SD)* |
|---|---|---|---|
| Interpersonal | 1.00 | 6.00 | 2.01 (1.07) |
| Companionship | 23.00 | 86.00 | 52.61 (11.66) |
| Instrumental Aid | 25.00 | 89.00 | 55.25 (12.42) |
| Intimacy | 18.00 | 86.00 | 45.16 (13.75) |
| Nurturance | 19.00 | 90.00 | 57.01 (16.36) |
| Affection | 34.00 | 90.00 | 73.91 (11.74) |
| Admiration | 24.00 | 90.00 | 66.42 (14.18) |
| Reliable Alliance | 27.00 | 90.00 | 73.00 (14.54) |
| Adaptive | 30.00 | 73.00 | 50.02 (10.01) |
| Externalizing | 30.00 | 107.00 | 52.09 (12.34) |
| Internalizing | 29.00 | 101.00 | 52.49 (12.34) |

*Social Support.* To measure qualitative social support, children were asked to complete the *Network of Relationships Inventory* (NRI; Furman & Buhrmester, 1985). The NRI is a 33-item measure that addresses eleven different attributes of support that may be provided by various sources of support present in a child's network. The different relationship attribute subscales (i.e., companionship, instrumental aid, satisfaction, intimacy, nurturance, affection, admiration, relative power, reliable alliance, conflict, and punishment) are rated on a 5-point Likert scale and applied to a child's relationship with his or her mother, father, other relative, teacher, best friend, boy or girlfriend, and siblings. Seven *social support factor scores* can be determined across all the sources of support by summing the three items included in each subscale, excluding scores on the satisfaction, relative power, punishment, and conflict subscales (Furman & Buhrmester, 1985). A *total social support score* can then be determined by summing the seven factor scores. Both factor scores and total scores were used in analyses to determine the role of

qualitative social support and to assist in investigating the potential protective roles of the various support elements. Although each NRI social support factor score can range from 0 to 105, in the present study, factor scores ranged from 18 to 90 (see Table 1).

Convergent validity has been found for children's reports of social support quality and their report of family environment (Creasy & Jarvis, 1989), child psychosocial outcome (Jackson & Frick, 1998) and peer victimization (Williams, Connolly, Pepler, & Craig, 2005). Satisfactory internal consistency ($\alpha = .80$) has also been established for the NRI (Furman & Buhrmester, 1985). Coefficient alphas for the companionship, instrumental aid, intimacy, nurturance, affection, admiration, and reliable alliance subscales in the present study were 0.84, 0.87, 0.85, 0.91, 0.87, 0.78, and 0.92, respectively.

*Psychosocial Adjustment.* Parents were asked to complete the *Behavior Assessment System for Children Parent Rating Scale* (BASC; Reynolds & Kamphaus, 1992). The BASC is a 148-item measure of three broadband domains of functioning: externalizing, internalizing, and adaptive behavior for children ages 4 through 18 years. The Externalizing Problems Composite (EPC) includes three scales: hyperactivity, aggression, and conduct problems. The Internalizing Problems Composite (IPC) also consists of three scales: anxiety, depression, and somatization. The Adaptive Skills Composite (ASC) includes five scales: adaptability, activities of daily living, functional communication, social skills, and leadership. In the current study, EPC scores ranged from 30 to 107 ($M = 52.09$, $SD = 11.78$), IPC scores ranged

from 29 to 101 ($M$ = 52.49, $SD$ = 12.34), and ASC scores ranged from 30 to 73 ($M$ = 50.02, $SD$ = 10.01; see Table 1).

The three BASC composite scores were used in analyses. High internal consistency ($\alpha$ = .84 to .93) and test-retest reliability ($r$ = .90 to .94) were established for the Parent Rating Scale of the BASC. Further, scores on the BASC Parent Rating Scale are significantly correlated with scores on other parent-report measures of child adjustment such as the Conners' Parent Rating Scale- Revised (Conners, 1997), Child Behavior Checklist (Achenbach & Rescorla, 2001), and Behavior Rating Inventory of Executive Functioning (Gioia, Isquith, Guy, & Kenworthy, 2000).

*Procedure*

Staff at public schools in several urban towns was provided information regarding the current project. After establishing cooperation from school staff, flyers were sent home with children in grades three through six to disseminate information to parents about a larger study on testing models of the relation between exposure to major life events and behavioral outcome. Specifically, the flyers provided information about the project's purpose and design. Parents interested in participating were asked to complete the bottom half of the flyer with their contact information before returning it to their child's school. The recruitment rate was not calculated as it was not possible to determine how many of the flyers made it home to parents, however, the population from which the sample was collected contained approximately 800 children. Once the flyers were returned (approximately 460 flyers returned), project staff then contacted interested families and scheduled a meeting

time at a prearranged location in the community during which parent-child dyads completed study measures. Potential participants were excluded if they did not return calls by the research team to set up a data collection time ($n = 12$), if the child's scores on measures collected as part of the larger study indicated that the child's intelligence was in the mentally retarded range ($n = 5$), or if the child did not endorse any interpersonal stress events in the past 12 months ($n = 167$).

During the scheduled meeting time, parents first signed an informed consent form (see Appendix D) and then worked independently in a separate location to complete the demographic information form and BASC. Oral and written assent (see Appendix E) were obtained from the participating children and then project staff assisted them in completing the LEC and NRI. Data for the current study was collected as part of a larger research project on childhood stress and resiliency and so, parents and children also completed additional questionnaires during this meeting which lasted approximately 90 minutes. Parents were compensated $5 for their time and children were given a small toy for their participation.

<div align="center">Results</div>

Zero-order correlations between the study variables are presented in Table 2. Results suggest that several variables examined were significantly interrelated. Specifically, the seven social support factors measured by the NRI were positively correlated with one another and the three psychosocial outcomes measured by the BASC were correlated. For the latter, externalizing problems and internalizing problems were positively correlated. Both externalizing and internalizing problems

were negatively correlated with adaptive behavior. Moreover, interpersonal stress was positively correlated with externalizing problems and affection, admiration, and reliable alliance were positively correlated with adaptive behavior.

Table 2

*Zero-Order Correlations Between Study Variables (N = 276)*

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Interpersonal | 1.00 | | | | | | | | | | | |
| 2. Companionship | .04 | 1.00 | | | | | | | | | | |
| 3. Instrumental Aid | .00 | .65** | 1.00 | | | | | | | | | |
| 4. Intimacy | .00 | .61** | .61** | 1.00 | | | | | | | | |
| 5. Nurturance | .09 | .58** | .68** | .53** | 1.00 | | | | | | | |
| 6. Affection | -.03 | .55** | .61** | .50** | .59** | 1.00 | | | | | | |
| 7. Admiration | -.01 | .60** | .62** | .53** | .60** | .75** | 1.00 | | | | | |
| 8. Reliable Alliance | -.09 | .47** | .52** | .48** | .47** | .79** | .67** | 1.00 | | | | |
| 9. Total Support | -.03 | .80** | .83** | .76** | .79** | .85** | .86** | .78** | 1.00 | | | |
| 10. Adaptive | -.09 | .11 | .03 | .11 | .08 | .20* | .17* | .24** | .10 | 1.00 | | |
| 11. Externalizing | .20** | .03 | .02 | .04 | .05 | -.07 | -.09 | -.13 | -.02 | -.57** | 1.00 | |
| 12. Internalizing | .05 | .06 | .05 | .04 | .11 | .04 | -.00 | -.01 | .06 | -.40** | .46** | 1.00 |

*$p < .05$. ** $p < .01$.

To test the hypotheses that children's levels of interpersonal stress and perception of social support elements would predict their adaptive, externalizing, and internalizing outcomes, a series of hierarchical multiple regressions were performed following the procedure outlined by Baron and Kenny (1986). Specifically, the analyses were completed as follows: With each of the outcome scores from the BASC as a dependent variable, interpersonal stress scores from the LEC were entered into the first block, followed by the seven social support factor scores from the NRI in the second block (i.e., factors totaled together to test hypothesis two; factors entered

separately to test hypothesis three), and the interaction term between interpersonal stress and social support in the third block (i.e., interpersonal X overall support to test hypothesis two; interpersonal X each support factor score to test hypothesis three) .

The results suggested that children's interpersonal stress significantly predicted their externalizing problems, $t$ (224) = 3.25, $p$ = .001, providing partial evidence for hypothesis one. In contrast, the results suggested that children's interpersonal stress did not significantly predict their internalizing problems, $t$ (224) = 0.86, $p$ = .39, or adaptive behavior, $t$ (224) = -1.79, $p$ = .08.

Moreover, the results did not support hypothesis two in that the overall NRI support score (i.e., composite of the seven NRI social support factors) did not moderate the relation between interpersonal stress and children's externalizing problems, internalizing problems, or adaptive behavior (see Table 3). Results did, however, suggest that the overall social support score had a significant main effect on children's adaptive behavior, $t$ (223) = 2.64, $p$ = .01. Finally, when considering the potential moderating role of the seven social support factors, results did not support hypothesis three as none of the individual support scores moderated the relation between children's interpersonal stress and externalizing problems (see Table 4), internalizing problems (see Table 5), or adaptive behavior (see Table 6).

Although the results from the current study suggest that the seven social support factors did not moderate the relation between interpersonal stress and children's psychosocial outcome, a significant main effect was found when

considering the role of overall social support on children's adaptive behavior after

controlling for their interpersonal stress.

Table 3

*Summary of Model 1 Regression Analyses: Interpersonal Events and Total Social Support Predicting Children's Psychosocial Outcome* ($N = 276$)

| Variable | B | SE B | β |
|---|---|---|---|
| *Externalizing Problems* | | | |
| Block 1 | | | |
| Number of Interpersonal Events | 2.23 | .69 | .21** |
| | | | |
| Block 2 | | | |
| Number of Interpersonal Events | 2.23 | .69 | .21** |
| Total Social Support | -.01 | .01 | - .34 |
| Block 3 | | | |
| Number of Interpersonal Events | 1.18 | 3.75 | .11 |
| Total Social Support | -.01 | .02 | - .07 |
| Interpersonal X Total Support | .00 | .01 | .11 |
| | | | |
| *Internalizing Problems* | | | |
| Block 1 | | | |
| Number of Interpersonal Events | .64 | .74 | .06 |
| Block 2 | | | |
| Number of Interpersonal Events | .63 | .74 | .06 |
| Total Social Support | .01 | .01 | .05 |
| Block 3 | | | |
| Number of Interpersonal Events | 3.39 | 4.03 | .31 |
| Total Social Support | .02 | .02 | .14 |
| Interpersonal X Total Support | -.01 | .01 | - .27 |
| | | | |
| *Adaptive Behavior* | | | |
| Block 1 | | | |
| Number of Interpersonal Events | -1.10 | .61 | - .12 |
| | | | |
| Block 2 | | | |
| Number of Interpersonal Events | -1.10 | .61 | - .12 |
| Total Social Support | .02 | .01 | .17** |
| Block 3 | | | |
| Number of Interpersonal Events | -.91 | 3.31 | - .10 |
| Total Social Support | .02 | .02 | .18 |
| Interpersonal X Total Support | .00 | .01 | - .02 |

*Note*. For externalizing problems: $R^2 = .05$** for Step 1; $\Delta R^2 = .00$ for Step 2; $\Delta R^2 = .00$ for Step 3. For internalizing problems: $R^2 = .00$ for Step 1; $\Delta R^2 = .00$ for Step 2; $\Delta R^2 = .00$ for Step 3. For adaptive behavior: $R^2 = .01$ for Step 1; $\Delta R^2 = .03$** for Step 2; $\Delta R^2 = .00$ for Step 3

* $p < .05$; ** $p < .01$

Table 4

*Summary of Model 2 Regression Analyses: Interpersonal Events and Social Support Factors*
*Predicting Children's Externalizing Problems* $(N = 276)$

| Variable | B | SE B | β |
|---|---|---|---|
| **Block 1** | | | |
| Number of Interpersonal Events | 2.29 | .69 | .21** |
| **Block 2** | | | |
| Number of Interpersonal Events | 1.98 | .69 | .19** |
| Companionship | .05 | .10 | .06 |
| Instrumental Aid | .00 | .10 | .00 |
| Intimacy | .10 | .08 | .11 |
| Nurturance | .04 | .07 | .06 |
| Affection | .08 | .12 | .08 |
| Admiration | - .12 | .09 | - .15 |
| Reliable Alliance | - .16 | .09 | - .21 |
| **Block 3** | | | |
| Number of Interpersonal Events | 3.32 | 4.57 | .32 |
| Companionship | .25 | .22 | .25 |
| Instrumental Aid | - .33 | .22 | - .34 |
| Intimacy | .01 | .17 | .02 |
| Nurturance | - .03 | .16 | - .04 |
| Affection | .15 | .28 | .15 |
| Admiration | .04 | .21 | .05 |
| Reliable Alliance | - .13 | .21 | - .16 |
| Interpersonal X Companionship | - .10 | .09 | - .57 |
| Interpersonal X Instrumental Aid | .15 | .09 | .89 |
| Interpersonal X Intimacy | .04 | .07 | .21 |
| Interpersonal X Nurturance | .04 | .07 | .24 |
| Interpersonal X Affection | - .02 | .12 | - .12 |
| Interpersonal X Admiration | - .08 | .09 | - .53 |
| Interpersonal X Reliable Alliance | - .03 | .08 | - .22 |

*Note.* $R^2 = .05**$ for Step 1; $\Delta R^2 = .04$ for Step 2; $\Delta R^2 = .02$ for Step 3

$* p < .05; ** p < .01$

Table 5

*Summary of Model 3 Regression Analyses: Interpersonal Events and Social Support Factors Predicting Children's Internalizing Problems* ($N = 276$)

| Variable | B | SE B | β |
|---|---|---|---|
| **Block 1** | | | |
| Number of Interpersonal Events | .64 | .74 | .06 |
| **Block 2** | | | |
| Number of Interpersonal Events | .42 | .76 | .04 |
| Companionship | .04 | .10 | .03 |
| Instrumental Aid | - .04 | .11 | - .04 |
| Intimacy | .01 | .08 | .02 |
| Nurturance | .12 | .08 | .16 |
| Affection | .12 | .14 | .11 |
| Admiration | - .11 | .10 | - .13 |
| Reliable Alliance | - .07 | .10 | - .09 |
| **Block 3** | | | |
| Number of Interpersonal Events | 4.49 | 5.02 | .41 |
| Companionship | .13 | .24 | .12 |
| Instrumental Aid | .03 | .24 | .03 |
| Intimacy | .00 | .18 | .00 |
| Nurturance | - .03 | .18 | - .04 |
| Affection | .19 | .31 | .18 |
| Admiration | - .01 | .23 | - .01 |
| Reliable Alliance | - .12 | .23 | - .14 |
| Interpersonal X Companionship | - .04 | .09 | - .21 |
| Interpersonal X Instrumental Aid | - .04 | .10 | - .20 |
| Interpersonal X Intimacy | .01 | .08 | .03 |
| Interpersonal X Nurturance | .07 | .08 | .47 |
| Interpersonal X Affection | - .04 | .13 | - .25 |
| Interpersonal X Admiration | - .05 | .10 | - .32 |
| Interpersonal X Reliable Alliance | .02 | .09 | .12 |

*Note.* $R^2 = .00$ for Step 1; $\Delta R^2 = .02$ for Step 2; $\Delta R^2 = .01$ for Step 3
* $p < .05$; ** $p < .01$

Table 6

*Summary of Model 4 Regression Analyses: Interpersonal Events and Social Support Factors Predicting Children's Adaptive Behavior  (N = 276)*

| Variable | B | SE B | β |
|---|---|---|---|
| **Block 1** | | | |
| Number of Interpersonal Events | - 1.10 | .61 | - .12 |
| **Block 2** | | | |
| Number of Interpersonal Events | - .92 | .61 | - .10 |
| Companionship | .06 | .08 | .07 |
| Instrumental Aid | - .16 | .09 | - .20 |
| Intimacy | .01 | .07 | .01 |
| Nurturance | - .01 | .06 | - .01 |
| Affection | .09 | .11 | .10 |
| Admiration | .05 | .08 | .07 |
| Reliable Alliance | .13 | .08 | .18 |
| **Block 3** | | | |
| Number of Interpersonal Events | - 1.56 | 4.04 | - .17 |
| Companionship | .09 | .20 | .10 |
| Instrumental Aid | .04 | .19 | .05 |
| Intimacy | .00 | .15 | - .00 |
| Nurturance | - .08 | .14 | - .12 |
| Affection | .20 | .25 | .23 |
| Admiration | .03 | .18 | .04 |
| Reliable Alliance | - .10 | .19 | - .14 |
| Interpersonal X Companionship | .00 | .08 | .20 |
| Interpersonal X Instrumental Aid | - .10 | .08 | - .67 |
| Interpersonal X Intimacy | .00 | .06 | .02 |
| Interpersonal X Nurturance | .03 | .06 | .23 |
| Interpersonal X Affection | - .05 | .10 | - .44 |
| Interpersonal X Admiration | .01 | .08 | .05 |
| Interpersonal X Reliable Alliance | .10 | .07 | .85 |

*Note*. $R^2 = .01$ for Step 1; $\Delta R^2 = .08*$ for Step 2; $\Delta R^2 = .02$ for Step 3
* $p < .05$; ** $p < .01$

Discussion

The purpose of the current study was to examine the role of social support in the relation between interpersonal life events and outcome. The results did not corroborate findings from previous studies that suggested a moderating role of overall social support in the relation between negative life events and children's socioemotional adjustment (Hammack et al., 2004; Muller et al., 2000; Quamma & Greenberg, 1993). Moreover, findings from the current study did not highlight the potential differential moderating role of individual elements of social support within this relation. Results, however, did suggest that total social support may be directly related to children's adaptive outcome.

*Hypothesis One*

In line with the existing literature (Bancila et al., 2006; Williamson et al., 2005), the current study found partial support for the notion that children endorsing higher levels of interpersonal stress would display more maladjustment. Specifically, children's interpersonal stress was significantly and positively related to their externalizing symptoms. Children's interpersonal stress, however, was not significantly related to their internalizing symptoms or adaptive behavior. These findings highlight interpersonal stress as a risk factor and the potential reciprocity between interpersonal stress events and children's acting out behaviors. While children in the current sample commented on the occurrence of interpersonal stressors (e.g., having trouble with a teacher or sibling, parents recently separating) in their lives, they did not provide a rationale for the events. Perhaps children who have

externalizing problems are more likely to experience stress involving members of their social network, including themselves, related to their own functioning. For instance, parents of children with externalizing problems endorse significantly higher levels of parenting stress than parents of children who are non-externalizers (Morgan, Robinson, & Aldridge, 2002). Children demonstrating externalizing problems are also more likely to experience peer rejection than those who are presenting adaptively or with internalizing problems (Trachtenberg & Viken, 1994).

Results from the current study must, however, also be considered in context of the general stress and coping literature. When taken together with previous efforts exploring the relation between stress and children's behavioral outcome (Hetherington et al., 1989; Marcus et al., 2001; Williamson et al., 2005), findings from the present study suggest that interpersonal stress may be a *non-specific* risk factor rather than a strict determinant of a particular kind of maladjustment. Namely, while the present investigation highlighted the connection between general interpersonal stress and externalizing problems, other studies have shown that specific interpersonal stressors (e.g., parent divorce, loss of a relative) also are related to children's internalizing problems. The work of Hughes and Luke (1998) illustrates this notion as they found five distinct patterns of adjustment (i.e., no impairment, mild impairment, acting out behavior, depression, multiple behavior and emotional problems) for children exposed to one specific form of interpersonal stress-- physical interparental conflict. It may be that it is not really important for the field to determine the exact form of maladjustment that might be predicted from exposure to

interpersonal stress. Rather, most relevant is showing the stress-psychosocial outcome connection. That is, a change within one's social relationships are likely to influence a change in one's socioemotional functioning and vice versa. This may be particularly true for children. Developmentally, children rely on their social interactions for a wealth of information on how to effectively manage and interact with the world and so, problems within this social domain may have overarching impact on their socioemotional well-being (Compas, 1987; Runyan et al., 1998).

Moreover, similar to the majority of studies in the stress and coping literature, Hughes and Luke (1998) did not examine the relation between children's stress and their *adaptive* functioning. While 60% of children in their sample were categorized as displaying no or mild signs of psychosocial distress, no reference was made to their potential prosocial skills. Perhaps, as suggested by the results of the current study, the mere non-presence of a risk factor (e.g., a child's low endorsement of interpersonal stress) is not sufficient to facilitate adaptive skills. For example, children who do *not* experience a parent divorce in their lifetime are not guaranteed to demonstrate effective social skills -- their ability to adaptively interact with others may be more influenced by, for instance, their exposure to capable role models (Bandura, 1977) or by having an easy temperament (Belsky, Hsieh, & Crnic, 1998). This highlights the need to move beyond merely trying to establish *what* occurs following the experience of a risk factor to understanding *how* maladaptive outcomes develop.

*Hypothesis Two*

Social support, often assumed to have a beneficial influence on human functioning (Cohen & Wills, 1985; Hagen, Myers, & Mackintosh, 2005), is one potentially important positive life factor to consider in the relation between children's stress and outcome. The mechanism, however, by which the construct influences outcome remains somewhat unclear. A growing number of empirical investigations have attempted to highlight the potential *protective* role of social support in the relation between children's stress and their psychosocial functioning (Hammack et al., 2004; Quamma & Greenberg, 1994; von Weiss et al., 2002). Efforts, however, have also aimed to understand the *direct relation* between social support and socioemotional adjustment irregardless of stress experienced (Cohen & Wills, 1985). Findings from the current study, contrary to what was hypothesized, align somewhat better with the latter conceptualization. That is, children's overall social support did not moderate the relation between interpersonal stress and psychosocial outcome (i.e., externalizing, internalizing, adaptive), but rather appeared to be directly related to children's functioning.

Specifically, after accounting for their experience of interpersonal stress, overall social support significantly and positively predicted children's adaptive behavior. That is, children who reported higher levels of overall support were rated by parents as demonstrating more adaptive behaviors. Results would suggest that more important than the mere presence of a risk factor, in this case interpersonal stress, is the presence of a positive factor (i.e., social support) to promote children's

*prosocial* outcomes. Consistent with social learning theory (Bandura, 1977), children reporting higher levels of overall social support presumably are exposed to models who directly demonstrate a variety of prosocial behaviors. Included in the adaptive skills modeled by support network members likely include effective communication and appropriate social skills—both of which are incorporated on the BASC as a measure of children's adaptive functioning.

The work of DeRosier and Gilliom (2007) is but one example of empirical evidence that upholds the likely importance modeling plays on children's development of prosocial behaviors. Specifically, they investigated the efficacy of a parent training program for children with socio-emotional problems (i.e., Parent Guide for Social Skills Group Intervention) by comparing two treatment groups (i.e., parent only group vs. parent group with parallel child group) with a non-treatment condition. While treatment was significantly related to children's social skills and psychosocial functioning, there was no difference between the two intervention conditions. Moreover, they found that, while parents' knowledge of social skills did not significantly predict differences in children's outcome, an increase in children's social skills knowledge was positively related to their adaptive behavior and use of assertive problem-solving. Despite the fact that not all children received psychoeducation on social skills directly, they demonstrated improvements in prosocial skills presumably through their parents' transmission of the adaptive skills and their own increased knowledge. The findings of DeRosier and Gilliom, along with those from the current study, uphold the basic tenet of social learning theory and

highlight the potential power of social network members to directly influence children's development of prosocial behaviors often necessary to 'succeed' in life as judged by traditional Western values (e.g., independence).

In an effort to further understand the lack of moderation by the overall support variable, it is helpful to consider the nature of the stress events being targeted in the current study. That is, interpersonal stressors were defined as life events that alter an existing relationship within a child's social network (Rudolph et al., 2000). Although defined based on the preexisting literature and linked to social support based on the logical, face value of the constructs, interpersonal stress is largely an uncharted area of study. While prior efforts have examined the relation between specific interpersonally-based events (e.g., parent divorce, peer conflict) and children's psychosocial outcome, no other known studies have attempted to cluster such events into a broader category of stress type to examine the context-specificity of social support as a coping resource. Given that the reliability coefficient for the 14 items on the LEC identified as being interpersonal events was low, it could be argued that there was insufficient consistency in the interpersonal stress variable as measured in the current study (Cortina, 1993). Perhaps if the cluster of interpersonal items was more statistically cohesive, their impact on children's functioning or interaction with social support would appear different and more robust as was hypothesized. Results, however, from the current study reiterate the notion that the social support literature is built upon somewhat inconsistent findings (e.g., Teja & Stohlberg, 1993 vs. White et al., 1998), lending to the confusion regarding the role of social support (i.e., no

relation, direct effect, buffer) for children exposed to stress. The identification and adoption of a universal definition of social support within the research arena would likely assist greatly in future attempts to clarify the construct's influence.

*Hypothesis Three*

As aforementioned, empirical findings regarding the role of social support on children's outcome are ample, but not entirely consistent. In part, these conflicting results may be due to the lack of an agreed upon definition for the construct and further, researchers' tendencies to measure the likely multidimensional construct in an oversimplified manner (Finfgeld-Connett, 2005). While the preponderance of studies do highlight social support as a potentially important protective factor for children experiencing various types of stress, a subset of studies suggest the opposite and call into question the construct's protective utility (e.g., Graham-Bermann, 1998; White et al., 1998). Contrary to what was hypothesized, the present sample is included in this latter subset. In addition to overall social support not moderating the interpersonal stress and child outcome relation, when parceled out, the individual elements of social support also did not moderate this relation.

The principal investigator of the current study, while reviewing the literature, cautioned against accepting claims which reject the potential importance of social support as a protective factor—partially because they are based on a limited number of studies, each of which have a varied way in which the construct was operationalized. Despite finding null results in the present project, this caution is still merited. That is, although the current study measured social support more

comprehensively compared to previous efforts (i.e., as a multidimensional construct as it is provided by multiple source of support), it also utilized a measure that preexisted and was drawn from only one of the possible 30+ definitions of support circulating throughout the literature, limiting the ability to place the current results into the field's knowledge of the construct (Williams et al., 2005). Researchers must strive toward an agreed upon definition of social support. Having such universal agreement on what constitutes the construct would allow for the direct comparison of independent research results and further clarification of the role of social support on the functioning of children exposed to stress.

It may be the case, however, that before a universal definition of social support can be developed and tested, the field needs to address the components that likely make up the construct of social support. Similar to studies on the definition on intelligence (Sattler, 2001), the present investigation sought to test how each of these parts of support may operate independently. Although significant results were not found, the present findings suggest partially, that the overall construct of social support is likely larger than the mere sum of its parts. It may not be the case that one element of support is more important over another kind, but that taken together, the total experience of support from another is sufficient to be predictive of positive outcomes. This is not to say that sub-component research on support has no merit. Conversely, it is still important for the field to define what the parts should be so that a universal-like definition can be developed. It will not be possible to do so without a

clearer understanding of what should be included and how these sub-parts of support are interrelated.

Findings from the current study further offer some suggestions on the measurement of the specific elements of the social support construct. That is, results suggest that some of the measured elements (e.g., intimacy, companionship) may or may not be sufficient to serve on their own as proxies for the overall construct. For instance, the individual parts of social support measured in the current study were not significantly related to children's outcome—a relation that is repeatedly upheld in the existing literature (e.g., Cowen, Pedro-Carroll, & Alpert-Gillis, 1990; Demaray & Malecki, 2002; Thoits, 1995). Similarly, the findings also highlight the extreme overlap between some of the measured social support elements (e.g., reliable alliance and affection are correlated at $r = .79$). Perhaps if some of the more correlated elements were collapsed or combined, resulting in fewer pieces representing the overall construct, more robust findings would emerge.

*Implications of the Current Study*

Previous efforts explored the relation between stress and children's psychosocial outcome. The current study contributes in that it not only examined *what* happens for children experiencing stress but also *how* certain outcomes develop. Further, stress and social support are usually examined with sole emphasis on children's maladjustment. To truly understand the influence of these constructs on a child's overall functioning, adaptive outcomes must be considered and therefore, were included in the current study. The present study also built upon previous works

in the social support literature as it implemented a definition of the construct that acknowledges its likely multidimensionality and attempted to identify a category of stressors to investigate the possible context-specificity of social support, each of which would allow interventions to target the optimal components of social support for children experiencing a specific category of stress.

While the preponderance of studies suggests the moderating role of social support in the relation between stress and children's outcome, the current study does not fit into this grouping. It may be that present results correspond better with the smaller group of studies in the social support literature that do not provide evidence for the construct's moderating role since a similar method of measurement was used across these investigations. For example, White et al. (1998) utilized a *multidimensional* definition of family support that included variables like companionship, intimacy, and nurturance and failed to find evidence of moderation for their sample of children exposed to community violence. Studies that did find evidence of social support as a protective factor appeared to define and measure the construct in a comparatively narrow manner (i.e., measuring one or two elements of support). For example, social support was defined as parent discipline and consistency by Quamma and Greenberg (1994), as maternal closeness and friendliness by Hammack and colleagues (2004), as satisfaction and network size by Drapeau and Bouchard (1993), and as peer acceptance by Teja and Stohlberg (1993). In addition to highlighting researchers' tendency to select only a few elements of support to represent the larger construct, these examples demonstrate the various and

nonoverlapping ways in which social support is currently measured. Although each claims to be investigating the impact of *social support* on children's outcome, each study included a unique conceptualization of the construct. The varied ways for measuring and defining social support likely contribute to the inconsistent results found in the social support literature. There is a great need to work toward an agreed upon definition of the construct to facilitate the direct comparison of empirical results and to clarify the role of social support in the relation between stress and children's psychosocial functioning.

Moreover, the work of Jackson and Frick (1998) is an example of an investigation that may begin to bridge the gap between the aforementioned groups of studies in the social support literature. They, too, utilized a multidimensional definition of support but also examined the role of social support while considering additional individual-specific factors. Mixed evidence for moderation was found. While social support did not appear to moderate the relation between stress and outcome for their overall sample of school-age children, partial evidence was found when gender was considered in the analyses. That is, social support appeared to moderate the stress and outcome relation (i.e., internalizing problems) for a female-only sample, whereas no evidence of moderation was found for the male-only sample. Their findings highlight the importance of considering additional stressor and individual-specific characteristics that may impact the stress-outcome relation. Combining the use of a multidimensional definition of support with consideration of

these additional factors may allow significant results to emerge that may have otherwise gone undetected.

The present study also built upon previous works in the general stress literature as it implemented a measurement of stress (i.e., major life events) that is widely used, but that has repeatedly come into question. Major life events are defined as those that alter significant areas of living (e.g., loss of sibling, parental separation; Holmes & Rahe, 1967). Empirical findings consistently demonstrate a relation between major life events and outcome, although the strength is rather modest (Johnson & Sherman, 1997; Lazarus & Folkman, 1984). Major life events, however, while expected to alter a child's life in some manner, are not inherently stressful or traumatic. Stress—an individualized construct—varies with the subjective appraisal of a life event's demands and one's personal resources for coping with the event (Dise-Lewis, 1966). The current study attempted to address this subjectivity by defining stress as the events which children deemed as being negative. This raises the question though as to whether an event that is simply characterized as negative equates to the experience of stress. It may be that some children, although not perceiving such occurrences as positive or beneficial, have access to adequate resources allowing them to effectively cope with negative events. It may also be that positive events contribute to a child's experience of stress (e.g., birth of a sibling). Future endeavors examining the impact of stress on children's outcome using the major life events model may benefit from directly asking participants to not only rate

the valence of experienced events but also their ability to manage the impact of the events on their functioning.

While the major life events model is, by far, the most common approach to investigating the impact of stress on psychosocial adjustment (Turner & Wheaton, 1995), some researchers argue for the need to consider the impact of more minor and chronic experiences of stress on children's functioning (Miller, Webster, & McIntosh, 2002). This call for action seems valid in that there is evidence suggesting these smaller events or daily hassles (i.e., frustrating experiences that occur in typical interactions between the individual and the environment; Kanner, Coyne, Schaefer, & Lazarus, 1981) are better predictors of adjustment compared to major life events (Johnson & Sherman, 1997; Lazarus & Folkman, 1984). Stress likely results, however, as a combination of an individual's experiences, both big and small, throughout their lifetime (Johnson & Sherman, 1997). To improve the prediction of the impact of stress on outcome, efforts should then shift from sole focus on individual stress forms (i.e., major events vs. daily hassles) and combine the two for a broader conceptualization of the stress construct. This goal seems particularly pertinent as major life events and daily hassles are only moderately correlated (e.g., $r$ = .20; Lazarus & Folkman, 1984) and because everyday events likely provide a lens through which major life occurrences are then interpreted. This combined approach may specifically assist in clarifying the impact of *interpersonal* stress on psychosocial functioning. While major life events capture a child's experience with extreme forms of loss or intense conflict, they do not necessarily highlight the smaller, but

nonetheless significant, struggles experienced while trying to get along with others. These latter interactions (e.g., being ignored or left out, experiencing disrespect) are important to include when examining the impact of interpersonal stress on children's outcome because they likely set the tone for how more major socially-based life events are managed. Additionally, researchers tend to ask children to provide information on experiences that they have a priori defined as being major events or daily hassles. Perhaps to clarify the consistent, but minimal relation between stress and psychosocial outcome, children should be asked to provide input on the experiences in their life that are stressful for them, including those that are interpersonally-based. This refining of the field's approach to measuring stress appraisal may assist in accounting for the variation children experience based on their unique environments and personal characteristics (Miller et al., 2002).

Finally, in addition to contributing to the existing literature, findings from the current study hold clinical implications. That is, understanding the relation (i.e., buffering or direct) between social support and adjustment can assist in developing effective interventions. Because overall social support appears to be directly related to children's adaptive skills, interventions should aim to bolster a child's supports in an attempt to foster the demonstration of prosocial skills. Specifically, parents and/or other supports might be coached to demonstrate various prosocial skills (e.g., effective problem-solving, appropriate social skills) so that they can directly model these behaviors for and transmit them to their children to provide a significant feeling of overall support to their children. This approach would be consistent with the strong

empirical evidence existing for parent training programs for children with disruptive

behavior problems (e.g., parent-child interaction therapy; Bell & Eyberg, 2002).

*Limitations of Current Study*

The current study has several notable strengths. A multidimensional definition

of social support was implemented while considering the impact of a particular

stressor type on children's functioning. Further, the current sample was drawn from

the general population rather than from a group of children utilizing clinical

therapeutic services, which would have limited the generalizability of the results. It is

not, however, without limitations. First, data were collected cross-sectionally and

analyses utilized were correlational in nature. Caution, therefore, must be taken when

inferring causality. Collection of longitudinal data in the future would assist in

clarifying the directionality and reciprocity of the relations between interpersonal

stress, social support, and psychosocial outcome. Second, parent report only was used

to measure psychosocial functioning while child report only was used to measure

perceived social support and interpersonal stress. The latter seems appropriate, as the

intent was to quantify children's *perceptions* of their support and stress. Future

studies, however, may benefit from the inclusion of children's self-report on their

own psychosocial functioning—particularly in regard to internalizing symptoms and

when working with older children who may experience difficulties unbeknownst to

their caregivers. Third, the present study utilized a measure of children's stress that

incorporates general life events. To explore the impact of interpersonal stress on

children's outcome, it would be helpful if a measure was designed and validated to

specifically address interpersonal events. In a similar vein, the current study attempted to simultaneously examine the "parts" of social support to examine their comparative protective utility and to explore the possible context-specificity of social support as a coping resource. Because both are somewhat unchartered areas of study, it may have been beneficial to first begin with the former in regard to the relation between general negative life events and children's outcome. Finally, although a multidimensional definition of social support was used, the current study utilized an assessment tool that preexisted and is based on one of the numerous definitions available for the construct. Future efforts should continue to define social support as a multidimensional construct but researchers should attempt to form an agreed upon definition so that previously inconsistent results can be understood.

*Future Directions*

In addition to addressing the limitations noted for the current study, future researchers should aim to investigate the role of risk and protective factors on *both* maladjustment and adaptive outcomes. Prior studies have tended to investigate the role of social support on children's maladjustment (e.g., Hammack et al., 2004; Muller et al., 2000) but the avoidance of maladjustment problems does not equate to the attainment of adaptive adjustment (Jackson, Kim, & Delap, 2007). For instance, in the current study, overall social support appeared to be directly related only to children's adaptive behaviors. If future endeavors do not include adaptive skills as a measure of outcome, in addition to indicators of traditional maladjustment, then inconsistent findings regarding the role of social support may continue to characterize

the field. Continuation of such inconsistent knowledge regarding the impact of social support may hinder the development of effective interventions that not only ameliorate maladjustment problems, but also facilitate improvement in adaptive behaviors.

Researchers should continue testing the role of social support in the relation between stress and children's psychosocial outcomes. Current findings support the main effect model of social support. Ample evidence, however, also supports the buffering model for the construct. To clarify how social support influences children's functioning, researchers should attempt to form an agreed upon definition of social support—perhaps one that pools knowledge gained throughout the years based on empirical studies—and identify the "parts" that constitute the whole. In doing so, efforts can be made to understand how the individual "parts" of the overall social support construct influence or interact with stress to impact outcome. Moreover, it may be useful to explore with children directly their perceptions on how relationships are supportive. Focus groups or qualitative forms of data collection could prove invaluable to contributing to the knowledgebase about the construct for this purpose. From the information obtained, researchers could then formulate a more practical method for operationalizing and measuring the social support variable in order to understand its relation to children's functioning.

Prospective endeavors should also aim to clarify previously inconsistent results in the social support literature by examining the context-specificity of the construct. That is, the role of social support should be explored in the relation

between various categories of stress type (e.g., school, peer, family) and children's outcome to determine the stressor for which social support may best be suited to protect against the potential negative outcomes associated with the risk factor. Such efforts may assist in the design of targeted interventions that are geared to promote adaptive adjustment for children experiencing particular kinds of stress. Relatedly, future inquiries should strive toward an integrative model. That is, researchers should consider the interactive role of multiple potential protective or intervening factors in conjunction with social support to fully understand the development of psychosocial maladjustment following exposure to various stressors to better represent a child's daily life.

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Demographic Questionnaire

Child's Date of Birth: _____   Child's Age: _____   Grade in School: _____ Child's Race: _____

Child's Gender:   Male   Female          What is your relationship to the child? _____

What adults now live in the child's home?
_____

Your marital status (circle one):          married          divorced/separated  widowed          remarried
                    never married

Highest level of education completed by child's mother: _____ father: _____

How many brothers and sisters does your child have? _____

Please list the following information for each sibling:

| First Name | Age | Gender (M or F) | Natural or Step | Living in the home (Y or N) |
|---|---|---|---|---|
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |

How many schools has your child attended? _____

What special activities does your child participate in?  (i.e. sports, scouts, music lessons, etc.)

| Schools attended: | Reason for move: | Activities involved in: |
|---|---|---|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

Does your child have any major health problems?  Yes   No    (If so, what are they?) _____

Any significant injuries or surgeries?  _____

How often has your child seen the doctor in the last year? _____ The school nurse in the last year? _____

Do you or your spouse have any chronic medical problems?  If so, what are they? _____

Have you, your child, or any one else in your family been treated for emotional or psychological problems?
Yes   No   (If so, please answer the following)

| Person's relationship to child | Type of problem | Treatment type  (therapy, hospital, etc.) | Dates of treatment |
|---|---|---|---|
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |

All children experience stress.  What stresses has your child experienced in the last year?  How old was he/she at the time?

<u>Incident:</u>                                                                                                              <u>Age of child:</u>

_____      _____

_____      _____

_____      _____

_____      _____

_____      _____

1. Taking into account all sources of income (wages, interest, government assistance, child support, etc.), please estimate the total family income on a yearly basis <u>before taxes</u>.    $ _____

2. Who is the primary wage earner in the family?  (check one)

   _____ Father             _____ Mother                _____ Both Equally

*Answer the following for the primary wage earner (use father if both are primary).*

3. Kind of work (e.g., electrical engineer, stock clerk, farmer)

   _____

   _____

4. Most important activities  (e.g., filing, supervisor, kept books, taught)

   _____

   _____

   _____

5. Kind of business  (e.g., shoe store, farm, auto dealership)

   _____

Appendix B

Life Events Checklist

<u>Please read to child</u>: I am going to read a list of things that sometimes happen to people and I want you to tell me if any of these things have happened to you. I will circle the number of the event that you have experienced and then I will ask you to try to remember when it happened. I will also ask you to rate the event as a *good* event or a *bad* event. Finally, I will ask you to tell me how *good* or *bad* the event was. I will circle the number that tells how good or how bad the event was for you.

| 0 = **None**<br>(not good/bad at all) | 1 = **Little**<br>(a little bit good/bad) | 2 = **Medium**<br>(pretty good/ bad) | 3 = **Big**<br>(really good/bad) |
|---|---|---|---|

(circle #)                             (date mo/yr)    (circle one)       (# times)

1.  Have you ever moved to a new home? _____ Good Bad 0 1 2 3 \_\_\_\_
2.  Do you have a new brother or sister? _____ Good Bad 0 1 2 3 \_\_\_\_
3.  Have you changed to a new school? _____ Good Bad 0 1 2 3 \_\_\_\_
4.  Has any family member been seriously
    ill or injured? _____ Good Bad 0 1 2 3 \_\_\_\_
5.  **Have your parents gotten divorced?** _____ Good Bad 0 1 2 3 \_\_\_\_
6.  **Have your parents been arguing more?** _____ Good Bad 0 1 2 3 \_\_\_\_
7.  Has your mother or father lost his/her job? _____ Good Bad 0 1 2 3 \_\_\_\_
8.  **Has a family member died?** _____ Good Bad 0 1 2 3 \_\_\_\_
9.  **Have your parents separated?** _____ Good Bad 0 1 2 3 \_\_\_\_
10. **Has a close friend died?** _____ Good Bad 0 1 2 3 \_\_\_\_
11. Has either parent been away from home more? _____ Good Bad 0 1 2 3 \_\_\_\_
12. **Has a brother or sister left home?** _____ Good Bad 0 1 2 3 \_\_\_\_
13. Has a close friend been seriously ill or injured? _____ Good Bad 0 1 2 3 \_\_\_\_
14. Has one of your parents gotten into trouble with
    the law? _____ Good Bad 0 1 2 3 \_\_\_\_
15. Has one of your parents gotten a new job? _____ Good Bad 0 1 2 3 \_\_\_\_
16. Do you have a new stepmother or stepfather? _____ Good Bad 0 1 2 3 \_\_\_\_
17. Has one of your parents gone to jail? _____ Good Bad 0 1 2 3 \_\_\_\_
18. Has there been a change in how much money
    your parents have? _____ Good Bad 0 1 2 3 \_\_\_\_
19. **Have you had trouble with a brother or**
    **sister?** _____ Good Bad 0 1 2 3 \_\_\_\_
20. Have you gotten any awards for good grades? _____ Good Bad 0 1 2 3 \_\_\_\_
21. Have you joined a new club? _____ Good Bad 0 1 2 3 \_\_\_\_
22. **Have you lost a close friend?** _____ Good Bad 0 1 2 3 \_\_\_\_
23. **Have you been arguing less with your**
    **parents?** _____ Good Bad 0 1 2 3 \_\_\_\_

24. Have you been in special education classes (resource room, class for kids with learning or behavior problems) _____ Good Bad 0 1 2 3 \_\_\_\_

25. Have you had a problem obeying rules? _____ Good Bad 0 1 2 3 \_\_\_\_

26. Have you gotten new glasses or braces? _____ Good Bad 0 1 2 3 \_\_\_\_

27. Have you had learning problems in school? _____ Good Bad 0 1 2 3 \_\_\_\_

28. Have you had a new boyfriend/girlfriend? _____ Good Bad 0 1 2 3 \_\_\_\_

29. Have you repeated a grade in school? _____ Good Bad 0 1 2 3 \_\_\_\_

**30. Have you been arguing more with your parents?** _____ Good Bad 0 1 2 3 \_\_\_\_

31. Do you have any difficulty saying words, or do other people have a hard time understanding what you say? _____ Good Bad 0 1 2 3 \_\_\_\_

32. Have you gotten into trouble with the police? _____ Good Bad 0 1 2 3 \_\_\_\_

33. Have you been seriously ill or injured? _____ Good Bad 0 1 2 3 \_\_\_\_

**34. Have you broken up with a boy/girlfriend?** _____ Good Bad 0 1 2 3 \_\_\_\_

**35. Have you made up with a boy/girlfriend?** _____ Good Bad 0 1 2 3 \_\_\_\_

**36. Have you had trouble with a teacher?** _____ Good Bad 0 1 2 3 \_\_\_\_

37. Have you been put in a foster home? _____ Good Bad 0 1 2 3 \_\_\_\_

38. Do you have a hearing problem? _____ Good Bad 0 1 2 3 \_\_\_\_

39. Have you tried out for a sport but didn't make it? _____ Good Bad 0 1 2 3 \_\_\_\_

40. Have you been suspended from school? _____ Good Bad 0 1 2 3 \_\_\_\_

41. Have you made failing grades on your report card? _____ Good Bad 0 1 2 3 \_\_\_\_

42. Have you tried out for a sports team and made it? _____ Good Bad 0 1 2 3 \_\_\_\_

**43. Have you had any trouble with classmates?** _____ Good Bad 0 1 2 3 \_\_\_\_

44. Have you gotten any awards for playing sports? _____ Good Bad 0 1 2 3 \_\_\_\_

45. Have you been put in jail? _____ Good Bad 0 1 2 3 \_\_\_\_

46. Are there any other events that we haven't talked about?

_____ _____ Good Bad 0 1 2 3 \_\_\_\_

Appendix C

Informed Consent Form

*Please print CLEARLY*

Name of the child: _____

Name of the guardian: _____

Address: _____

Telephone: _____

ID #: _____

I, the undersigned, am the legal guardian of _____, and consent to participate with her/him in a research project on stress and resilience in children directed by Yo Jackson, Ph.D. of the Psychology and Applied Behavioral Science Departments at the University of Kansas. I understand that participation in this study involves the following commitment for me and my child:

      1) Read and sign this consent form.

      2) Complete several questionnaires, one a background/demographic questionnaire, one on my child's temperament, one on my child's behavior, and one on the environment of my child's family, taking approximately 90 minutes of my time.

      3) Have my child complete several questionnaires after the school day or on weekends, one on his/her intelligence level, one on his/her locus of control, one on his/her significant relationships, one on his/her social support, and one on the major stresses he/she has experienced in that past year, taking approximately 90 minutes of his/her time.

Procedures
I understand that my child will be asked several questions regarding his/her intellectual and emotional adjustment. As part of the research, I understand that I will be asked to complete several questionnaires about my child's emotional and behavioral functioning , and his/her family environment. I also understand that my child will be asked to complete several questionnaires about his/her emotional and behavioral functioning and the stresses he/she has experienced. I understand that I can discuss any concerns I have about this project with the coordinator of this research, Yo Jackson, Ph.D. (864-3581).

Confidentiality

All information obtained in this project will be held in the strictest confidence with the staff of this research project. All information will be stored in a confidential, locked file cabinet, and can be viewed only by authorized research staff members. As legal guardian of my child, I understand that no information about my child will be released, and no names will be recorded on any forms other than this consent form.

By law, the only times in which information will not be kept confidential is 1) if either my child or myself state that we are in imminent danger of harming either ourselves or others or 2) in suspected cases of child abuse.

Risks and Benefits

I understand that the risks of participating in this study are minimal and that all of these questionnaires have been used with other children and their families with no negative effects reported.

I understand that my participation in the study will help in developing a better understanding of the factors that help children to maintain good behavior when faced with stress.

Also I understand that I can request a copy of the study's results, which would be mailed to me following the completion of the study.

Right to Refuse Participation

I understand that participation in this project is voluntary and both my child and myself have the right to withdraw at any time.


Date: _____          Signature: _____

With my signature I affirm that I am at least 18 years of age and I have received a copy of this consent form to keep.

Appendix D

Child Assent Form

I, _____, agree to be in a study conducted by Yo Jackson,

Ph.D. at the University of Kansas on how children react to stress and things that help

kids adjust well to stress.  I agree to be asked a number of questions about my

knowledge, feelings, behaviors, and experiences.  I will be asked to remember events

that may have been unhappy for me.  If I become upset, I will talk to someone about

it like my mother, father, or teacher.

I also understand that my name or other information that lets people know that the

information is about me will not be used.  My answers will not be shared with my

parents or anyone else, unless I am in danger of being hurt.  If I have any questions

about this project, I can ask them at any time.

I understand that I can refuse to be in the study and neither my parents nor the

research staff will be upset. I also understand that I can stop answering questions at

any time and no longer be in the study.

By signing below I am indicating that I understand what is on this form and am

agreeing to fill out other forms.

Signed: _____ Date: _____