Predictors of Resilience in Maltreated and Nonmaltreated Latino Children

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To date, few studies have sought to investigate the effects of child maltreatment and processes influencing maladaptation and resilience in Latino children. In the current investigation, multiple aspects of functioning, personal resources, and relationship features were examined in school-age maltreated and nonmaltreated Latino children. Maltreated Latino children were found to have fewer areas of resilient functioning. Ego-resiliency and ego-control, as personal resources, and the ability to form a positive relationship with an adult figure outside of the immediate family predicted resilience. However, certain aspects of interpersonal functioning were differentially related to resilience for maltreated and nonmaltreated Latino children. These findings have implications for understanding how resilience can be promoted in maltreated and nonmaltreated Latino children.

Latino children are among the largest growing minority group in the United States, comprising 16% of children younger than 18 years of age (Flores et al., 2002). Historically, there has been a paucity of research investigating the developmental processes and outcomes of Latino children (Dihn, Roosa, Tein, & Lopez, 2002; Fisher, Jackson, & Villarruel, 1998; Flores et al., 2002). Owing to issues such as immigration, language barriers, discrimination, acculturative stress, and parental factors such as teenage pregnancy, Latino children may be at high risk for maladaptive outcomes, even more so than children from other minority groups of similar socioeconomic status (SES; Arcia, Keyes, & Gallagher, 1994; Canino, Gould, Prupris, & Shaffer, 1986; Centers for Disease Control and Prevention, 1999; Fisher et al., 1998; Flores et al., 2002). Consequently, there is now a great urgency to conduct research to elucidate the processes contributing to adaptive and maladaptive functioning in this population of children.

In addition, many environmental risk factors have been identified that predict maladaptive functioning in children independent of race/ethnicity, including limited maternal education, unskilled occupational status of the head of the household, low SES, dependency on the state for financial support, parental unemployment, low number of parents living in the home, large family size, parental mental illness, and parental relationship instability (Brooks-Gunn, Duncan, & Aber, 1997; Cicchetti & Toth, 1998; Duncan & Brooks-Gunn, 1997; Jessor, 1993; Luther, 1999; McLoyd, 1998b; Rutter, 1979; Sameroff, Seifer, Barocas, Zax, & Greenspan, 1987; Seifer, Sameroff, Baldwin, & Baldwin, 1992). Furthermore, many children living in low-income families tend to experience negative outcomes such as higher rates of academic failure, emotional distress, and mental health problems (Duncan & Brooks-Gunn, 1997; Duncan, Brooks-Gunn, & Klebanov, 1994; Huston, McLoyd, & García Coll, 1997; Luther, 1999; McLoyd, 1998a, 1998b).

According to the National Child Abuse and Neglect Data System (U. S. Department of Health and Human Services, National Clearinghouse on Child Abuse and Neglect Information, 2002), approximately 879,000 children in the United States are victims of child maltreatment, and about 15% of those victims are Latino/Hispanic. Prior research has shown that maltreated children are at high risk for maladaptive functioning and psychopathology across the life span because of the many detrimental effects on biological, cognitive, social, emotional, representational, and linguistic development associated with child maltreatment (Cicchetti, 2002; Cicchetti & Lynch, 1995; Cicchetti & Rogosch; 2001a, 2001b; DeBellis, Baum, et al., 1999; DeBellis, Keshaven, et al., 1999; Malinowsky-Rummel & Hansen, 1993; Trickett & McBride-Chang, 1995). Maltreatment also is associated with disruptions in several stage-salient areas of development, including emotion regulation, the formation of secure attachment relationships, the development of an autonomous and integrated self-system, effective peer relations, and successful adaptation to school (Cicchetti & Lynch, 1993; Cicchetti & Toth, 1995; Eckenrode, Laird, & Doris, 1993; Shields & Cicchetti, 1998; Shonk & Cicchetti, 2001; Toth, Cicchetti, Macfie, & Emde, 1997; Trickett & McBride-Chang, 1995). Because of the extensive risk factors for maladaptive development faced by many Latino children, the deleterious effects of child maltreatment may place some Latino children at even greater risk for negative outcomes.

A content analysis of three major journals specializing in child maltreatment research revealed that very few studies of child maltreatment examine the ethnicity of their participants (Behl, Crouch, May, Valente, & Conyngham, 2001). Of the 1,133 articles that were published in these journals from 1977 to 1998, only 6.7% (N = 76) focused on ethnicity in their participant sampling and study designs. Fewer than half of all studies reviewed included...
information regarding the ethnic representation of their participants, and in those studies, the mean percentage of study participants reported to be Latino was 7% (Behl et al., 2001).

As suggested by Cohen, Deblinger, Mannarino, and de Arellano (2001), minority children who have been abused may be at greater risk for developing more detrimental sequelae of child maltreatment than are maltreated children from more mainstream cultures. Although few studies of Latino children have investigated the deleterious effects of different types of child maltreatment, several studies have demonstrated greater rates of behavioral problems, depressive symptoms, self-esteem issues, and emotional trauma among sexually abused African American and Latino children than among European American sexually abused children (Morrow & Sorrell, 1989; Russell, 1986; Sanders-Phillips, Moisan, Wadlington, Morgan, & English, 1995; Stein, Golding, Siegel, Burnam, & Sorenson, 1988). For instance, a study of African American and Latina sexually abused girls by Sanders-Phillips and colleagues (1995) found higher rates of depression among sexually abused Latina girls than among sexually abused African American girls of the same socioeconomic background. Compared with African American girls, Latina girls were more likely to have been sexually abused by a family member, experienced lower self-esteem and feelings of inadequacy, and received less maternal support after disclosure of the abuse.

Thus, prior investigations of maltreated Latino children (primarily sexually abused children) have demonstrated that these children are at high risk for maladaptive outcomes (e.g., depression, behavior problems; Morrow & Sorrell, 1989; Russell, 1986; Sanders-Phillips et al., 1995; Stein et al., 1988). Because very little is known about the predictors of developmental outcomes in general and of resilient outcomes in particular in Latino children, it is imperative that we begin to evaluate what processes may contribute to resilient functioning in both maltreated and nonmaltreated Latino children.

Resilience is conceptualized as a dynamic process that influences an individual's capacity to adapt and function successfully despite experiencing chronic stress and adversity; it does not represent a personality trait or other static condition (Engelhard, Carlson, & Stroufe, 1993; Luthar, 2003; Luthar, Cicchetti, & Becker, 2000). Although previous studies of resilience in maltreated children have not focused solely on Latino children, a prior investigation of predictors of resilient adaptation evaluated multiple areas of functioning in a heterogeneous sample of economically disadvantaged maltreated children and nonmaltreated comparison children (Cicchetti, Rogosch, Lynch, & Holt, 1993). Maltreated children were rated as more disruptive-aggressive and more withdrawn, had significantly greater levels of internalizing behavior problems, and evinced lower overall competence on the indices of functioning that were assessed than nonmaltreated children. However, among the maltreated children, ego-resiliency, ego-overcontrol, and positive self-esteem were found to be predictors of resilient adaptation. In contrast, among the nonmaltreated children, only ego-resiliency and positive self-esteem were predictive of resilient adaptation. Likewise, in a 3-year longitudinal study of another heterogeneous sample, Cicchetti and Rogosch (1997) demonstrated that in maltreated, socioeconomically disadvantaged children, factors such as positive self-esteem, ego-resiliency, and ego-overcontrol predicted resilient functioning, whereas in nonmaltreated children, relationship features, as well as ego-resiliency, proved to be more influential.

Intellectual functioning is another factor that may predict resilience among high-risk children. Prior investigations have shown that intellectual functioning, as typically measured by intelligence tests, not only predicts academic achievement but also may serve as a protective factor against the development of antisocial behavior problems (Garmezy, Masten, & Tellegen, 1984; Luthar, 1991; Masten et al., 1999; White, Moffitt, & Silva, 1989). High intellectual abilities may be associated with normal brain functioning and cognitive development despite the experience of adversity (Curts & Cicchetti, 2003). Furthermore, high intellectual ability may indicate effective information-processing skills that a high-risk child may use when coping with environmental hardships, including better problem-solving skills and the ability to attract the interest of teachers and improve school functioning (Masten & Coatsworth, 1998). In a study conducted by Herrenkohl, Herrenkohl, and Egolf (1994), average or above average intellectual performance was found to be an individual factor that contributed to ongoing competent functioning in a longitudinal investigation of maltreated and nonmaltreated children. Because previous studies have shown that there is a link between intellectual functioning and positive developmental outcomes, in the present investigation we examined the role of intellectual functioning as a predictor of resilience in Latino children.

Despite the fact that past research has sought to identify predictors of resilient adaptation in maltreated children, current studies have not conducted within-group analyses of maltreated Latino children, and it is not known if the same predictive factors of resilience would be applicable to this group. For instance, in many Latino cultures, relationships are extremely valued and considered of central importance (Harrison, Wilson, Pine, Chan, & Buriel, 1990). Yet it is not known whether relationship features would serve as predictors of resilient adaptation for both maltreated and nonmaltreated Latino children. In other diverse populations, the ability to form relationships with others has been shown to promote resilience (Luthar, 2003; Masten & Coatsworth, 1998). In addition, in a sample of high-risk children, Werner (1993) identified protective factors associated with the development of resilience in Hawaiian children followed over the course of a 32-year longitudinal study. One of the important findings of that investigation was that the ability to establish and seek out emotional support systems that extended beyond the immediate family network promoted resilience in adulthood. That is, external support systems served as a protective factor for high-risk Hawaiian children and made a significant impact on the development of resilience over time. To date, it is unknown whether this pattern would emerge in a sample of high-risk, socioeconomically disadvantaged, maltreated and nonmaltreated Latino children.

Likewise, there is very little known about the role of gender in developmental outcomes among maltreated Latino children. Previous literature has suggested that gender may influence responses to adversity; specifically, it has been noted that girls may be less reactive to family stress than boys, and they may be less at risk for developing externalizing responses (Emery & O’Leary, 1982; Ferguson & Horwood, 2001; Hetherington, 1989; Porter & O’Leary, 1980). However, to our knowledge, no investigations have examined whether gender influences resilient functioning among Latino children or the impact of cultural sex roles in predicting resilience. Because traditional sex roles such as machismo (a man who carries himself with respect, responsibility, and honor) and marianismo (a woman who is self-sacrificing and virtuous) are prominent in
many Latino cultures, they may influence early socialization and behavioral development in Latino boys and girls (Bem, 1981; de Rios, 2001; Vasquez, 1994).

Hypotheses

On the basis of extant theory and empirical research, we hypothesized (a) that maltreated Latino children would manifest less adaptive functioning than their equally disadvantaged nonmaltreated Latino counterparts; (b) that for nonmaltreated Latino children, ego-resiliency and intelligence would predict resilient functioning, whereas in the maltreated Latino group, ego-overcontrol, ego-resiliency, and intelligence would predict resilient functioning; and (c) that for maltreated and nonmaltreated Latino children, relationship features would prove to be significant in contributing to resilience. In addition, we conducted exploratory analyses and investigated the potential role of sex differences in the functioning of Latino children.

Method

Participants

Participants in this investigation included 133 Latino children from an upstate New York urban setting who attended a summer day camp research program designed for maltreated and nonmaltreated low-income, disadvantaged children. In this investigation, the term Latino refers to children “whose origins can be traced back to Spanish speaking regions of Latin America, including that of the Caribbean, Mexico, Central America, and South America” (Flores et al., 2002, p. 83). The children were identified by their primary caregivers as Latino and were, on average, 8.68 years of age (SD = 1.78; see Table 1); 30.8% of the children were girls and 69.2% were boys. All Latino children who attended the camp were fluent in English according to parent report and interactions with the child. The Latino sample as a whole can be characterized as disadvantaged and at risk for maladaptive outcomes because of environmental risk factors such as living in single-parent homes with multiple children, low SES, dependency on the state for financial support, and minority status (see Table 1). By selecting a sample of Latino children from among a larger representation of ethnicities, counselors were not exclusively rating Latino children but were simultaneously evaluating children from many different ethnicities interacting as they would in an everyday context. Moreover, the counselors were unaware of the experimental hypotheses and the children’s maltreatment status.

This sample comprised both maltreated Latino children (N = 76; 56 boys and 20 girls) and demographically comparable nonmaltreated Latino children (N = 57; 36 boys and 21 girls). Consistent with the larger percentage of boys in the Monroe County Department of Human and Health Services (MCDHHS) population and consequently in the overall camp sample, the Latino sample had a higher percentage of boys (69.2%) than girls (30.8%). However, the gender distribution did not differ significantly for the maltreated and nonmaltreated groups.

Prior to enrolling their children in the camp, parents of all children provided informed consent for their children’s participation as well as for examination of any MCDHHS records. Maltreated children were identified by MCDHHS as having experienced child abuse and/or neglect. All existing MCDHHS records were screened and coded by raters using the Barnett, Manly, and Cicchetti (1993) classification system for child maltreatment. In order to obtain a demographically comparable comparison group, nonmaltreated children were recruited from families receiving Aid to Families with Dependent Children (AFDC) and through notices placed in neighborhoods where the maltreated children resided. MCDHHS record searches were conducted on the comparison group families, and trained research assistants also interviewed them, in order to further verify that there was no history of prior MCDHHS involvement. Families were excluded from the nonmaltreated Latino comparison group if any family history of child abuse and/or neglect existed or if the family had received preventive services through MCDHHS because of concerns over risk for maltreatment.

Demographic Characteristics

The sample as a whole can be characterized as disadvantaged and at risk for maladaptive outcomes because of environmental risk factors such as living in single-parent homes with multiple children, low SES, dependency on the state for financial support, and minority status (see Table 1).

Procedure

The week-long summer day camp is designed to provide children with a variety of recreational activities and opportunities for peer interaction while in a supportive environment. At the day camp, the children were

Table 1

<table>
<thead>
<tr>
<th>Variable</th>
<th>Maltreated (n = 76)</th>
<th>Nonmaltreated (n = 57)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>73.7</td>
<td>63.2</td>
</tr>
<tr>
<td>Female</td>
<td>26.3</td>
<td>36.8</td>
</tr>
<tr>
<td>Age</td>
<td>8.53 ± 1.47</td>
<td>8.90 ± 2.12</td>
</tr>
<tr>
<td>Number of adults in home</td>
<td>1.66 ± 0.69</td>
<td>1.50 ± 0.56</td>
</tr>
<tr>
<td>Number of children in home</td>
<td>3.27 ± 2.41</td>
<td>3.06 ± 1.18</td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single, not living with a partner</td>
<td>38.0</td>
<td>42.9</td>
</tr>
<tr>
<td>Married or living with a partner</td>
<td>40.8</td>
<td>26.5</td>
</tr>
<tr>
<td>Divorced, separated, widowed</td>
<td>21.1</td>
<td>30.6</td>
</tr>
<tr>
<td>Family Hollingshead (Levels 1 and 2)</td>
<td>90.0</td>
<td>81.6</td>
</tr>
<tr>
<td>Receiving public assistance</td>
<td>89.9</td>
<td>76.6</td>
</tr>
</tbody>
</table>

Note. There were no significant differences between maltreated and nonmaltreated children on any of the demographic variables. Hollingshead = Hollingshead Index of Social Position.
placed in groups consisting of three counselors (one head counselor and two co-counselors) and 6 – 8 children who were matched according to age and gender. The percentages of maltreated and nonmaltreated children in the groups were approximately equal (50% maltreated and 50% nonmaltreated). Within the groups, many different ethnicities (e.g., African American, Latino, European American) were represented among the children. New groups of children attended the camp every week.

A typical camp day lasted 7 hr, resulting in 35 hr of interaction between the children and the counselors during the week. In addition to recreational activities, the children also were asked to participate in a variety of research assessments. Child assent was obtained prior to any administration of research assessments. Research assistants were trained in administering assessments such as the Peabody Picture Vocabulary Test—Revised (PPVT–R) to individual children (see the following section). Camp counselors completed a variety of assessments that measured their interactions with, and observations of, the children assigned to their respective groups.

Measures

Maltreatment Classification System

In order to determine children’s maltreatment experiences, coding of MCDHHS records was conducted by trained research assistants, doctoral students, and PhD-level psychologists using the Maltreatment Classification System (MCS) developed at the Mt. Hope Family Center (Barnett et al., 1993). The MCS uses MCDHHS records detailing investigations and findings regarding maltreatment occurrences in identified families. Rather than relying on official designations and case dispositions, the MCS codes all information available on a designated family from MCDHHS records, making independent determinations of maltreatment experiences. (See Manly, Kim, Rogosch, & Cicchetti, 2001, for a more detailed explanation of this coding system.)

Among the maltreated sample of Latino children in this study, 74.6% experienced physical neglect, 83.1% experienced emotional maltreatment, 66.2% experienced physical abuse, and 15.5% experienced sexual abuse. Consistent with previous maltreatment literature, there was a high comorbidity of multiple subtypes among the maltreated Latino sample. Multiple subtypes were experienced by 77.6% of the Latino children. Because of the high comorbidity among the maltreatment subtypes, discrete subgroups for use in subtype comparisons were not feasible.

Counselor Measures

Camp counselors each evaluated the children in their respective groups by providing assessments of individual child functioning. The counselors were each trained on how to complete the assessments described below, and counselors conducted their ratings of the children independently at the end of each week, after 35 hr of interaction with the children. Interrater determinations were made by computing Cronbach’s alphas among the raters in each camp group. Individual counselor measures were averaged for each individual child, thus combining the independent perspectives of two to three different adult raters.

Behavior ratings (Wright, 1983). Counselors rated the behavior of individual children on nine items that assessed three different aspects of interpersonal functioning: prosocial behavior, aggression, and withdrawal. Seven-point ratings were completed each day and based on 45-min observations of children in unstructured and structured camp settings (e.g., sports, art, free play). Interrater reliabilities across the years of assessment (1986–2000) ranged from .67 to .85 for prosocial behavior, from .70 to .88 for aggression, and from .65 to .80 for withdrawal. Individual counselor assessments were averaged together to generate individual child scores for each of the three scales.

Pupil Evaluation Inventory (PEI; Pekarik, Prinz, Liebert, Weintraub, & Neale, 1976). Counselors completed the PEI at the end of each week. The PEI makes use of a nomination technique and consists of 35 items that assess social behavior. It yields three homogeneous and stable factors: Aggression, Withdrawal, and Likability. Counselors nominated up to 2 children in their groups who were characterized best by each individual item. Interrater reliabilities across camp years ranged from .88 to .90. Aggregate scores for each of the three scales were generated on the basis of the number of nominations each child received on the respective scale items. Scores were then averaged across counselors to obtain three subscale scores per child.

Teacher Report Form of the Child Behavior Checklist (TRF; Achenbach, 1991a). At the end of each camp week, counselors rated each child’s behavioral symptomatology by completing the TRF (a teacher-completed version of the Child Behavior Checklist; Achenbach, 1991a). The TRF is a widely used and validated instrument for assessing behavioral disturbance from the perspective of teachers. In the present study, because camp counselors were able to observe behaviors similar to those observed by teachers, camp counselors completed the measure to provide an analogous assessment of child functioning by an adult external to the family. The TRF contains 118 items rated for frequency that assess two broadband dimensions of child symptomatology: externalizing behavioral problems (e.g., delinquent and aggressive behavior) and internalizing behavioral problems (e.g., withdrawal, anxiety–depression, and somatic complaints). The scores for each child, in each group, were averaged among counselors to obtain individual child scores for both internalizing and externalizing behavior problems. Interrater reliabilities ranged from .83 to .91 for externalizing behavior problems and from .70 to .88 for internalizing behavior problems.

California Child Q-Set (CCQ; J. H. Block & Block, 1969). At the end of each week, the three counselors in each group independently completed the CCQ for each child in their respective group on the basis of their week-long intensive interactions with and observations of the children. The CCQ consists of 100 diverse items about the personality, cognitive, and social characteristics of children. Raters sort the individual items printed on cards into a fixed distribution of piles depicting nine categories ranging from most to least characteristic of the individual child. Thus, individual profiles consisting of the 100 items are generated for each child. Interrater agreement ranged from .68 to .86. Two-dimensional scores are derived from the Q-set data: ego-resiliency and ego-control. On the basis of profiles for prototypical children displaying high ego-resiliency and high ego-undercontrol, each item was assigned a criterion score for each respective dimension (J. H. Block & Block, 1980). Each individual child’s profile of Q-sorted items was correlated with the criterion sorts. The resulting correlations of each child’s profile with the prototypical ego-resiliency and ego-control criterion sorts represented how similar to or different from the prototype profiles the individual child was. For instance, a high positive correlation with the ego-resiliency sort would indicate that a child had a high level of ego-resiliency, and a negative correlation would be indicative of low ego-resiliency, or ego-brillleness (J. H. Block & Block, 1980). Similarly, the ego-control dimension is organized such that high scores on the ego-control dimension would indicate ego-undercontrol, and low scores would indicate ego-overcontrol. The correlations of each counselor’s Q-sort profiles for each child with the criterion sorts were averaged to obtain individual scores of ego-resiliency and ego-control for each child.

Student–Teacher Relationship Scale (STRS; Plante & Steinberg, 1992). The STRS is a 30-item measure assessing the quality of the relationship between a child and a teacher, as reported from the teacher’s perspective. Because of the similarity between the roles of a teacher and a camp counselor in terms of these individuals representing nonfamilial adults, the STRS was deemed to be appropriate for the counselors to use to rate their relationships with the individual children in their respective groups. Items are rated on a 5-point scale representing how applicable each item is for a particular child. Subscales for this instrument include Warm, Open Communication, Conflicted, Dependent, and Closed/Troubled. A total relationship score can also be obtained and was used in these analyses. Interrater reliability was not obtained because relationship quality with each child could vary from counselor to counselor. Because the head counselors of each group were considered the group leaders and typically had the most experience working with high-risk children, the ratings of the head coun-
The PPVT–III was administered in English by trained research assistants in a one-on-one interview setting.

**Composite Scores of Resilient Functioning**

An overall resilient functioning score was created to assess multiple aspects of adaptive functioning (including social competence and behavioral symptomatology). Indicators of social competence were evaluated using measures obtained from both peers and counselors; indicators of behavioral symptomatology were obtained only from counselors. A total of nine indicators were assessed and used in the creation of an overall resilient functioning score.

First, three composite variables assessing prosocial behavior, aggressiveness, and withdrawal were created from the perspective of counselors. These aspects of a child’s interpersonal behavior are important because they portend long-term adjustment (Deater-Deckard, 2001; Masten et al., 1999; Newcomb, Bukowski, & Pattee, 1993; Parker, Rubin, Price, & DeRosier, 1995). Scores from the behavior ratings and the PEI were used. A prosocial score was created by averaging $z$ scores for the behavior ratings score of prosocial behavior and the PEI score for Likability (α = .66). Likewise, $z$ scores for the behavior ratings’ and PEI’s aggression scales were averaged (α = .69), and $z$ scores for the behavior ratings’ and PEI’s withdrawal scales were averaged (α = .68).

From the perspective of peers, four indicators of social functioning based on peer nominations for “cooperative,” “disruptive,” “shy,” and “fighter” were used. In addition to these measures of social functioning, indicators of behavioral symptomatology also were used in the creation of the composite of resilient functioning. These indicators included the counselor ratings of internalizing and externalizing behavior problems from the TRF.

Because resilient functioning may be manifested in different domains by different individuals (Luhr, 1991, 1993; Masten & Coatsworth, 1998; Masten et al., 1999), we used a person-centered strategy to evaluate the patterns of strengths and weaknesses of individual children across multiple areas. Thus, in order to gain a clearer depiction of variation across the multiple domains of functioning within individual Latino children, criteria for high functioning were established for each of the nine indicators.

Specifically, whether children scored in the most adaptive third of the distribution was determined for each indicator (i.e., in the highest third for counselor-rated prosocial behavior and peer-rated “cooperative”; in the lowest third for counselor-rated aggression and withdrawal; in the lowest third for peer-rated “shy,” “fighter,” and “disruptive”; and in the lowest third for internalizing and externalizing behavior problems).

For each of the nine indicators, scores were dichotomized to reflect high functioning (a score of 1) or no high functioning (a score of 0). Summing across the nine indicators resulted in a total score of resilient functioning, with a possible range of scores from 0 to 9 (M = 3.04; SD = 2.12). No child scored highly on all indicators of adaptive functioning (i.e., received a score of 9). However, 4 Latino children in the nonmaltreated group achieved a score of 8.

The composite of resilient functioning was also used to categorize children into three levels of functioning. The range of scores from 0 to 8 was divided into three levels. Resilient children were defined as those having high functioning in 6–8 areas. These children were one standard deviation above the mean on the resilience composite. Children with high functioning in 2–5 areas were considered in the middle range of functioning, and children with scores of 0–1 were considered in the low range, as they evidenced either no high functioning or high functioning in only one area and were one standard deviation below the mean.

**Results**

**Contrasts of Maltreated and Comparison Children**

In order to examine the differences between the maltreated and nonmaltreated Latino children, an omnibus multivariate analysis of variance was first conducted to determine if there was a significant multivariate main effect for maltreatment. The main effect of maltreatment was significant, $F(9, 121) = 2.24, p < .05$. Individual $t$ tests were then performed for each of the nine components of resilient functioning (see Table 2). Maltreated Latino children exhibited significantly greater aggressive behavior, exhibited significantly less prosocial behavior, were rated more frequently by their peers as fighters, had more internalizing symptoms, and had more externalizing symptoms than did nonmaltreated Latino comparison children.

The resilient functioning composite, which summarized the number of domains in which children exhibited levels of high functioning, also was evaluated. Maltreated Latino children had significantly fewer areas of resilient functioning (2.61 vs. 3.61), $t(131) = 2.79, p < .01$, than did nonmaltreated Latino children.

Because the children were categorized into three levels of adaptive functioning (low, medium, and high), the distribution of maltreated and nonmaltreated Latino children at each of these levels also was evaluated in greater detail. Table 3 summarizes the percentages of maltreated and nonmaltreated Latino children in each of the three levels of competent functioning. There was a significant difference between maltreated and nonmaltreated Latino children, $\chi^2(2, N = 133) = 6.88, p < .05$. At the high end of functioning, there were fewer maltreated Latino children (9.2%) represented than nonmaltreated Latino children (17.5%). In addition, 9.2% ($N = 7$) of the maltreated Latino children versus 8.8% ($N = 5$) of the nonmaltreated Latino children achieved a score of 0, indicating no areas of resilient functioning. When the 30.8% of

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1 In the summer day camp, the PPVT–III was used instead of the PPVT–III in order to remain consistent with data that had been collected prior to the introduction of the PPVT–III.
children in the low adaptive functioning group were compared with all others, significantly more maltreated Latino children, $\chi^2(1, N = 133) = 6.22, p < .02$, than nonmaltreated Latino children were in the low group.

**Predicting Resilient Functioning**

In order to identify contributors to differences in resilient functioning among the Latino children, several process variables were evaluated as potential predictors of resilient functioning. Personal resource variables were assessed in these analyses, including ego-resiliency, ego-control, and receptive vocabulary. In addition to the personal resource variables, aspects of interpersonal relations that could serve to promote resilience among high-risk Latino children were evaluated. In particular, the ability of a child to form a positive relationship with the head camp counselor was assessed and considered an indication of a child’s capacity to relate successfully to a new adult figure. Table 4 provides a summary of each of these variables contrasting maltreated and nonmaltreated Latino children. A number of significant differences were found. Specifically, maltreated Latino children evinced lower levels of ego-resiliency and receptive vocabulary than did nonmaltreated children. Maltreated Latino children also evinced marginally higher levels of ego-undercontrol than did nonmaltreated children. In terms of interpersonal relationships, maltreated Latino children were rated by their counselors as more conflicted than were nonmaltreated children. Similarly, nonmaltreated Latino children, compared with maltreated children, were rated as being warmer, were rated as having more open communication, and received higher total relationship scores, indicating that the nonmaltreated children were better able to achieve positive relationships with their head counselors.

In order to determine whether the process variables predicted resilient functioning and whether they related differentially to resilient functioning for maltreated and nonmaltreated Latino children, we conducted a series of hierarchical regressions. Gender was included in the regression analyses to explore whether it contributed significantly to resilient functioning.

**Ego-Resiliency and Ego-Control**

In the first hierarchical regression analysis, resilient functioning total scores were regressed onto the predictor variables of ego-

### Table 3

**Levels of Resilient Functioning by Maltreatment Status**

<table>
<thead>
<tr>
<th>Resilient functioning</th>
<th>Maltreated</th>
<th>Nonmaltreated</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low (0–1 indicators)</td>
<td>30 39.5</td>
<td>11 19.3</td>
<td>41 30.8</td>
</tr>
<tr>
<td>Middle (2–5 indicators)</td>
<td>39 51.3</td>
<td>36 63.2</td>
<td>75 56.4</td>
</tr>
<tr>
<td>High (≥ 6 indicators)</td>
<td>7 9.2</td>
<td>10 17.5</td>
<td>17 12.8</td>
</tr>
<tr>
<td>Total</td>
<td>76 57</td>
<td>133 100</td>
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</tbody>
</table>

resiliency and ego-control. In Steps 1 and 2 of the regression, maltreatment status and gender were entered followed by the main effects of ego-resiliency and ego-control entered simultaneously at Step 3. Last, the linear interactions between ego-resiliency and maltreatment status and between ego-control and maltreatment status were entered simultaneously at Step 4. The unique contributions to the variance explained (reported as $r^2$) for each predictor variable are summarized in Table 5. The main effects of maltreatment status, gender, ego-resiliency, and ego-control each made significant contributions to the prediction of resilient functioning, with ego-resiliency serving as the most powerful predictor. High ego-resiliency scores were associated with high resilience ($\beta = .60$), and high ego-undercontrol scores were associated with low resilience ($\beta = - .17$). Together these variables resulted in a highly significant regression equation, $F(6, 126) = 21.17, p < .01$, accounting for 50.2% of the variance in resilient functioning (adjusted $R^2 = .48$).

The linear interactions of both ego-resiliency and ego-control with maltreatment status were found to be not significant. Because the personal resource variable of ego-control theoretically has a curvilinear relation with adaptation and maladaptation (i.e., extreme ego-overcontrol and ego-undercontrol are associated with maladaptation; Kremen & Block, 1998), a separate analysis of a possible quadratic effect was evaluated for the interaction of maltreatment status and ego-control on resilient functioning. In Steps 1 and 2 of this analysis, the main effects of maltreatment status and ego-control were entered into the regression equation, respectively, followed by the quadratic term of ego-control at Step 3. Next, the product of ego-control and maltreatment was entered at Step 4 to evaluate the linear interaction, followed by the product of maltreatment and the quadratic term for ego-control at the final step, to evaluate the quadratic interaction. The main effects of maltreatment status, ego-control, and the quadratic effect of ego-control were significant, $R^2 = .21$, $F(3, 129) = 11.46, p < .01$, together accounting for 21% of the variance in the resilient functioning composite. The linear and curvilinear interactions of mal-

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* Twenty-eight children were missing interpersonal relationship scores in the early years of camp, the STRS measure was not administered. In addition, 27 children were missing scores of receptive vocabulary because of issues such as absence from camp or concerns of validity. Thus, owing to differences in sample size resulting from missing data, interpersonal relationship variables and personal resource variables were evaluated in separate hierarchical regression analyses. Receptive vocabulary, as measured by the PPVT–R, was not significantly correlated with scores of resilient functioning ($r = .05$); thus it was not included as a variable in the regression analyses.
treatment status and ego-control were not significant, thus showing that regardless of maltreatment status, Latino children who demonstrated either high ego-overcontrol or high ego-undercontrol demonstrated less resilient functioning than children who had ego-control scores that were more moderate to slightly overcontrolled. In other words, for Latino children, mid-range ego-control promotes resilient functioning.

Although there was a significant main effect of gender in the overall regression evaluating the predictors of ego-resilience and ego-control, the interactions of gender with each of the personal resource variables were not significant, suggesting that the predictor variables of ego-resiliency and ego-control did not relate differently to resilient functioning for Latino girls and boys.

Relationship Quality With an Extr familial Adult

Two subsequent hierarchical regression analyses were conducted to evaluate the interpersonal variables that represent aspects of relationship features (i.e., the STRS overall relationship score and the “conflicted,” “warm,” “open communication,” “dependent,” and “closed/troubled” variables), in order to determine if they related to the resilient functioning composite. The overall relationship quality was examined first; individual components of this relationship were subsequently evaluated.

In the first regression analysis, maltreatment status and gender were entered first, followed by the overall quality of the relationship with the head counselor. Significant main effects of maltreatment and of the overall relationship with the head counselor were found (see Table 6). There was no significant main effect of gender. The interaction between maltreatment status and the overall quality of the relationship with the head counselor was also nonsignificant. Thus, for Latino children, regardless of maltreatment status, the overall quality of the relationship with the head counselor significantly predicted higher resilient functioning, contributing to 50.6% of the variance in the resilient functioning score, $\Delta R^2 = .51$, $F(1, 101) = 124.20$, $p < .01$, $\beta = .76$.

### Table 4

**Comparison of Maltreated and Nonmaltreated Latino Children on Personal Resource Characteristics, Receptive Vocabulary, Interpersonal Relationship Factors, and Overall Relationship With Head Camp Counselor**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Maltreated</th>
<th>Nonmaltreated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ego-resiliency</td>
<td>0.15</td>
<td>0.30</td>
</tr>
<tr>
<td>Ego-undercontrol</td>
<td>0.06</td>
<td>0.23</td>
</tr>
<tr>
<td>Receptive vocabulary (PPVT–R)</td>
<td>81.74</td>
<td>14.53</td>
</tr>
<tr>
<td>Open communication</td>
<td>2.93</td>
<td>0.85</td>
</tr>
<tr>
<td>Dependent</td>
<td>1.96</td>
<td>0.64</td>
</tr>
<tr>
<td>Closed/troubled</td>
<td>2.75</td>
<td>0.66</td>
</tr>
<tr>
<td>Warm</td>
<td>3.33</td>
<td>0.66</td>
</tr>
<tr>
<td>Conflicted</td>
<td>2.38</td>
<td>0.82</td>
</tr>
<tr>
<td>Overall relationship</td>
<td>3.42</td>
<td>0.51</td>
</tr>
</tbody>
</table>

Note. PPVT–R = Peabody Picture Vocabulary Test—Revised.

### Table 5

**Influences of Maltreatment, Gender, and Personal Resource Variables on Level of Resilient Functioning**

<table>
<thead>
<tr>
<th>Step</th>
<th>$\beta$</th>
<th>$F$</th>
<th>df</th>
<th>$\Delta R^2$</th>
<th>Adjusted $R^2$</th>
<th>$sr^2$</th>
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</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td>7.79</td>
<td>1,131</td>
<td>.06</td>
<td>.05</td>
<td>.06**</td>
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<tr>
<td>Maltreatment status</td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Step 2</td>
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<td>6.07</td>
<td>2,130</td>
<td>.03</td>
<td>.07</td>
<td>.05*</td>
</tr>
<tr>
<td>Maltreatment status</td>
<td>-.22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>.17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.03*</td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
<td>31.56</td>
<td>4,128</td>
<td>.41</td>
<td>.48</td>
<td>.48</td>
</tr>
<tr>
<td>Maltreatment status</td>
<td>-.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>.15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.02*</td>
</tr>
<tr>
<td>Ego-resiliency</td>
<td>.60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.31**</td>
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<tr>
<td>Ego-control</td>
<td>-.17</td>
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<td></td>
<td></td>
<td></td>
<td>.02*</td>
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<tr>
<td>Step 4</td>
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<td>21.17</td>
<td>6,126</td>
<td>.01</td>
<td>.48</td>
<td>.48</td>
</tr>
<tr>
<td>Maltreatment status</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>.14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.02*</td>
</tr>
<tr>
<td>Ego-resiliency (ER)</td>
<td>.61</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.31**</td>
</tr>
<tr>
<td>Ego-control (EC)</td>
<td>-.16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.02*</td>
</tr>
<tr>
<td>Maltreatment Status $\times$ ER</td>
<td>-.06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.00</td>
</tr>
<tr>
<td>Maltreatment Status $\times$ EC</td>
<td>-.07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.00</td>
</tr>
</tbody>
</table>

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

FLORES, CICCHETTI, AND ROGOSCH
In the second hierarchical regression analysis, the influences of the individual features of the relationship with the head counselor were examined. Maltreatment status and gender were entered at Steps 1 and 2 of the regression equation, followed by the interpersonal variables, which were simultaneously entered in the third step of the analysis (see Table 6). Maltreatment status and the interpersonal variables of “conflicted,” “warm,” and “closed/troubled” uniquely contributed to the variance in the total resilient functioning score. Together, maltreatment status, gender, and the interpersonal variables resulted in a highly significant regression equation, \( F(7, 97) = 22.5, p < .01 \), accounting for 61.9% of the variance in resilient functioning (adjusted \( R^2 = .59 \)). The interpersonal variables uniquely accounted for 53.5% of the variance in the resilient functioning score, \( \Delta R^2 = .54, \ F(5, 97) = 27.25, p < .01 \), which is similar to the amount of variance accounted for by the overall quality of the relationship with the head counselor.

Next, separate regression analyses were conducted to explore whether any of the interpersonal relationship variables related to the composite of resilient functioning differentially for maltreated and nonmaltreated Latino children. To do so, we evaluated possible interaction effects between maltreatment status and the interpersonal variables. In each of these analyses, maltreatment status was entered first, followed by one of the interpersonal variables, and finally by the interaction between maltreatment and the interpersonal variable. No significant interactions were found for the “warm,” “dependent,” and “conflicted” interpersonal variables. In contrast, the interaction between maltreatment status and the “closed/troubled” variable was found to be significant, accounting for an additional 2.6% of the variance in resilient functioning scores, \( \Delta R^2 = .03, F(1, 101) = 3.76, p < .05 \). As shown in Figure 1, the negative relation between closed/troubled relationship features and resilient functioning was stronger for nonmaltreated children (\( \beta = -.54 \)) than maltreated children (\( \beta = - .40 \)).

The interaction of maltreatment status and open communication was also found to be significant, accounting for 3.1% of the variance in the resilient functioning scores, \( \Delta R^2 = .03, F(1, 101) = 4.37, p < .05 \). As shown in Figure 2, the positive relation between open communication and resilient functioning was stronger for nonmaltreated (\( \beta = .58 \)) than maltreated (\( \beta = .30 \)) Latino children.

### Discussion

This investigation was designed to gain an understanding of the impact of child maltreatment on Latino children as well as to examine the processes contributing to resilient functioning in Latino children at high risk for adverse outcomes. Consistent with our first hypothesis, maltreated Latino children evinced more difficulty across multiple aspects of functioning than their equally socioeconomically disadvantaged nonmaltreated Latino peers. Even though both maltreated and nonmaltreated Latino children experienced multiple adversities that placed them at high risk for maladaptive functioning (i.e., living in single-parent homes with multiple children, low SES, dependency on the state for financial support, and minority status), maltreated children evinced more difficulties in several important areas of functioning. In accord with prior investigations of resilience in samples of maltreated children that have been composed predominantly of African American and European American children (Cicchetti & Rogosch, 1997; Cicchetti et al., 1993), maltreated Latino children were rated by both peers and counselors as having more difficulties in interpersonal relations (e.g., exhibiting greater aggressive behavior and less prosocial behavior and being more likely to be rated as fighters) than nonmaltreated Latino children, and they also displayed more symptoms of internalizing and externalizing behavior problems than nonmaltreated Latino children.

Furthermore, consistent with other studies of resilience and maltreatment (Cicchetti & Rogosch, 1997; Cicchetti et al., 1993; McGloin & Widom, 2001; Moran & Eckenrod, 1992), maltreated Latino children demonstrated a lower level of resilient functioning than did equally disadvantaged nonmaltreated Latino children. Moreover, several Latino children evinced a paucity of resilient strivings (39.5% maltreated vs. 19.3% nonmaltreated), highlighting the fact that in addition to ethnicity, SES, and other high-risk...
Figure 1. Interaction of maltreatment and closed/troubled relationship features.

Figure 2. Interaction of maltreatment and open communication.
environmental factors, child maltreatment promotes maladaptive functioning in Latino children. In this sample, twice as many maltreated Latino children as nonmaltreated Latino children were functioning maladaptively. Because resilience was determined by scores of adaptive functioning only at one point in time, future studies should focus on evaluating Latino children’s resilience longitudinally.

In terms of identifying factors that would explain individual differences in resilient functioning among both maltreated and nonmaltreated Latino children, analyses revealed that maltreated Latino children were rated as significantly more conflicted in relationships with an adult counselor than were nonmaltreated Latino children and evinced higher levels of ego-undercontrol; conversely, nonmaltreated Latino children evidenced higher ego-resiliency and higher receptive vocabulary and were rated as having more open communication, more warmth, and demonstrating a more positive relationship with their head camp counselor. Thus, the nonmaltreated Latino children displayed higher levels of the interpersonal relationship factors previously associated with higher resilient functioning than did the maltreated Latino children (Cicchetti & Rogosch, 1997).

For both maltreated and nonmaltreated Latino children, analyses of personal resource variables revealed that higher ego-resiliency and moderate ego-overcontrol were associated with higher resilient functioning. Being female also was associated with higher resilient functioning. Contrary to the findings in previous literature (Cicchetti & Rogosch, 1997), the effects of ego-resiliency and ego-control did not relate differentially in predicting resilience for maltreated and nonmaltreated Latino children; thus, only partial support for our second hypothesis was found. Ego-resiliency was found to be the strongest predictor of resilient functioning for this sample, and consequently, the child’s ability to modify his or her own characteristic level of ego-control, in order to accommodate and sustain possible stressors in the environment as they arise, was an adaptive resource (J. Block, 1982). For the children in this sample, high ego-resiliency may have helped them to overcome the many environmental hardships they experienced and, thus, fostered resilient functioning.

The significant quadratic main effect for ego-control found in this study suggests that there is an optimal amount of ego-control that both maltreated and nonmaltreated Latino children should exhibit for higher resilient functioning. For Latino children, resilient functioning was found to decrease significantly as scores of ego-undercontrol increased; that is, Latino children who had difficulty regulating behavioral, affective, and cognitive expressions of impulse had worse outcomes. Likewise, Latino children who were extremely overcontrolled, and excessively inhibited in emotional and behavioral expressiveness, also had fewer areas of resilient functioning. For the Latino children in this sample, a moderate amount of ego-overcontrol was found to be the most adaptive. Our findings are similar to those of prior investigations in showing that demonstrating more ego-overcontrol, or the ability to adopt more reserved and controlled ways of interacting with others, may help maltreated children function successfully and cope with their adverse home environments (Cicchetti & Rogosch, 1997; Cicchetti et al., 1993). However, in this study, both maltreated and nonmaltreated Latino children were found to benefit from moderate ego-overcontrol; thus, the ability to exhibit greater ego-control may also be important for nonmaltreated Latino children. Previous findings have suggested that in other samples of maltreated and nonmaltreated children, ego-overcontrol has been an important predictor of resilience in maltreated children only (Cicchetti & Rogosch, 1997; Cicchetti et al., 1993). Because Latino children may be at an even greater risk for maladaptive outcomes than children of more mainstream cultures, there may be a greater tendency for both resilient maltreated and nonmaltreated Latino children to exhibit moderate amounts of behavioral and emotional expressiveness. As described by J. H. Block and Block (1980), some Q-sort items that characterize features of children with a resilient overcontrolling type of personality organization include “compliant,” “calm/relaxed,” and “empathic.” Similarly, in the Latino culture, characteristics such as respect and control of emotions (de Ríos, 2001; Durrett, O’Byrant, & Pennebaker, 1975; Simoni & Perez, 1995) are often valued by many Latino parents. Thus, certain value systems may inculcate modulation of expressiveness through expectations for respect and forgiving of restraint, and these features appear to be valuable for promoting resilience in nonmaltreated as well as maltreated Latino children.

In addition, in terms of interpersonal relationship factors that predict resilient functioning in Latino children, the main effects of having a positive relationship with the head camp counselor and of being rated as less conflicted, warmer, and being less closed/troubled were also significant in predicting adaptive functioning. The fact that these interpersonal variables were significantly associated with higher functioning supports the notion that interpersonal factors play a role in overcoming environmental hardships. However, not all of these factors were found to relate to resilient functioning differentially for maltreated and nonmaltreated Latino children. As indicated above, the interactions of maltreatment status with the relationship variables of “closed/troubled” and “open communication” were significant, lending partial support to our second and third hypotheses. Analyses revealed that, as in previous investigations of resilience (Cicchetti & Rogosch, 1997), the relations between these interpersonal relationship features and resilient functioning were stronger for nonmaltreated Latino children. That is, although relationship features do promote higher resilient functioning in maltreated Latino children than in nonmaltreated Latino children, the deleterious effects of maltreatment may lessen the relative effectiveness of relationship features in promoting positive outcomes. Maltreated children may not be able to make use of relationships with adults in order to succeed and surmount environmental hardships as well as nonmaltreated children may. Thus, for maltreated Latino children, internal strengths such as ego-resiliency and ego-overcontrol may be more essential than relationship features in predicting resilience.

In terms of gender differences, being female was associated with higher levels of resilient functioning in Latino children. However, none of the linear interactions of gender with any of the predictor variables was significant, suggesting that the predictors of resilience did not differ for Latino girls and boys. Caution should be taken when interpreting the role of gender in predicting resilience because there were small numbers of girls in both the maltreated group and the nonmaltreated comparison group. Thus, we recommend that future investigators not only increase their sample size to include more Latina girls but also that they continue to explore possible gender differences that may exist in the development of resilient functioning in Latino children. Because strong gender roles and cultural ideals such as machismo and marianismo exist in the Latino culture, they may promote differences in resilient functioning between Latino girls and boys. For Latino boys growing up...
in an environment that adheres to ideals of machismo, maltreatment experiences may promote feelings of shame and frustration around not being able to defend oneself or one’s family, thus leading to increased aggression and increased externalizing and internalizing behaviors. Likewise, many Latina girls who are socialized to be self-sacrificing and obedient may develop the ability to better cope with environmental adversities and avoid conflict.

Because it remains unclear, for example, how certain Latino traditions, beliefs, and attitudes may promote resilient functioning in both maltreated and nonmaltreated Latino children, future studies need to incorporate models of development that investigate the importance of culture and its role in predicting resilience. Future investigations should use an emic (culture-specific) (García Coll, Akerman, & Cicchetti, 2000; Shwed et al., 1998) approach by obtaining measures that target specific cultural factors, in order to examine patterns of adaptation and maladaptation, and predictors of resilience within Latino culture. One such paradigm, proposed by García Coll and her colleagues proposed a social stratification model for studying developmental pathways in minority children. Several constructs proposed in this model were of particular relevance to this study and may have contributed to how developmental processes operated to promote resilience in Latino children. For example, social position variables (e.g., race, social class, ethnicity, gender), family (e.g., structure and roles, family values), and developmental competencies (e.g., cognitive, social, emotional) may differentially influence what factors facilitate resilience. Future research on resilience should be guided by models sensitive to the effects of culture on developmental processes and to culture’s unique contributions to how successful adaptation is achieved in the face of adversity.

Despite important findings in this study, several limitations must be addressed. First, contrary to past research in child maltreatment, receptive vocabulary, which is indirectly related to intellectual functioning, was not found to be a predictor of resilience for either maltreated or nonmaltreated Latino children in this investigation. This is not to suggest that for Latino children receptive vocabulary is not related to resilient outcomes. Instead, one explanation may be that the PPVT–R may not have been a valid measure of receptive vocabulary for Latino children because of language differences and acculturation issues. In this study, scores for both maltreated and nonmaltreated Latino children were generally below average (84% achieved a score of less than 100). This limited range of scores may provide an explanation as to why the PPVT–R was not related to the resilient functioning composite. However, it is important to note that the PPVT–R scores for the Latino children in this sample were comparable to those of the other children attending the summer day camp. Therefore, the low scores may not be due to cultural factors but instead may be more associated with the demographic characteristics of this group. Thus, future investigations should use measures of receptive vocabulary and intellectual functioning that have proven validity for Latino populations.

Second, measures of acculturation were not obtained in this study, nor were specific Latino subgroups identified (e.g., Puerto Rican, Mexican American, Cuban, Dominican). Because there are many different traditions and value systems within the Latino culture, it is important to measure acculturation and to recognize the diversity within specific groups of Latinos in future investigations. Third, because of the sample size and the high comorbidity of maltreatment subtypes, the potential differential effects of physical neglect, emotional maltreatment, physical abuse, and sexual abuse among Latino children could not be rigorously investigated. Future investigations should use a much larger sample of maltreated Latino children in order to perform further subtype analyses. Lastly, self-system processes were not evaluated in this study. Processes such as self-esteem, self-confidence, self-reliance, and social self-efficacy have been indicated as protective factors in reducing behavior problems among maltreated children (Cicchetti & Rogosch, 1997; Kim & Cicchetti, 2003) and may predict resilience in maltreated children. In other minority cultures, it has been found that the presence of a positive ethnic identity is associated with the development of an integrated self-system and increased self-esteem (Spencer, Dupree, & Hartmann, 1997; Spencer, Fegley, & Harpalani, 2003). For Latino children who are able to establish a positive ethnic identity, these self-system processes may be of particular importance. Thus, future studies need to examine the influence of such processes on adaptive and maladaptive development in Latino children.

Definitive intervention implications await additional research on pathways to adaptive and maladaptive functioning in Latino children. Because certain aspects of relationship features differed as predictors of resilient functioning in nonmaltreated and maltreated Latino children, one clinical implication that should be considered is the development and fostering of relationships with persons outside of the nuclear family for maltreated Latino children. Relationship features may not have been as effective in predicting resilience in maltreated Latino children because, unlike many nonmaltreated Latino children, maltreated Latino children may not have experienced a positive relationship within their families and may find it more difficult to relate to, or to rely on, others. Thus, future work with this population should focus on promoting resilience in maltreated Latino children through the development of supportive relationships with adults and peers outside of the immediate family system. Finally, because ego-resiliency was found to be the strongest predictor of resilient functioning in high-risk Latino children, and may be essential to the development of resilience in maltreated Latino children (J. Block, 1993), future interventions should focus on how to enhance the development of ego-resiliency in both nonmaltreated and maltreated Latino children.

Although the Latino population is rapidly increasing, our current understanding of pathways to resilience in high-risk Latino children has not shown commensurate progress. In fact, this investigation is among the first to advance our knowledge of the deleterious effects of child maltreatment on Latino children and to elucidate some of the predictors of resilient adaptation in these youngsters. The important findings emanating from this investigation highlight the need to conduct additional work on the predictors of resilient functioning in maltreated Latino children. As our knowledge base expands, our ability to design and implement the preventive interventions necessary to promote resilience in this high-risk population of children will be greatly enhanced.

References


Toth, S. L., Cicchetti, D., Macfie, J., & Emde, R. N. (1997). Representa-


Received January 13, 2004
Revision received May 15, 2004
Accepted July 9, 2004