

The Role of Ethnicity in Parenting Practices and Children's Behavior Problems

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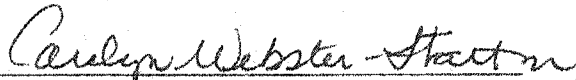
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**Abstract**

The Role of Ethnicity in Parenting Practices and Children's Behavior Problems

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The purpose of the study was to investigate 1) ethnic differences in the use of parenting practices and 2) the effects of ethnicity on the relationship between parenting practices and children's behavior problems. It further aimed to address several limitations in past research concerning theoretical constructs, research methods, and confounding factors. Thus, the parenting practices measured in this study, prosocial parent-child interactions, hostile parent-child interactions, and inconsistency, are consistent with cross-cultural research. Furthermore, both parent report and observational measures were examined, and parent education and family structure were included as confounding factors. The subjects included 634 low-income families (58% European American, 20% African American, 11% Latino, 12% Asian American) with children aged 4 to 5 years. Mothers' reports and observational data were examined separately as the combination of observational scales with mother report scales resulted in poor internal consistency for both parenting and child behavior variables. The results of this study demonstrated the differing effects of the parenting practices on children's behavior problems based on ethnicity as well as type of measure used. European American mothers were observed to use more Prosocial Interactions than the other groups. European American and

African American mothers reported using more Hostile Interactions than the other groups. Asian American mothers reported using less Inconsistency than the other groups. When examining the overall effects of parenting on children's behavior, Prosocial Interactions predicted fewer behavior problems for European American children but not for ethnic minority groups. This finding suggests that positive parenting practices may differ in their effects for different ethnic groups and supports the hypothesis that ethnicity is a critical factor when examining parenting behaviors. However, the relationship between Hostile Interactions and child behavior problems was remarkable in its consistency and strength across all groups. Inconsistency also related to children's behavior problems across all groups. These findings can be useful in the development of parenting interventions that are beneficial across ethnicities by demonstrating the need to target Hostile Interactions and Inconsistency when preventing or treating children's behavior problems.

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## **DEDICATION**

This thesis is dedicated to my father, mother, sister, and Grandma Gaby who encouraged and supported me in the pursuit of my goals.

## INTRODUCTION

Much psychological research has focused on the effects of parenting on children's social adjustment (see Maccoby & Martin, 1983 and Darling & Steinberg, 1993, for reviews). Only recently, however, has psychological research looked into ethnicity as a factor in these effects (Radziszewska, Richardson, Dent, & Flay, 1996; Steinberg, Mounts, Lamborn, & Dornbusch, 1991). Differences in the child rearing values of different ethnic groups suggest that ethnicity plays a major role in parenting, and, in fact, recent findings support this view (Chao, 1994; Cardona, Nicholson, & Fox, 2000; Pinderhughes, Dodge, Bates, Pettit, & Zelli, 2000). These differences in values relate to the expectations parents have of their children's behavior and to the parenting strategies used by each ethnic group (Chao, 1994; Coatsworth, Pantin, & Szapocznik, 2002; Knight, Cota, & Bernal, 1993). However, research on the relationship between ethnicity and parenting is fraught with many confounding variables such as parent education, family income, level of acculturation, wide variation within each ethnic group, newly developing theory, and inadequate methodology. Therefore, it is understandable that studies in this area show contradictory findings.

A few studies have attempted to disentangle some of the confounding variables in order to examine differences and similarities in parenting and child adjustment between ethnic groups (Kaufmann, Gesten, Santa Lucia, Salcedo, Rendina-Gobioff, & Gadd, 2000; Lindahl & Malik, 1999; Radziszewska et al., 1996; Smith & Krohn, 1995; Steinberg et al., 1991). Their findings have great implications for the promotion of children's social adjustment and the prevention and treatment of children's behavior

problems. While differences between ethnic groups demonstrate the importance of tailoring research and interventions to each population, the similarities suggest that some universal parenting practices will positively or negatively influence children across ethnicity. The goal of this study is to expand on past parenting research by examining the relationship between parenting practices and children's behavior problems for different ethnic groups while addressing developing methodology and theory in this area.

### **Parenting style and child adjustment**

Most research on parenting refers to Baumrind's (1966) seminal theory on parenting styles. She suggested that parenting behavior falls along two dimensions, warmth and control, and into four categories: authoritative, authoritarian, permissive, and unengaged. Authoritative parenting is characterized by high levels of warmth and moderate levels of control (Radziszewska et al., 1996). These parents retain firm control over their children but explain their rationale for parenting decisions and involve their children in the discussion of rules (Kaufmann et al., 2000). Authoritarian, or autocratic, parents demonstrate low levels of warmth and high levels of control. They focus on discipline and obedience. On the other hand, permissive parents show high levels of warmth and low levels of control, while unengaged parents show low levels of both warmth and control (Radziszewska et al., 1996).

Research shows that, in general, authoritative parenting style is related to better child outcome (e.g., fewer behavior problems, better school performance, less depression) than other forms of parenting (Radziszewska et al., 1996; Steinberg, 1990).

Unengaged parenting typically results in poor child adjustment (Radziszewska et al., 1996). While some studies find that authoritarian parenting is not a primary factor in child adjustment (Kaufmann et al., 2000; Radziszewska et al., 1996), other studies show that this parenting style is related to lower school adjustment (Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987; Shumow, Vandell, & Posner, 1998), less effective problem-solving skills (Jones, Rickel, & Smith, 1980), antisocial peer pressure (Curtner-Smith & MacKinnon-Lewis, 1994), and incarceration (Chipman, Olsen, Klein, Hart, & Robinson, 2000). Though these findings appear to endorse the use of Baumrind's authoritative parenting style, most of the studies failed to examine demographic variables such as ethnicity and socio-economic status that are likely to affect the results (Kaufmann et al., 2000; Radziszewska et al., 1996; Steinberg, Mounts, Lamborn, & Dornbusch, 1991).

### **Ethnic differences in values**

Despite the fact that ethnic minority groups make up about one-third of the U.S. population (U.S. Census, 2001a), most theories of parenting behavior are based on middle-class European American parenting behaviors (Cardona, Nicholson, & Fox, 2000; Dumas, Rollock, Prinz, Hops, & Blechman, 1999). Authoritative parenting, in particular, is based on the U.S. European American values of individualism and independence through such practices as the involvement of children in the discussion of rules (Chao, 1994). Though this group currently makes up a large portion of the population, the U.S. population has been changing rapidly and is expected to be 8% Asian American, 14% African American, 25% Hispanic, and 53% European American

by the year 2050 (McLoyd, Cauce, Takeuchi, & Wilson, 2000). Culture influences parenting behavior through its values and often varies by ethnicity (Bennett & Grimley, 2001; Garcia-Coll, Meyer, & Brillon, 1995; Ogbu, 1981). Therefore, it is important to recognize that Baumrind's parenting styles may not generalize to other ethnic groups, a significant and growing portion of the U.S. population (Chao, 1994).

Each family exists within a context that includes cultural norms and values, which guide children's development on a daily basis (Bennett & Grimley, 2001; Coatsworth et al., 2002; Dumas & Rollock, et al., 1999). Research shows that these values vary by ethnicity. For instance, in the U.S., European American values typically include individualism, competition, efficiency, and a focus on the nuclear family (McDermott, 2001). On the other hand, ethnic minority groups such as Latino, African American, and Asian American groups typically focus on their community, hierarchy, and extended family (MacPhee, Fritz, & Miller-Heyl, 1996; McDermott, 2001; Sue & Sue, 1999). These values affect the type of social support generally available to families within each ethnic group, their social interactions, the expectations of parents for their children's behavior, and the types of parenting practices used (Coatsworth et al., 2002; Knight et al., 1993; MacPhee et al., 1996).

A few studies have examined the values of different ethnic groups in the U.S. For instance, one study examining the social networks of 502 low-income parents found that European American parents reported relying on domestic partners and friends for support, whereas Latino and Native American parents reported relying on family members (MacPhee et al., 1996). The National Educational Longitudinal Study

including over 20,000 high school students and their families found that African American, Latino, and Asian American families are significantly more likely than European American families to have relatives other than immediate family members living in the home (Blair, Blair, & Madamba, 1999). Furthermore, they found that the academic performance of African American adolescents improved with relatives living in their homes, whereas it decreased for European American adolescents who had relatives living in their homes, suggesting ethnic differences in the value of extended family.

Studies have also shown differences in the social interactions of different ethnic groups. Knight and his colleagues examined the priorities of Mexican American and European American elementary school children in their distribution of resources (i.e., pennies) to peers (Knight, Cota, & Bernal, 1993). Significantly more Mexican American (41%) than European American (19%) children preferred to distribute resources cooperatively, whereas significantly more European American (59%) than Mexican American (29%) children preferred to distribute resources competitively. This finding is consistent with Mexican American parents' expectations for children's behavior. They described these expectations with the term *bien educado* (i.e., "well-educated") (Knight, Bernal, Garza, & Cota, 1993). A child is considered *bien educado* in Latino culture when he or she demonstrates politeness, respect, familialism, and cooperation.

A study by Szapocznik and his colleagues on the values of 208 Cuban American and European American adolescents further supports this ethnic difference in values

(Szapocznik, Scopetta, Aranalde, & Kurtines, 1978). They found that Cuban American adolescents valued lineality, or hierarchy and social structure, whereas European American adolescents valued individuality.

Studies on African American and Asian American values show similar differences. As with Latino families, African American families tend to show strong family ties with an emphasis on extended family, family cooperation, and interdependence (Mays, 1985; Stevenson & Renard, 1993; Sue & Sue, 1999). In order to teach their children these values, African American parents often use metaphorical parenting, or story-telling, while respecting social hierarchy. Asian American families also focus on the value of interdependence. O'Reilly, Tokuno, and Ebata (1986) asked 260 Japanese American and European American parents of children aged 8 to 18 years to rank their priorities for their children's social behavior. Unlike the previous studies, this analysis took family income and education into consideration. They found that significantly more Japanese American parents ranked "behaves well" as their primary priority for their children's behavior, whereas significantly more European American parents ranked "self-directed" as their primary priority. The Japanese American priority of "behaving well" reflects a concern for their children's social development as well as a concern for the effects of children's behavior on others.

These values are consistent with the Chinese concept of *chiao shun* (i.e., training). Chao (1994) described this concept as the Chinese American perception that parenting practices aim to provide children with clear guidelines for their behavior to aid in their social development. While the concept of *bien educado* refers to children's

behavior, *chiao shun* refers to the methods parents employ to achieve that behavior.

These concepts contrast the European American values of individuality or independence by focusing on interdependence and obedience.

### **Ethnic differences in parenting**

These ethnic differences in parents' expectations for their children's behavior suggest that parenting behavior also may vary by ethnicity. In fact, several studies have demonstrated ethnic differences in parenting. They show that European American parents are more likely than parents from other ethnic groups to use authoritative parenting (Chiu, 1987; Dornbusch, Ritter, Leiderman, Roberts, and Fraleigh, 1987; Radziszewska et al., 1996; Steinberg et al, 1991). For example, Chiu (1987) compared the parenting styles of 213 European American parents, 95 Chinese American parents, and 397 Chinese parents living in Taiwan. Using the Parental Attitude Research Instrument, she found that European American parents used more democratic, or authoritative, parenting than Chinese or Chinese American parents did. Chinese and Chinese American parents were more likely to use authoritarian parenting.

Though these differences exist, Radziszewska and colleagues (1996) demonstrated that ethnic differences could be small when controlling for socioeconomic status (SES). They studied 3,993 high-risk adolescents in the 9<sup>th</sup> grade and their parents' parenting styles based on Baumrind's (1966) categories. A greater percentage of European American parents used authoritative parenting than the other groups did, especially when compared with African American and Asian American parents. However, these differences were not large. Approximately 37% of the sample

used authoritative parenting, 31% used autocratic parenting, 20% used permissive parenting, and 11% used unengaged parenting, with each ethnic group falling within 5% of each mean.

Other studies used more specific parenting behaviors than Baumrind's (1966) parenting styles to measure parenting. These studies typically focused on discipline strategies, parent-child interactions, and parental expectations. Several studies found that African American, Latino, and Asian American parents tend to use harsher discipline strategies than European American parents do (Cardona et al., 2000; Chiu, 1987; Hill & Sprague, 1999; Loeber, Drinkwater, Yin, Anderson, Schmidt, & Crawford, 2000; MacPhee et al., 1996; Pinderhughes et al., 2000). For instance, after controlling for socio-economic status, African American parents were more likely than European American parents to use physical punishment (Deater-Deckard, Dodge, Bates, & Pettit, 1996; Pinderhughes et al., 2000).

Similarly, Pinderhughes and colleagues (2000) found that African American parents tended to use harsher discipline strategies than European American parents did. They studied the discipline responses of 978 parents to hypothetical vignettes, interview questions, and two items from the Conflict Tactics Scale. Eighty-two percent of the sample was European American, and 16% was African American. Though they found a significant effect for ethnicity, socio-economic status (SES) interacted with this effect. In particular, low-SES African American parents were more likely to use harsh discipline strategies than low-SES European American parents, but there were no significant differences in the discipline strategies used by mid-SES African American

and European American parents. These findings demonstrate the importance of not only ethnicity but also SES as factors in parenting.

However, these studies only reflect one aspect of parenting. In their longitudinal study of 1,517 boys aged 6 to 18 years, Loeber and his colleagues (2000) looked at several types of family interactions, including physical punishment, positive parenting, and parent-child communication. They used parent and child interviews to assess each type of interaction. While African American parents used more physical discipline, they also demonstrated more positive behaviors toward their children, such as winking and smiling, than European American parents did. They found no differences in the parent-child communication behaviors of either group.

Like African American parents, Latino parents tend to use harsher discipline strategies than European American parents (Cardona et al., 2000; MacPhee et al., 1996; Pullam-Brown, 1998). For instance, Cardona, Nicholson, and Fox (2000) compared the parenting practices of 38 Hispanic mothers of children aged 3 to 5 years with those of 38 European American mothers. They used the Parent Behavior Checklist (Fox, 1994) to measure parents' developmental expectations for their children, discipline strategies, and nurturing practices. They found that Hispanic mothers were more likely to use corporal punishment and less likely to demonstrate nurturing parenting practices such as playing with their children than European American mothers.

Consistent with this finding, Pullam-Brown (1998) found that Latino parents were more likely to use a restrictive parenting style (i.e., use structure and limit-setting) than both European American and African American parents. She compared European

American, African American, and Latino parents of 4- and 5-year old children and found that the Latino parents were more restrictive than the other groups. However, inconsistent with the previous study (Cardona et al., 2000), the Latino parents also demonstrated more nurturing parenting behaviors such as listening and sharing feelings. Another study supported this finding by demonstrating that Latino parents were less likely to be unengaged from their children than parents of other ethnic groups, including European American, African American, and Asian American parents (Radziszewska et al., 1996).

Similar to studies looking at African American and Latino families, several studies show that Asian American parents are more likely than European American parents to use an authoritarian parenting style (Chao, 1994; Chiu, 1987; Lin & Fu, 1990). When compared to other ethnic groups, they are least likely to use authoritative parenting (Steinberg et al., 1991). However, these findings do not describe the specific parenting behaviors used by Asian American parents.

Only a few studies have examined specific parenting behaviors used by Asian Americans (Chao, 1994; Chiu, 1987; Lin & Fu, 1990). In separate studies on parenting, Chiu (1987), Chao (1994), and Lin and Fu (1990) found that Chinese and Chinese American parents used more restrictive and controlling parenting behaviors than European American parents did. Chao (1994) compared 50 Chinese American mothers who had immigrated to the U.S. with 50 European American mothers. She used the Child-Rearing Practices Report and a questionnaire measuring "training" parenting style. There were no differences between the groups in socio-economic status, with

both groups described as upper middle class. As with Chiu's (1987) study, the Chinese American mothers used more authoritarian and controlling parenting than the European American mothers did. Lin and Fu (1990) also found that Chinese American parents were more likely to exert parental control. However, they found no differences between Chinese American and European American parents in their expression of affection. It is important to note that these studies all focus on Chinese American parents and, therefore, cannot be generalized to other Asian American groups.

As shown by the studies described in this section, studies that examine specific parenting behaviors among ethnic minority groups have consistently found a combination of high levels of parental control with expressions of warmth (Lin & Fu, 1990; Loeber et al., 2000; Pullam-Brown, 1998). This combination contradicts the characteristics of authoritarian parenting style, which includes high levels of control but low levels of warmth (Radziszewska et al., 1996), and raises concerns about applying past research on parenting styles to ethnic minority groups.

Therefore, specific definitions of parenting may be more appropriate when examining the parenting behaviors of ethnic minority populations. For instance, Darling and Steinberg (1993) have distinguished between parenting styles and parenting practices. They defined parenting styles as parental attitudes directed toward the child that create an emotional climate. Baumrind's (1966) classifications serve as primary examples of parenting styles. Darling and Steinberg (1993) defined parenting practices as specific parenting behaviors such as physical punishment or expressions of affection.

This distinction could aid in the understanding of parenting among different ethnic groups.

### **Issues concerning research on ethnicity**

The studies reviewed in this paper show consistent patterns in the values and parenting styles and practices of different ethnic groups in the U.S. They demonstrate that European American parents tend to value individuality and independence and are more likely to use an authoritative parenting style (see Chao, 1994; Knight et al., 1993; MacPhee et al., 1996; O'Reilly et al., 1986; Radziszewska et al., 1996). On the other hand, African American, Latino, and Asian American parents tend to value hierarchy and interdependence and are more likely to use parental control.

These differences in values and parenting underscore the importance of considering the effects of ethnicity when examining parenting behavior. However, several factors complicate research on ethnicity, rendering the findings of a large portion of this research inconclusive. Confounding factors affecting research on parenting behavior include family characteristics (e.g., parent education, family income, family structure, acculturation level), social climate, and theoretical constructs (Cardona et al., 2000; Dumas & Rollock et al., 1999).

### ***Parent Education***

The U.S. Census (2000) revealed significant differences in the educational attainment of European Americans, African Americans, and Latinos. Eleven percent of European Americans in the U.S. have not graduated from high school, as compared with approximately 20% of African Americans and 44% of Hispanic Americans.

Furthermore, two times as many European Americans graduate from college when compared to these minority groups. The National Educational Longitudinal Study also found that a greater number of European Americans and Asian Americans attended private high schools than African Americans or Latinos, suggesting possible differences in the quality of their educations (Blair, Blair, & Madamba, 1999).

Parents with low levels of education are more likely to have an authoritarian parenting style than are parents with higher levels of education (Aunola, Nurmi, Jari, Onatsu-Arviolommi, & Pulkkinen, 1999). Thus, parental education may contribute to the authoritarian parenting style of ethnic minority groups in the U.S. Low levels of parent education also are related to lower academic achievement in children (Shu, Lui, & Wang, 2001). In contrast, high levels of parent education are related to positive parenting attitudes (Tseng, Wai-Ping, Yau, & Yuen, 2001), more positive parenting practices (Fox, Platz, & Bentley, 1995), and children's social skills (Cardamone, 1999). Because education level affects parenting and because education varies with ethnicity, research examining parenting behavior faces the challenge of disentangling the interaction between ethnicity and education.

### ***Family Income***

This challenge also applies to the family incomes of different ethnic groups. For instance, McLeod and Shanahan (1993) studied the effects of poverty on parenting and child adjustment. Through the National Longitudinal Survey of Youth (NLSY), they looked at 1,733 children aged 4 to 8 years and their mothers and studied the effects of current poverty and persistent poverty. They found that African Americans and Latinos

experienced significantly more persistent poverty than European Americans did and that persistent poverty was related to children's internalizing behavior problems such as anxiety and depression. African Americans and Latinos also experienced current poverty, which was related to frequent physical punishment, low emotional responsiveness, and children's externalizing behavior problems.

The ethnic differences in income found by this study are consistent with the difference between the current median income of each ethnic group reported by the U.S. Census (2001b). While European American men earn \$72,400 annually, African American men earn \$21,662 and Latino men earn \$19,833 annually. There is no significant difference in the annual earnings of European American and African American women, with each group earning approximately \$16,000. However, Latino women earn significantly less than the other groups with \$9,079 as their annual income. It is important to interpret these statistics with caution as the socio-economic status of families varies greatly within ethnic groups as well as across groups (Blair et al., 1999; Dumas & Rollock et al., 1999; McLoyd et al., 2000).

### *Family Structure*

While European American and African American women may not differ in their individual incomes, significantly more African American women head their households as single parents, thereby greatly decreasing their family income. Single women head approximately 18% of European American families, whereas they head 51% of African American families, 31% of Latino families, and 26% of Native American families (McLoyd, Cauce, Takeuchi, & Wilson, 2000). On the other hand, Asian American

women are less likely to have children out of wedlock and less likely to divorce than women of other groups. This difference in family structure affects the resources available to parents and is likely to influence the use of specific parenting strategies.

### *Acculturation*

Within each ethnic group, the family's acculturation level has been shown to affect the use of parenting strategies. The parenting behaviors of recent immigrants to the U.S. seem to become more similar to the parenting of European American parents over time (Chiu, 1987; Fuligni, Tseng, & Lam, 1999; Patel, Power, & Bhavnagri, 1996; Strom, Daniels, & Park, 1986). For example, mothers who emigrated to the U.S. from India reported having more assimilated social expectations for their daughters over time (Patel et al., 1996). Strom and colleagues (1986) found that Korean American parents tended to play with their children more frequently as they spent more time in the U.S. Chiu (1987) found that Chinese American parents used more democratic parenting and less restrictive and controlling parenting than did Chinese parents living in Taiwan. Asian American and Latino families also showed changes in their values over time in the U.S. While they retained many of their values, they also adopted certain U.S. values such as autonomy (Fuligni, 1998).

As these groups assimilate to U.S. culture, they encounter the challenge of integrating their native culture with U.S. culture. A few studies have found that this challenge poses particular problems for second generation Americans from ethnic minority groups (Chiu, 1987; Wakil, Siddique, & Wakil, 1981). For example, Chinese American parents reported more hostility and rejection in their family interactions than

Chinese parents or European American parents (Chiu, 1987). Wakil et al. (1981) suggested that this conflict likely results from the interaction between parents' attempts to retain the values from the country of origin with children's efforts to adopt the values of their surroundings. Thus, the family interactions experienced by first and second generation Americans from ethnic minority groups may directly relate to their family's level of acculturation.

### *Social Climate*

Ethnic minority groups also encounter social interactions involving prejudice that influence parents' goals for the socialization of their children. For instance, African American mothers reported having concerns for their children's safety and self-esteem due to the hostile behavior they face in mainstream culture (Peters, 1981). Therefore, parents from minority groups adjust their parenting behavior to prepare their children for experiences with discrimination (Locke, 1992; Stevenson & Renard, 1993). For instance, African American parents living in racially mixed neighborhoods are more likely than African American parents living in primarily African American neighborhoods to socialize their children in terms of their race (Thornton, Chatters, Taylor, & Allen, 1990). Chavira (1995) also found that African American and Mexican American parents are more likely than European American parents to discuss prejudice with their children. These findings demonstrate that ethnic minority groups adjust their parenting strategies according to their experiences and expectations of prejudice.

### *Theoretical Constructs*

Despite the differences in the values and experiences of ethnic minority groups, most of the theoretical constructs in parenting research are based on the experiences of European American families (Cardona et al., 2000; Dumas & Rollock et al., 1999). These differences indicate that Baumrind's (1966) parenting styles may not adequately describe the parenting of other ethnic groups. For instance, while many studies describe parenting among African American families as authoritarian, the research findings show that African American parents use high levels of control as well as high levels of warmth (Loeber et al., 2000). This combination of control and warmth, which seems to fall between the authoritarian and authoritative parenting styles, also has been found among Latino and Asian American parents (Lin & Fu, 1990; Pullam-Brown, 1998; Radziszewska et al., 1996).

Similarly, the constructs developed to measure specific types of parenting behaviors may not be consistent with the cultures of other ethnic groups. For example, the Parent Behavior Checklist used by Cardona and his colleagues (2000) measures parents' developmental expectations for their children, discipline strategies, and nurturing practices. It defines nurturing practices as activities such as rough and tumble play. This study found that European American parents were more likely to endorse playing with their children, whereas Cardona and colleagues argue that Latino parents have been shown to demonstrate nurturing behavior through affection. Therefore, it is possible that the Parent Behavior Checklist did not accurately detect the nurturing behavior of Latino parents (Cardona et al., 2000).

Thus far, the studies reviewed in this paper have demonstrated that ethnicity plays a significant role in parenting. However, several confounding factors such as socio-economic status and inadequate parenting measures complicate research on ethnicity (see Dumas et al., 1999). When interpreting research on parenting behavior and child adjustment, it is therefore necessary to consider ethnicity's role in parenting and the factors that complicate research in this area.

### **Ethnic differences in parenting and child adjustment**

Recently, research examining the relationship between parenting and child adjustment has begun to test the generalizability of existing theories by including ethnicity as a factor. Several of these studies have found ethnicity to significantly affect the relationship between parenting and child adjustment (Blair et al., 1999; Deater-Deckard et al., 1996; Dornbusch & Brown, 1992; Radziszewska et al., 1996; Shaw, Winslow, & Flanagan, 1999; Smith & Krohn, 1995; Williams, 2000). These findings raise questions regarding the effectiveness of certain parenting behaviors for different ethnic groups and highlight areas in parenting that require further examination.

Radziszewska and her colleagues (1996) examined each of Baumrind's (1966) parenting styles and its effects on adolescent depression, smoking, and academic performance with high-risk families. Their sample was 33% European American, 13% African American, 46% Latino, and 9% Asian American. One item defined parenting style, with authoritative parenting defined as asking for the adolescent's opinion but generally making the decisions. They found that the effects of specific parenting styles on child adjustment varied by gender and ethnicity, with unengaged parenting placing

African American boys and Asian American girls at highest risk for depression.

Authoritarian parenting was related to depression in Asian American girls but did not have negative effects on any of the other groups.

Other studies examining the effects of authoritarian parenting and related parenting behaviors showed contradictory results (Blair et al., 1999; Deater-Deckard et al., 1996; Dornbusch & Brown, 1992; Smith & Krohn, 1995). Dornbusch and Brown (1992) looked at the relationship between authoritarian parenting and academic performance. They found that authoritarian parenting negatively affected the school performance of African American and Latino adolescents but did not affect Asian American adolescents. Deater-Deckard and colleagues (1996) specifically examined physical discipline and found that physical discipline predicted greater externalizing behavior problems for European American children but not for African American children, even after controlling for socio-economic status. These studies suggest that authoritarian parenting and related parenting practices have different effects for particular child outcomes depending on the child's ethnicity.

Two studies examined the effects of parental control by ethnicity. They defined parental control as structure in the home and parental monitoring behavior (Blair et al., 1999; Smith & Krohn, 1995). The National Educational Longitudinal Study studied the role of parenting and family characteristics in the school performance of 20,706 students in the tenth grade, including European American, African American, Latino, and Asian American adolescents (Blair et al., 1999). They measured parental control with a single question assessing the frequency of parental structuring and monitoring

behavior. After controlling for socio-economic status, they found that parental control was related to better school performance for European American adolescents but not for ethnic minority groups.

Smith and Krohn (1995) compared 907 European American, African American, and Latino adolescents and their parents in a study on parental control and involvement. They found that parental control was related to less deviant behavior in European American and African American adolescents but not in Latino youth. However, they found that parental involvement was related to decreased delinquency among Latino youth but not European American or African American youth. Williams (2000) also examined parental involvement and found that it was related to fewer behavior problems among European American and Cuban American adolescents, but had no effect on African American adolescents.

These studies show contradictory findings in the effects of parental control and involvement on adolescents. It is possible that confounding factors (e.g., SES, acculturation, or measures of parenting) may account for some of these differences. It is also possible that parenting behaviors differ in meaning for different ethnic groups. For instance, parental concern may be expressed as control among European American and African American families and as involvement among Latino families.

Though future research is needed to determine the reasons for these differences, these preliminary findings show that the effects of parenting on child adjustment vary according to ethnicity, gender, and the measures of parenting and child adjustment. In particular, the effects of authoritarian parenting, physical punishment, parental control,

and parental involvement seem to differ based on their definitions and the child's ethnicity. The findings seem consistent with Baumrind's (1966) parenting theory for European American children. For example, authoritative parenting behaviors such as monitoring are associated with positive child adjustment for European American children (Blair et al., 1999), while authoritarian parenting behaviors such as physical discipline are associated with negative child adjustment (Deater-Deckard et al., 1996). However, these relationships remain unclear for ethnic minority groups. Future studies that systematically examine specific parenting practices among different ethnic groups are needed to clarify and replicate these relationships.

#### **Similarities in parenting and child adjustment across ethnicity**

A few studies have begun to clarify the effects of parenting on child adjustment by uncovering similarities in parenting effects across ethnic groups (Blair et al., 1999; Kaufmann et al., 2000; Radziszewska et al., 1996; Steinberg et al., 1991). For instance, several studies have demonstrated a positive relationship between authoritative parenting and child adjustment.

In their study on 10,000 high school students, Steinberg and colleagues (1991) studied the effects of authoritative parenting style on school performance (i.e., grades), psychosocial maturity, psychological distress, and behavior problems. The students completed questionnaires, and a portion of the students and their parents were interviewed. Sixty percent of their sample was European American, 9% was African American, 12% was Latino, and 14% was Asian American. They defined authoritative parenting as acceptance and involvement, firm control, and psychological autonomy.

Authoritative parenting was related to better school performance, greater self-reliance, less psychological distress, and fewer behavior problems for all ethnic groups, despite differences in socio-economic status and family structure.

Similarly, in their study on 3,993 ninth-graders, Radziszewska and colleagues (1996) examined the effects of parenting style on adolescent school performance, smoking, and depression. As mentioned in the previous section, ethnic differences in child adjustment occurred for unengaged and autocratic parenting. However, they found that authoritative parenting was related to better school performance and less depression regardless of ethnicity or socio-economic status.

Kaufmann and others (2000) compared authoritative parenting with authoritarian parenting on child adjustment in their study of 1,230 mothers of first-through fifth-graders. Their sample was 88% European American, 2% African American, 2% Latino, and less than 1% Asian American or Native American. They measured parenting style using the Child-Rearing Practices Scale and measured child adjustment using the Child Health Survey, which measures emotional and behavioral problems, and the AML-Revised Behavior Rating Scale, which measures acting out behavior, moodiness, and learning disabilities. Parents and teachers completed the child adjustment questionnaires. They found that authoritative parenting was related to better child adjustment and less maladaptive behavior when compared to authoritarian parenting across ethnicity, socio-economic status, and gender.

Lindahl and Malik (1999) developed categories of parenting styles that are more consistent with the parenting behaviors of ethnic minority groups. They identified three

types of parenting: democratic parenting (i.e., family members work together to resolve problems; encouragement of autonomous thinking), hierarchical parenting (i.e., parents determine rules without discussion), and lax or inconsistent parenting (i.e., parents do not exert authority or demonstrate contradictory parenting styles). They distinguished hierarchical parenting from authoritarian parenting by excluding the authoritarian characteristic of low warmth but including its characteristic of high control. This distinction is consistent with findings that ethnic minority parents exert high levels of control while demonstrating warmth (Lin & Fu, 1990; Loeber et al., 2000; Pullam-Brown, 1998).

They studied 113 families (32 European American families, 50 Latino families, and 31 biethnic families) with 7- to 11-year old sons. In order to assess parenting behavior, they used the Conflict Over Childrearing subscale of the Marital Satisfaction Inventory, the O'Leary-Porter Scale, which measures interparental conflict, and observational measures. They used the Child Behavior Checklist to assess child adjustment. After controlling for income, they found that lax and inconsistent parenting predicted behavior problems across ethnic groups. They further found that marital conflict was related to lax and inconsistent parenting as well as to increased behavior problems for each ethnic group.

Other studies assessed specific parenting practices. McCoy, Frick, Loney, and Ellis (1999) used the Alabama Parenting Questionnaire (APQ) to measure parental involvement, inconsistent discipline, reinforcement, corporal punishment, and monitoring behavior. They studied 141 clinic-referred children aged 6 to 17 years who

were referred for emotional problems, behavioral problems, or learning disabilities. The IQ scores of all of the children fell in the normal range. Seventy-nine percent of their sample was European American and 21% was African American. After testing for the effects of socio-economic status, they found that inconsistent discipline, corporal punishment, and poor monitoring behavior were related to greater behavior problems for both groups. In sum, these studies suggest that authoritative parenting is related to positive child adjustment while inconsistent parenting negatively affects child adjustment across ethnic groups.

A few studies looked at the effects of monitoring on child adjustment. Williams (2000) specifically examined the effects of strictness/supervision, autonomy-granting, and parental involvement on adolescent behavior problems and academic performance. Strictness/supervision included parental control and monitoring behavior. She compared 469 European Americans, African Americans, and Cuban Americans using questionnaires to assess perceptions of parenting and social adjustment. The three ethnic groups revealed that strictness/supervision and autonomy-granting were related to fewer adolescent behavior problems.

Another study compared 907 African American and Latino adolescents aged 14 to 16 years (Forehand, Miller, Dutra, & Watts Chance, 1997). They examined the effects of parental monitoring and communication on adolescent behavior problems. Four items from the Strictness/Supervision Scale were used to assess monitoring, and ten questions based on the Barnes and Olson's Communication Scale were used to assess parent-adolescent communication. Adolescents responded to 9 items regarding

deviant behavior such as using drugs. Both mothers and adolescents completed the parenting questionnaires. After controlling for socio-economic status and other demographic variables such as maternal age, they found that monitoring behavior was significantly related to less adolescent deviance across ethnicity.

Miller (1998) demonstrated that parental monitoring also related to academic achievement. She examined the effects of parental monitoring, parental support, and parental educational involvement in the academic achievement of 329 middle school students. In order to measure parenting behavior, the adolescents completed questionnaires. After controlling for ethnicity, Miller (1998) found that parental monitoring, support, and educational involvement were positively related to adolescent academic achievement. However, this study did not control for socio-economic status.

While studying the effects of parenting on 20,706 high school students, the National Educational Longitudinal Study found that socio-economic status best predicted academic achievement for all ethnic groups over parenting and family structure (Blair et al., 1999). In particular, family income, parental education, and availability of educational resources were related to academic achievement for European American, African American, Latino, and Asian American adolescents. Therefore, while research has demonstrated the beneficial effects of monitoring behavior and authoritative parenting across ethnic groups, their interactions with other factors such as socio-economic status cannot be dismissed.

### **Research limitations**

Most of past parenting research is based on Baumrind's (1966) authoritarian, authoritative, permissive, and unengaged classifications of parenting. However, these classifications do not incorporate major factors that interact with parenting such as ethnicity and SES (Cardona et al., 2000). Despite the ethnic diversity of the U.S. population, studies on parenting have only recently begun to examine the effects of ethnicity and include ethnicity as a factor in their theoretical constructs and parenting measures.

A portion of the studies reviewed in this paper examined the role of ethnicity in parenting and children's social adjustment (Blair et al., 1999; Deater-Deckard et al., 1998; Dornbusch & Brown, 1992; Radziszewska et al., 1996; Williams, 2000). They found that measures based on Baumrind's (1966) parenting styles did not accurately assess parenting across ethnicity. For example, several studies found that African American, Latino, and Asian American parents demonstrated high levels of control and high levels of warmth, a pattern that is inconsistent with any of the parenting styles. Therefore, new parenting constructs and measures that apply to ethnic minority groups need to be developed (Chao, 1994; Lindahl & Malik, 1999). A focus on parenting practices, as defined by Darling and Steinberg (1993), is likely to help clarify the parenting behaviors of minority groups and guide the development of more appropriate definitions of parenting styles. Parenting research also uses different terms, such as parental control, monitoring, and strictness/supervision, that have overlapping

definitions of parenting practices. More consistent definitions are needed in order to compare study findings.

Several of the studies discussed in this paper did not examine additional confounding factors such as socio-economic status, parent education, and acculturation. A few recent studies have focused on these factors and have found significant effects on child adjustment (Blair et al., 1999; Forehand et al., 1997; Kaufmann et al., 2000; Radziszewska et al, 1996; Steinberg et al., 1991). Therefore, future studies are needed to replicate and expand on these findings.

In addition, most of the research on parenting and children's social adjustment focuses on adolescents and does not address the age appropriateness of specific parenting behaviors. One study examined the stability of parenting behaviors over children's development (Loeber et al., 2000). They found that family interactions generally remained stable over time but that physical discipline, supervision, and positive parenting decreased with the child's age. This study demonstrates that parenting changes as the child develops. Furthermore, the same parenting behaviors may affect a child differently based on the child's age. Therefore, it is important to address children's age as it relates to parenting behavior.

Finally, the complicated relationships between ethnicity, parenting, child adjustment, and other confounding factors require sound methodology (e.g., Dumas et al., 1999; McLoyd et al., 2000). For instance, questionnaires and interviews completed by parents are likely to measure the parents' perceptions of their parenting behavior and their children's behavior, which are likely to vary from their actual behaviors. However,

most of the studies used questionnaires exclusively, and several of the studies included only one reporter such as the parent or the child. This limitation produces the risk of measurement and reporter bias. Using multiple reporters and reliable observational methods would help minimize this bias. Due to the significant research limitations described in this section, the relationship between ethnicity and the effects of parenting on child adjustment remains unclear.

### **Current directions in parenting research**

Current research on parenting and child adjustment is attempting to address some of these concerns. First, researchers are developing more specific definitions of parenting. For instance, Darling and Steinberg's (1993) distinction between parenting styles and parenting practices aids in the development of consistent definitions of parenting that can be used to compare findings across research studies. Furthermore, a focus on parenting practices is likely to clarify the effects of parenting on child adjustment as well as lead to the development of parenting styles that incorporate these practices to represent the parenting behaviors of different ethnic groups.

In the meantime, researchers have begun to develop new classifications of parenting that better describe the parenting styles of different ethnic groups as particular parenting practices may have different implications for different cultures (Chao, 1994). For example, while European American adolescents may interpret strict parenting as parental hostility, Chinese American adolescents may interpret strictness as parental concern. This theory is supported by the contradicting effects of authoritarian parenting and parental control on different ethnic groups.

Based on research focusing on Asian American adolescents, Chao (1994) suggested an alternative parenting style to authoritarian parenting. She termed this parenting style *chiao shun*, or “training,” and described it as teaching children expected behaviors. This training is based on the values of interdependent and hierarchical relationships and their role in maintaining social order. Thus, training is perceived as concern for and involvement in children’s social development. Chao’s (1994) study comparing European American and Chinese American mothers supported the distinction between authoritarian parenting and training. After controlling for authoritarian parenting, she found that Chinese American mothers were significantly more likely than European American mothers to endorse training concepts.

Other researchers have suggested hierarchical parenting style as an alternative to authoritarian parenting style (Lindahl & Malik, 1999). This parenting style is based on the Latino values of respecting authority and each person’s role in relation to the family. Unlike authoritarian parenting, hierarchical parenting does not include low levels of warmth as a characteristic. Lindahl and Malik’s (1999) study comparing European American, Latino, and biethnic families supports this distinction. Consistent with Chao’s (1994) study, Latino parents were more likely than European American and biethnic parents to endorse hierarchical parenting. Furthermore, European American and biethnic parents reported that their children exhibited greater externalizing problems with hierarchical parenting than with democratic parenting, but there was no difference between hierarchical parenting and democratic parenting in parental reports

of behavior problems for Latino children. This finding supports an ethnic difference in the perception of hierarchical parenting style.

Thus, *chiao shun*, or training, and hierarchical parenting provide researchers with constructs that more appropriately reflect Asian American and Latino parenting. These new constructs and the development of specific definitions of parenting behavior pave the way for identifying parenting practices and styles that adequately represent parenting for different ethnic groups.

In addition to developing new definitions of parenting, recent studies on parenting and children's social adjustment have accounted for demographic variables that are known to interact with parenting. Thus, while several studies have examined the effects of ethnicity on parenting, only a few studies have addressed additional confounding variables such as socio-economic status, parent education, family structure, acculturation, and children's age (Blair et al., 1999; Forehand et al., 1997; Kaufmann et al., 2000; Loeber et al., 2000; Radziszewska et al., 1996; Shaw et al., 1999; Steinberg et al., 1991). These studies demonstrated that demographic variables significantly contribute to the effects of parenting on child adjustment. However, they represent a small portion of parenting research, and further studies that consider demographic factors are needed to replicate and clarify these findings.

The purpose of the current study is to investigate the effects of ethnicity on the relationship between parenting practices and children's behavior problems by comparing at-risk European American, African American, Latino, and Asian American children. This study aims to expand on past research in this area by addressing several

limitations frequently encountered in previous studies. First, the parenting practices that were examined are specifically defined and consistent with recent cross-cultural constructs of parenting. For instance, while the parenting styles used by past research fail to accurately describe the parenting behaviors of ethnic minority groups (Chao, 1994), the parenting practices measured in this study focus on specific parenting behaviors that more likely relate to children's behavior problems across ethnicity.

These parenting practices include prosocial parent-child interactions, hostile parent-child interactions, and inconsistency. Prosocial parenting practices refer to strategies designed to teach children new social skills and reinforce social skills when they occur. While studies have consistently demonstrated the positive effects of authoritative parenting (e.g., Kaufmann et al., 2000; Radziszewska et al., 1996; Steinberg et al., 1991), few studies have examined specific parenting practices associated with positive parent-child interactions (Forehand et al., 1997; McCoy et al., 1999; Miller, 1998; Smith & Krohn, 1995; Williams, 2000). On the other hand, several studies have examined the effects of physical punishment but have shown contradictory results when ethnicity is included as a factor (e.g., Deater-Deckard et al., 1996; McCoy et al., 1999). The current study examined general hostile parenting practices that include antagonistic behaviors toward the child such as physical punishment, critical comments, and expressions of anger as this combination of behaviors may reflect more similar meaning across ethnic groups. Two studies have examined the effects of inconsistency on child adjustment for different ethnic groups and have shown that it relates to increased behavior problems across ethnicity (Lindahl & Malik, 1999; McCoy

et al., 1999). Thus, the current study attempted to replicate this finding by including inconsistency as a variable.

A second limitation addressed by our study concerns reporter and measurement biases. Most studies in this area use questionnaires completed by one reporter (e.g., parents or adolescents) and a single measure of each construct. This study includes observational data and uses multiple measures of each construct in an effort to reduce these biases.

Finally, the current study aims to disentangle some contextual effects on parenting by focusing on a distinct population, children aged 4 to 5 years from low-income families, and by including confounding factors such as parent education and family structure in the analyses. The study population was chosen because the parenting practices used by parents differ according to the age of the child and likely differ in their effects on children of different ages (Loeber et al., 2000). This study focused on one age group for which high levels of parental involvement is expected. In addition, only low-income families whose children were enrolled in Head Start programs participated in the study to address the effects of socio-economic status on child adjustment (e.g., Blair et al., 1999). Children from low-income families are at greater risk for developing behavior problems, and their parents are more likely to use harsh parenting across ethnicity (Coatsworth et al., 2002; Kaufmann et al., 2000; McCoy et al., 1999). Therefore, they may have a greater need for parenting interventions. Though a specific population was identified based on socio-economic

status, this study also examined the role of socio-economic status in the relationship between parenting and children's behavior problems within this population.

In order to assess ethnicity's role in the relationship between parenting practices and children's behavior problems, we first examined whether or not ethnicity significantly affected this relationship for each parenting practice. When a significant effect was found, we sought to clarify the effect of ethnicity by examining ethnic differences in the use of parenting practices and in the relationships between parenting practices and children's behavior problems.

Based on ethnic differences in values and parenting, it was expected that ethnicity would significantly affect the relationship between each parenting practice and children's behavior problems. When examining ethnic differences in the use of parenting practices, it was expected that European American parents would use prosocial parent-child interactions more than parents from the other groups, just as European American parents are more likely to use authoritative parenting than are parents from ethnic minority groups (Chiu, 1987; Dornbusch et al., 1987; Radziszewska et al., 1996; Steinberg et al, 1991). On the other hand, African American, Latino, and Asian American parents are more likely to use harsher discipline strategies than European American parents (Cardona et al., 2000; Chiu, 1987; Hill & Sprague, 1999; Loeber, Drinkwater, Yin, Anderson, Schmidt, & Crawford, 2000; MacPhee et al., 1996; Pinderhughes et al., 2000). Thus, it was expected that these groups would also demonstrate more hostile parent-child interactions. As studies have found that Latino and Asian American parents are more restrictive than European American and African

American parents (Chao, 1994; Chiu, 1987; Pullam-Brown, 1998), it was expected that European American and African American parents would show greater inconsistency than Latino and Asian American parents.

Regarding the relationships between parenting practices and children's behavior problems, certain parenting behaviors were expected to relate either positively or negatively to children's behavior problems across ethnicity as observed in past studies on parenting and child adjustment (Blair et al., 1999; Kaufmann et al., 2000; Radziszewska et al., 1996; Steinberg et al., 1991). However, in general, the relationships between parenting practices and children's behavior problems were expected to be stronger for European American families because most parenting measures were designed according to theories based on European American parenting behaviors (Cardona et al., 2000; Chao, 1994; Dumas & Rollock et al., 1999).

In particular, it was expected that inconsistency would relate to greater child behavior problems for each ethnic group as past studies have consistently found this relationship (Lindahl & Malik, 1999; McCoy et al., 1999). While it was expected that prosocial parent-child interactions would generally relate to fewer child behavior problems across ethnicity, this relationship was expected to be stronger for European American parents as authoritative parenting and possibly a focus on prosocial interactions may apply more specifically to European American parenting values.

Research findings on negative parenting behaviors such as harsh discipline have been less consistent in their effects on children's adjustment across ethnic groups than have inconsistency or authoritative parenting (Blair et al., 1999; Deater-Deckard et al.,

1996; Dornbusch & Brown, 1992; Radziszewska et al., 1996; Smith & Krohn, 1995).

This discrepancy likely results from ethnic differences in values and perceptions of discipline strategies, with ethnic minority groups placing a greater value on hierarchy and training than European American parents in the U.S. (Chao, 1994; Knight et al., 1993; O'Reilly et al., 1986; Szapocznik et al, 1978). Thus, it was expected that hostile parenting practices would relate to greater behavior problems for each ethnic group but would have a weaker relationship with the behavior of ethnic minority children.

Whereas similarities among ethnic groups would help inform intervention programs as to which parenting behaviors are likely to promote or detract from children's social adjustment, differences would help intervention programs adjust to the needs of different ethnic groups.

## METHOD

### Participants

The sample included 634 families enrolled in Head Start programs in the Seattle Area. Head Start is a federally funded program for preschoolers whose parents receive public assistance. The families participated in a longitudinal intervention study examining the effectiveness of The Incredible Years Parent Program, an empirically validated parent training program (Webster-Stratton, 1998).

The parents who participated in the study included 634 mothers and 291 fathers. To maximize sample size, all data reported in the current study represent mother reports and observations of mother-child interactions. Fifty-four percent of the mothers did not have partners living in the home. Of the 634 children, 343 were boys and 291 were girls. They had a mean age of 55.96 months ( $SD = 4.35$ ). Based on mother report, 58% of the children were European American, 20% were African American, 11% were Latino, and 12% were Asian American.

### Procedure

The 23 Head Start centers were randomly assigned to either an intervention condition, in which the families received The Incredible Years Training Series intervention, or a control condition, in which the families received the usual Head Start programs. The families were assessed at baseline, post-intervention, and at a one-year follow-up. This study will focus on the baseline assessments in order to examine the relationship between parenting and children's behavior problems prior to the families' participation in a parenting intervention. All of the families completed the same

baseline assessments, including parent reports and independent observations. The baseline data were collected in the home through a 2- to 3-hour parent interview followed by a 30-minute home observation of mother-child interactions.

### **Measures**

Measures for the present study were theoretically selected to define each parenting and child variable using multiple measures and multiple reporters (i.e., parents and independent observers). Two observational measures and one mother report were available for each of the three parenting domains (prosocial parent-child interactions, inconsistency, and hostile parent-child interactions). Two observational measures and two mother report measures were available for the child behavior domain. Composite scores were created for each variable by combining the scale scores of different measures. For each of the scales of a composite score, subject raw scores were converted to percentile scale scores calculated from the range of each scale because the ranges of the scales differed significantly. The percentile scale scores were then averaged to form the composite score. We used composite scores to reduce measurement bias and to simplify the interpretation of our findings. This approach followed a similar strategy to that used by Dishion, Patterson, Stoolmiller, and Skinner (1991).

Using Cronbach's alpha to evaluate the internal consistency of each composite score revealed that the combination of observational scales with mother report scales resulted in poor internal consistency for both parenting and child behavior variables. Therefore, we decided to separate observational and parent report scales for each variable, using composite scores for the observational parenting scales, observational

measures of children's behavior problems, and mother report measures of children's behavior problems. Mother report of parenting behavior was a single measure, the Parenting Practices Interview (described below), with three subscales representing the domains listed above, so composite scores were not created for these variables.

### ***Demographic variables***

The home interview included a section of questions focused on demographic variables. This study included information on the child's ethnicity and the parents' marital status and education. Marital status was coded as a dichotomous variable assessing whether or not the mother lived in the home with a partner (0 = partnered; 1 = unpartnered). Due to the small range of education level in this population, this variable was also coded as a dichotomous variable with 0 equal to high maternal education (more than a high school degree) and 1 equal to low maternal education (high school degree equivalent or less). Household income was not included in the analyses because it had a significant negative correlation with marital status ( $r = -.43$ ) and initial analyses revealed no ethnic differences in income. However, the analysis of variance (ANOVA) revealed ethnic differences in marital status,  $F(3, 670) = 32.74, p < .01$ , and education level,  $F(3, 665) = 14.11, p < .01$ . Thus, they were included as factors in the analyses. See Table 1 for demographic information.

### ***Parenting Practices – Parent Report Scales***

Parenting Practices Interview (PPI). Adapted from the Oregon Social Learning Center's Discipline Questionnaire for parents with preschool-age children, this questionnaire was administered verbally as an interview. Three subscales based on

Table 1. Demographic Variables by Ethnicity

Demographic Measures	European American ( <i>n</i> = 392)		African American ( <i>n</i> = 135)		Latino ( <i>n</i> = 80)		Asian American ( <i>n</i> = 67)	
	<i>M</i> or %	<i>SD</i>	<i>M</i> or %	<i>SD</i>	<i>M</i> or %	<i>SD</i>	<i>M</i> or %	<i>SD</i>
Gender (% male)	49.5		57.8		53.8		53.7	
Family income <sup>a</sup>	2.95	1.47	2.68	1.43	3.21	1.49	2.91	1.47
Marital status (% partnered)	46.2		23.0		65.0		49.3	
Parent education (% > high school)	78.4		84.3		40.5		41.8	

<sup>a</sup> For family income, 1 = less than \$4,999; 2 = \$5,000 to \$9,999; 3 = \$10,000 to 14,999; 4 = \$15,000 to \$19,999, 5 = \$20,000 to \$24,999; 6 = \$25,000 to \$44,999; 7 = \$50,000 or more

mothers' reports were used: Prosocial Interactions, Inconsistency, and Hostile Interactions. Prosocial Interactions consisted of 4 items and included parenting behaviors such as praise, having the child correct misbehavior, and discussing problems. Inconsistency consisted of 7 items that included parenting behaviors such as giving up trying to get the child to comply, failing to punish the child for misbehavior, and unpredictable reactions to misbehavior. Hostile Interactions included 5 items such as spanking, slapping, and showing anger when angry. Internal consistency (Cronbach's alpha) for each of these scores was .57, .63, and .73, respectively.

#### ***Parenting Practices – Observational Composite Scores***

Three scales from each of two observational measures (DPICS and CII, see below for descriptions) were used to derive three corresponding composite scores: Prosocial Interactions, Inconsistency, and Hostile Interactions. Cronbach's alpha for each composite score was .66, .31, and .72, respectively. Because of the low internal

consistency achieved for the Inconsistency composite score, the internal consistency of this score was assessed for each ethnic group to determine which analyses would be reliable. Cronbach's alpha for Inconsistency was .29 for European Americans, .44 for African Americans, .57 for Latinos, and -.23 for Asian Americans. Thus, it was determined that the Inconsistency observational composite score would be unreliable for the European American and Asian American groups but could be used for the African American and Latino groups. These composite scores were based on scales from the following two measures.

Dyadic Parent-Child Interactive Coding System Revised (DPICS-R). The DPICS-R (Robinson & Eyberg, 1981) is a widely used observation measure that codes observations of parent-child interactions in the home. Mothers were observed interacting with their children for 30 minutes. Twenty percent of all observations were randomly selected for reliability checks (ICCs for scales reported in this paper were all acceptable, ranging from .70-.98). Observers were European American, Hispanic, and Asian American and were matched with each family according to the language spoken by the family. Therefore, Latino interviewers were matched with Latino families, Asian American interviewers with Asian American families, and European American interviewers with European American and African American families.

As with the PPI, this study focused on three subscales of parenting behaviors: Prosocial Interactions, Inconsistency, and Hostile Interactions. Prosocial Interactions included 5 items related to parental acknowledgement of the child's behavior, praise, encouragement, and engaging the child. Inconsistency included 6 items assessing such

parenting behaviors as using excessive commands, using indirect commands, and not giving the child an opportunity to comply. Hostile Interactions consisted of 6 items referring to the use of critical commands, critical comments, and negative physical contact. Internal consistency (Cronbach's alpha) for each of these scores was .75, .51, and .67, respectively.

Coder Impression Inventory (CII). Adapted from the Oregon Social Learning Center's Impression Inventory, this coding system consists of 72 items that describe mother-child interactions, parenting style, and the child's affect based on the coders' impressions. Three summary scores were used: Prosocial Interactions, Inconsistency, and Hostile Interactions. Prosocial Interactions included 10 items assessing parenting behaviors such as positive responses to the child's prosocial behavior, modeling positive behavior, giving the child attention, engaging the child in conversation, and problem-solving with the child. Inconsistency included 7 items referring to such parenting behaviors as making unreasonable requests, erratic behavior, tentative interactions, and having little control. Hostile Interactions consisted of 11 items referring to such behaviors as use of threats, disapproval, guilt, sarcasm, shouting, anger while disciplining, and physical aggression. Internal consistency (Cronbach's alpha) for each of these scores was .76, .81, and .86, respectively.

#### ***Children's Behavior Problems – Parent Report Composite Scores***

The following two parent report measures were used to derive a mother report composite score for children's behavior problems. Cronbach's alpha for this score was .81.

Child Behavior Checklist (CBCL). The CBCL (Achenbach & Edelbrock, 1991) is a well-researched measure used as a report of children's internalizing and externalizing behavior problems. Achenbach and Edelbrock (1991) reported a correlation of .98 for inter-parent agreement and a correlation of .84 for test-retest reliability over a one-week period. This study used the Externalizing Behaviors T-Score to measure children's behavior problems.

Eyberg Child Behavior Inventory (ECBI). The ECBI (Robinson, Eyberg, & Ross, 1980) consists of 36 items measuring conduct problems for children aged 2 to 16 years. Parents indicate whether the child has exhibited given behavior problems (Total Problem Score) and report the severity of the behavior on a scale ranging from 1 to 7 (Intensity Score). Research has demonstrated the reliability of this measure, with reliability coefficients ranging from .86 (test-retest) to .98 (internal consistency). This study used the Intensity Score to assess the severity of behavior problems.

### ***Children's Behavior Problems – Observational Composite Scores***

The following two measures were used to derive an observational composite score for children's behavior problems. Cronbach's alpha for this score was .72.

DPICS-R. This measure was described in the Parenting Practices – Observational Composite Scores section as a coding system that describes mother-child interactions in the home. In addition to parenting, it measures child behaviors. This study used the sum of child behaviors in the Total Deviance Scale. Total Deviance included 6 items describing such behaviors as whining and yelling, disrespectful

speech, and destructive behavior. Internal consistency (Cronbach's alpha) for this scale was .75.

Coder Impression Inventory (CII). As described in the Parenting Practices – Observational Composite Scores section, this coding system describes mother-child interactions, parenting style, and the child's affect based on the coders' impressions of home observations. This study used the Child Negative Behaviors Subscale, which included 8 items such as non-compliance, physical aggression, shouting, hostility, and disrespect. Cronbach's alpha for this scale was .82.

## RESULTS

Univariate General Linear Model (GLM) was used to evaluate the effects of ethnicity on the relationship between each parenting practice and children's behavior problems. Each parenting practice served as a covariate, ethnicity, marital status, and parent education served as factors, and children's behavior problems served as the dependent variable. Separate analyses were conducted for Prosocial Interactions, Inconsistency, and Hostile Interactions in order to assess the role of ethnicity in the effects of each type of parenting practice on children's behavior problems. Then GLM analyses incorporating the three parenting variables as covariates were used to assess the overall effects of parenting and ethnicity on children's behavior problems.

As described in the Method section, parent report measures and observational measures of parenting and children's behavior problems were analyzed separately for greater internal consistency within the scales. Thus, the relationship between mother report scores of parenting and the parent report composite score of children's behavior problems was distinguished from the relationship between observational composite scores of parenting and the observational composite score of children's behavior problems. This distinction is shown in Figures 1 and 2. Following these analyses, posthoc ANOVAs using the Scheffé multiple comparison method identified the significant mean differences for ethnicity, marital status, and parent education when the GLM analyses reported significant main effects for these factors.

When ethnicity was shown to significantly affect the relationship between parenting and children's behavior problems, separate GLM analyses were conducted for

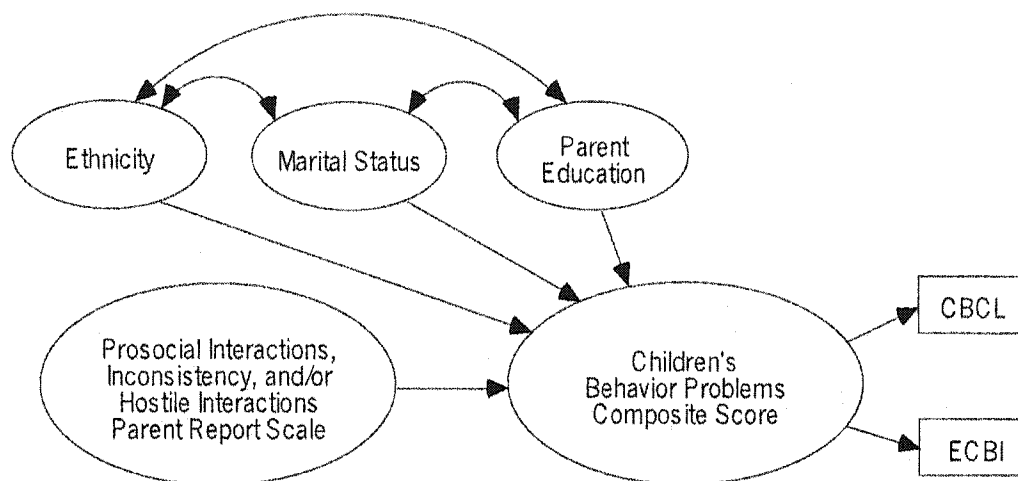


Figure 1. Parent report model of the effects of ethnicity on the relationship between parenting practices and children's behavior problems.

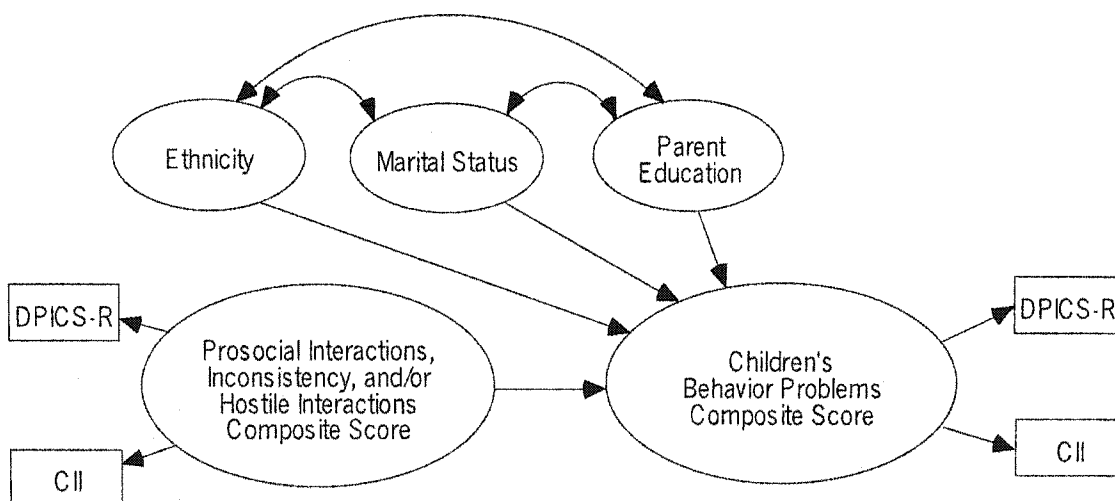


Figure 2. Observational model of the effects of ethnicity on the relationship between parenting practices and children's behavior problems.

each ethnic group. As with the initial analyses, each parenting practice served as a covariate, marital status and parent education served as factors, and children's behavior problems served as the dependent variable. Separate analyses were conducted for Prosocial Interactions, Inconsistency, and Hostile Interactions, followed by GLM analyses incorporating the three parenting variables as covariates. Posthoc ANOVAs using the Scheffé multiple comparison method identified the significant mean differences for marital status and parent education when the GLM analyses reported significant main effects for these factors.

### **Parent Reports**

Prosocial Interactions. Mothers' reports of Prosocial Interactions did not significantly predict reports of children's behavior problems. Ethnicity as well as the interaction between ethnicity and education level did significantly predict children's behavior problems,  $F(3, 601) = 10.23, p < .01$ , and  $F(3, 601) = 3.24, p < .05$ , respectively. However, these factors only accounted for 7% of the variance in children's behavior problems. Table 2 presents the GLM findings for the relationship between each parenting practice and children's behavior problems. Posthoc analyses found no ethnic differences in the use of Prosocial Interactions. However, European American parents reported more child behavior problems than African American, Latino, and Asian American parents,  $F(3,633) = 16.66, p < .01$ , with no significant differences between the ethnic minority groups. Table 3 presents the parent report means for each ethnic group.

Table 2. GLM Results for the Effects of Parenting, Ethnicity, Marital Status, and Parent Education on Children's Behavior Problems

Independent Variable (I.V.)	<i>F Values</i>				<i>Adjusted R<sup>2</sup></i>
	I.V.	Ethnicity	Marital Status	Parent Education	
Prosocial Interactions - Parent Report	.571	10.23	2.71	2.74	.07
Inconsistency - Parent Report	99.13**	8.60**	3.20	7.01**	.20
Hostile Interactions - Parent Report	79.29**	4.75**	2.23	4.48*	.18
Prosocial Interactions - Observation	36.29**	3.68*	4.38*	.46	.05
Inconsistency - Observation	221.27**	1.77	.22	.47	.26
Hostile Interactions - Observation	334.80**	3.49*	.03	7.31**	.35

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

Table 3. Means of Parent Report Measures for Each Ethnic Group and Posthoc ANOVA Results for Ethnic Group Differences

		<i>M</i>	<i>SD</i>	<i>F</i>
Prosocial Interactions	European American	76.46	15.40	42.87*
	African American	67.27	18.87	
	Latino	58.09	19.76	
	Asian American	56.97	21.10	
Inconsistency	European American	34.05	14.26	9.26*
	African American	33.06	14.99	
	Latino	32.11	13.30	
	Asian American	24.13	10.53	
Hostile Interactions	European American	46.68	18.33	24.62*
	African American	43.09	17.51	
	Latino	33.14	21.03	
	Asian American	24.13	10.53	
Children's Behavior Problems	European American	53.59	10.88	16.66*
	African American	49.80	11.55	
	Latino	46.49	11.29	
	Asian American	45.36	11.29	

\* Significant posthoc ANOVA mean differences using the Scheffé method,  $p < .01$ .

The examination of ethnic differences in the relationship between Prosocial Interactions and children's behavior problems revealed that Prosocial Interactions did not significantly predict children's behavior problems for European American, African American, or Latino families. However, this relationship was significant for Asian American families,  $F(1, 56) = 5.91, p < .05$ . Prosocial Interactions accounted for 10% of the variance in children's behavior problems. Unexpectedly, the correlation between Prosocial Interactions and children's behavior problems demonstrated a positive relationship ( $r = .29$ ), with Prosocial Interactions relating to greater behavior problems. Table 4 presents the GLM results for each ethnic group based on parent report. Marital status and parent education did not predict children's behavior problems.

Table 4. GLM Results for the Effects of Parenting, Marital Status, and Parent Education on Children's Behavior Problems for Each Ethnic Group Based on Parent Report

	Independent Variable (I.V.)	<i>F Values</i>			<i>Adjusted R<sup>2</sup></i>
		I.V.	Marital Status	Parent Education	
European American	Prosocial Interactions	.51	.13	4.02	.00
	Inconsistency	58.63**	.01	.90	.15
	Hostile Interactions	74.22**	.58	1.21	.18
African American	Prosocial Interactions	.79	.02	.42	-.02
	Inconsistency	23.33**	.06	2.14	.13
	Hostile Interactions	8.42	.08	.94	.04
Latino	Prosocial Interactions	.06	2.97	3.75	.04
	Inconsistency	8.18**	2.32	5.32*	.14
	Hostile Interactions	6.64*	1.37	2.82	.12
Asian American	Prosocial Interactions	5.91*	3.83	.68	.10
	Inconsistency	9.44**	2.77	1.59	.15
	Hostile Interactions	.96	2.28	2.50	.02

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

Inconsistency. Inconsistency significantly predicted children's behavior problems,  $F(1, 602) = 99.13, p < .01$ . After accounting for the effects of Inconsistency,

ethnicity, parent education, and the interaction between ethnicity and parent education predicted children's behavior problems,  $F(3, 602) = 8.60, p < .01$ ,  $F(1, 602) = 7.01, p < .01$ , and  $F(3, 602) = 3.01, p < .05$ , respectively. This model accounted for 20% of the variance in children's behavior problems. Posthoc analyses demonstrated that European American, African American, and Latino mothers reported using more Inconsistency than Asian American mothers,  $F(3, 652) = 9.26, p < .01$  (see Table 3). There were no differences in the use of Inconsistency by parent education. The analyses further revealed that parents with high levels of education reported more child behavior problems than parents with low levels of education,  $F(1, 631) = 5.17, p < .05$ . However, these differences were not large ( $M = 50.75$  and  $47.72$ , respectively). Table 5 displays the means for parenting and children's behavior problems by parent education and marital status for each ethnic group based on parent report.

The examination of ethnic differences in the relationship between Inconsistency and children's behavior problems showed that Inconsistency significantly predicted children's behavior problems for European American, African American, Latino, and Asian American families,  $F(1, 347) = 58.63, p < .01$ ,  $F(1, 126) = 23.33, p < .01$ ,  $F(1, 70) = 8.18, p < .01$ , and  $F(1, 56) = 9.44, p < .01$ , respectively. Parent education only predicted children's behavior problems for Latino families,  $F(1, 70) = 5.32, p < .05$ , with the high education group reporting greater children's behavior problems than the low education group,  $F(1, 74) = 4.04, p < .05$ . As shown in Table 5, this difference did not prove to be large ( $M = 49.45$  and  $44.25$ , respectively). Marital status did not predict children's behavior problems. This model accounted for 15% of the variance in

children's behavior problems for European American families, 13% for African American families, 14% for Latino families, and 15% for Asian American families.

Table 5. Parent Report Means for Each Ethnic Group by Parent Education and Marital Status

		European American <i>M</i> ( <i>SD</i> )	African American <i>M</i> ( <i>SD</i> )	Latino <i>M</i> ( <i>SD</i> )	Asian American <i>M</i> ( <i>SD</i> )
Prosocial Interactions	High education	57.81 (17.91)	68.18 (18.23)	63.80* (21.18)	65.54* (15.21)
	Low education	52.14 (19.13)	63.19 (22.05)	54.31* (18.04)	51.10* (22.69)
	Partnered	76.95 (14.85)	67.81 (19.30)	58.67 (19.74)	63.06* (16.22)
	Unpartnered	76.03 (15.89)	67.11 (18.83)	57.07 (20.12)	51.59* (23.57)
Inconsistency	High education	35.08* (23.28)	32.91 (14.36)	40.48 (19.21)	26.33 (11.12)
	Low education	40.99* (21.96)	34.98 (17.83)	43.86 (16.43)	22.62 (9.98)
	Partnered	33.84 (13.95)	30.99 (15.24)	41.52 (18.28)	25.00 (11.44)
	Unpartnered	34.23 (14.55)	33.68 (14.93)	45.18 (16.77)	23.35 (9.76)
Hostile Interactions	High education	51.98* (22.26)	42.63 (17.65)	41.91 (22.24)	30.58 (15.66)
	Low education	56.96* (23.90)	46.67 (16.37)	36.19 (26.04)	28.42 (16.21)
	Partnered	46.59 (18.07)	40.00 (16.85)	36.14 (24.35)	31.22 (13.23)
	Unpartnered	46.76 (18.59)	44.01 (17.67)	44.19 (25.03)	27.60 (17.96)
Children's Behavior Problems	High education	54.21 (22.33)	50.18 (11.74)	49.45* (10.88)	47.39 (12.63)
	Low education	58.68 (21.02)	48.43 (10.54)	44.25* (11.23)	43.99 (10.24)
	Partnered	53.79 (10.58)	50.67 (14.02)	44.89 (10.31)	43.70 (8.87)
	Unpartnered	53.41 (11.16)	49.53 (10.74)	49.45 (12.57)	46.82 (13.02)

\* Significant posthoc ANOVA mean differences using the Scheffé method,  $p < .05$ .

Hostile Interactions. Hostile Interactions also significantly predicted children's behavior problems,  $F(1, 602) = 79.29, p < .01$ . Ethnicity and parent education predicted child behavior problems beyond the effects of Hostile Interactions,  $F(3, 602) = 4.75, p < .01$ , and  $F(1, 602) = 4.48, p < .05$ , respectively. These variables accounted for 18.2% of the variance in children's behavior problems. Posthoc analyses showed that both European American and African American mothers reported having significantly more Hostile Interactions than Latino or Asian American mothers,  $F(3, 652) = 24.62, p < .01$  (see Table 3 for means). There were no differences in Hostile Interactions by parent education.

The examination of ethnic differences in the relationship between Hostile Interactions and children's behavior problems showed that Hostile Interactions significantly predicted children's behavior problems for European American and Latino families,  $F(1, 347) = 74.22, p < .01$  and  $F(1, 70) = 6.64, p < .05$ , respectively. Marital status and parent education did not predict children's behavior problems. Hostile Interactions accounted for 18% of the variance in children's behavior problems for European American families and 12% of the variance for Latino families.

Overall Parenting Practices. Next the overall effects of parenting and ethnicity were examined. The parent report scales of Prosocial Interactions, Inconsistency, and Hostile Interactions were included as covariates. As with the previous analyses, ethnicity, marital status, and parent education were entered as factors. Inconsistency, Hostile Interactions, ethnicity, and parent education significantly predicted children's behavior problems,  $F(1, 599) = 62.29, F(1, 599) = 41.13, F(3, 599) = 3.82$ , and  $F(1,$

599) = 7.64, respectively, all  $p < .01$ . These variables accounted for 26% of the variance in children's behavior problems.

The examination of ethnic differences in the overall effects of the three parenting practices showed that Inconsistency and Hostile Interactions significantly predicted children's behavior problems for European American families,  $F(1, 345) = 20.25, p < .01$  and  $F(1, 345) = 43.16, p < .01$ , respectively, with these variables accounting for 24% of the variance in children's behavior problems. Inconsistency and Hostile Interactions also significantly predicted children's behavior problems for African American families,  $F(1, 124) = 21.61, p < .01$  and  $F(1, 124) = 4.91, p < .05$ , respectively, with these variables accounting for 17% of the variance in children's behavior problems. Marital status and parent education did not significantly affect these relationships. Parenting practices and marital status did not significantly predict children's behavior problems for Latino families, though parent education did,  $F(1, 67) = 4.10, p < .05$ , and accounted for 15% of the variance in children's behavior problems. As stated under the effects of Inconsistency, high parent education related to greater children's behavior problems. Prosocial Interactions, Inconsistency, and marital status significantly predicted children's behavior problems for Asian American families,  $F(1, 54) = 6.81, p < .05$ ,  $F(1, 54) = 14.16, p < .01$ , and  $F(1, 54) = 6.10, p < .05$ , respectively, with these variables accounting for 26% of the variance in children's behavior problems. Posthoc analyses revealed that Asian American parents who lived with a partner reported using more Prosocial Interactions than single parents,  $F(1, 62) = 5.00, p < .05$ .

## Observations

Prosocial Interactions. Observations of Prosocial Interactions significantly predicted children's observed behavior problems,  $F(1, 616) = 36.29, p < .01$  (see Table 2 for GLM results). Ethnicity and marital status also predicted children's behavior problems beyond the effects of Prosocial Interactions,  $F(3, 616) = 3.68, p < .05$ , and  $F(1, 616) = 4.38, p < .05$ , respectively. These variables accounted for 5% of the variance in children's behavior problems. Posthoc analyses revealed no differences in child behavior problems based on ethnicity or marital status. Table 6 presents the observational means for each ethnic group. There also were no differences in the use of Prosocial Interactions based on marital status. However, these analyses demonstrated that European American mothers used more Prosocial Interactions than African American and Asian American mothers and that African American mothers used more Prosocial Interactions than Asian American mothers,  $F(3, 633) = 12.50, p < .01$ .

The examination of ethnic differences in the relationship between Prosocial Interactions and children's behavior problems showed that Prosocial Interactions significantly predicted children's behavior problems for European American families but not for African American, Latino, or Asian American families,  $F(1, 369) = 46.75, p < .01$ . Table 7 presents the GLM results for each ethnic group based on observation. Marital status and parent education did not predict children's behavior problems. This model accounted for 11% of the variance in children's behavior problems.

Table 6. Means of Observational Measures for Each Ethnic Group and Posthoc ANOVA Results for Ethnic Group Differences

		<i>M</i>	<i>SD</i>	<i>F</i>
Prosocial Interactions	European American	56.60	18.25	12.50*
	African American	51.15	19.54	
	Latino	50.41	16.08	
	Asian American	41.38	20.05	
Inconsistency	European American	36.39	23.04	n/a
	African American	35.53	22.66	
	Latino	33.98	23.73	
	Asian American	36.96	20.76	
Hostile Interactions	European American	53.10	22.62	1.66
	African American	56.55	21.24	
	Latino	50.38	21.87	
	Asian American	50.19	26.62	
Children's Behavior Problems	European American	55.24	22.09	1.63
	African American	51.41	22.89	
	Latino	50.43	22.97	
	Asian American	53.21	21.02	

\* Significant posthoc ANOVA mean differences using the Scheffé method,  $p < .01$ .

Table 7. GLM Results for the Effects of Parenting, Marital Status, and Parent Education on Children's Behavior Problems for Each Ethnic Group Based on Observation

	Independent Variable (I.V.)	I.V.	<i>F Values</i>		
			Marital Status	Parent Education	<i>Adjusted R<sup>2</sup></i>
European American	Prosocial Interactions	46.75**	3.17	.75	.11
	Inconsistency	157.01**	.30	.36	.30
	Hostile Interactions	222.01**	.47	.45	.38
African American	Prosocial Interactions	5.31	.55	.52	.02
	Inconsistency	52.11**	.06	.98	.28
	Hostile Interactions	58.31**	.09	2.38	.31
Latino	Prosocial Interactions	1.03	.889	.02	-.01
	Inconsistency	9.73**	.05	.01	.10
	Hostile Interactions	24.80**	.02	1.36	.23
Asian American	Prosocial Interactions	2.70	.63	.21	.00
	Inconsistency	13.03**	.14	.18	.17
	Hostile Interactions	36.82**	.02	4.76*	.41

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

Inconsistency. Due to the low internal reliability of the Inconsistency observational composite score for the European American and Asian American groups, this score was only used to assess the relationship with children's behavior problems for the African American and Latino groups. Observed Inconsistency was found to predict children's behavior problems for both groups,  $F(1, 123) = 52.11, p < .01$  for African American families, and  $F(1, 73) = 9.73, p < .01$  for Latino families. There were no significant effects for marital status or parent education. This model accounted for 28% of the variance in children's behavior problems for African American families and 10% of the variance for Latino families.

Hostile Interactions. Hostile Interactions also significantly predicted children's behavior problems,  $F(1, 616) = 334.80, p < .01$ . After accounting for this effect, ethnicity and parent education additionally predicted children's behavior problems,  $F(3, 616) = 3.49, p < .05$ , and  $F(1, 616) = 7.31, p < .01$ , respectively. These variables accounted for 35% of the variance in children's behavior problems. Posthoc analyses indicated no ethnic differences in the use of Hostile Interactions. However, parents with a high education level demonstrated fewer Hostile Interactions than parents with a low education level,  $F(1, 631) = 6.07, p < .05$ . Table 8 displays the means for parenting and children's behavior problems by parent education and marital status for each ethnic group based on parent report.

The examination of ethnic differences in the relationship between Hostile Interactions and children's behavior problems showed that Hostile Interactions significantly predicted children's behavior problems for European American, African

Table 8. Observation Means for Each Ethnic Group by Parent Education and Marital Status

		European American <i>M</i> ( <i>SD</i> )	African American <i>M</i> ( <i>SD</i> )	Latino <i>M</i> ( <i>SD</i> )	Asian American <i>M</i> ( <i>SD</i> )
Prosocial Interactions	High education	57.81* (17.91)	51.65 (19.01)	53.82 (16.50)	42.11 (21.34)
	Low education	52.14* (19.13)	49.42 (22.56)	48.03 (15.51)	40.70 (19.17)
	Partnered	55.36 (18.17)	48.44 (21.58)	49.38 (15.32)	38.93 (23.01)
	Unpartnered	57.67 (18.30)	51.96 (18.92)	52.36 (17.55)	43.64 (16.99)
Inconsistency	High education	35.08* (23.28)	34.48 (22.97)	33.38 (23.79)	37.33 (22.82)
	Low education	40.99* (21.96)	41.59 (20.95)	34.40 (23.94)	36.62 (19.10)
	Partnered	35.11 (22.54)	33.99 (18.55)	30.65 (23.20)	32.73 (15.21)
	Unpartnered	37.49 (23.46)	35.98 (23.78)	40.27 (23.86)	40.88 (24.47)
Hostile Interactions	High education	51.98 (22.26)	55.80 (21.26)	43.71* (22.29)	43.07 (30.19)
	Low education	56.96 (23.90)	60.37 (21.72)	55.02* (20.55)	56.78 (21.31)
	Partnered	50.47* (22.84)	50.66 (19.34)	47.27 (22.38)	43.33 (26.92)
	Unpartnered	55.38* (22.23)	58.32 (21.55)	56.26 (19.96)	56.54 (25.17)
Children's Behavior Problems	High education	54.21 (22.33)	52.02 (23.29)	51.21 (24.33)	54.42 (21.59)
	Low education	58.68 (21.02)	47.60 (21.28)	49.89 (22.23)	52.09 (20.82)
	Partnered	53.86 (22.11)	48.30 (24.05)	48.53 (22.50)	50.32 (18.78)
	Unpartnered	56.45 (22.05)	52.34 (22.57)	54.03 (22.97)	55.88 (22.93)

\* Significant posthoc ANOVA mean differences using the Scheffé method,  $p < .05$ .

American, Latino, and Asian American families,  $F(1, 369) = 222.01$ ,  $p < .01$ ,  $F(1, 124) = 58.31$ ,  $p < .01$ ,  $F(1, 73) = 24.80$ ,  $p < .01$ , and  $F(1, 47) = 36.82$ ,  $p < .01$ , respectively.

This relationship accounted for 38% of the variance in children's behavior problems for European American families, 31% for African American families, 23% for Latino

families, and 41% for Asian American families. Parent education only predicted children's behavior problems for Asian American parents,  $F(1, 47) = 4.76, p < .05$ , though posthoc analyses revealed no differences in children's behavior problems by parent education. Marital status did not predict children's behavior problems for any group.

Overall Parenting Practices. The overall effects of parenting and ethnicity were examined by including the observational composite scores of Prosocial Interactions, Inconsistency, and Hostile Interactions as covariates. As with the previous analyses, ethnicity, marital status, and parent education were entered as factors. Prosocial Interactions, Inconsistency, Hostile Interactions, ethnicity, and parent education significantly predicted children's behavior problems,  $F(1, 612) = 12.15, F(1, 612) = 22.14, F(1, 612) = 117.04, F(3, 612) = 3.73$ , and  $F(1, 612) = 7.00$ , respectively. This model accounted for 39% of the variance in children's behavior problems.

The examination of ethnic differences in the overall effects of the observations of the three parenting practices showed that Prosocial Interactions, Inconsistency, and Hostile Interactions significantly predicted children's behavior problems for European American families,  $F(1, 345) = 13.59, p < .01, F(1, 345) = 12.43, p < .01$ , and  $F(1, 345) = 70.29, p < .01$ , respectively, with these variables accounting for 43% of the variance in children's behavior problems. Inconsistency and Hostile Interactions also significantly predicted children's behavior problems for African American families,  $F(1, 121) = 11.75, p < .01$  and  $F(1, 121) = 13.50, p < .01$ , respectively, with these variables accounting for 37% of the variance in children's behavior problems. Marital

status and parent education did not significantly affect these relationships. Hostile Interactions alone significantly predicted children's behavior problems for Latino and Asian American families,  $F(1, 71) = 13.58, p < .01$  and  $F(1, 45) = 16.67, p < .01$ . Hostile Interactions accounted for 23% of the variance in children's behavior problems for Latino families and 43% of the variance for Asian American families.

## DISCUSSION

Research examining ethnicity and parenting in the U.S. has consistently found ethnic differences in values and parenting behaviors (e.g., Chao, 1994; Pinderhughes et al., 2000; Szapocznik et al., 1978). However, few studies have included ethnicity as a factor when examining the relationship between parenting and children's adjustment (see Blair et al., 1999; Deater-Deckard et al., 1996; Dornbusch & Brown, 1992; Kaufmann et al., 2000; Radziszewska et al., 1996; Shaw et al., 1999; Smith & Krohn, 1995; Steinberg et al., 1991; Williams, 2000). The purpose of the current study was to investigate the role of ethnicity in the relationship between parenting practices and children's behavior problems. It further aimed to address several limitations in past research concerning theoretical constructs, research methods, and confounding factors. For this purpose, we examined parenting practices that are specifically defined and consistent with cross-cultural research: prosocial parent-child interactions, inconsistency, and hostile parent-child interactions. In addition, we included both parent report and observational measures to reduce reporter and measurement biases. Finally, this study focused on a specific population (i.e., 4- to 5-year old children from low-income families) and included parent education and marital status in the analyses to address the effects of these confounding factors on parenting and child adjustment.

Based on the ethnic differences in values and parenting behaviors found by previous research in this area, we hypothesized that parents from different ethnic backgrounds would differ in their use of the parenting practices measured in this study (i.e., prosocial, inconsistent, and hostile parenting). In particular, it was expected that

European American mothers would use prosocial parent-child interactions more than mothers from the other groups, whereas African American, Latino, and Asian American mothers would demonstrate more hostile parent-child interactions than European American mothers. As described in the Measures section, Prosocial Interactions refer to such parenting behaviors as praise, encouragement, engaging the child, and having the child correct misbehavior. Hostile Interactions refer to such behaviors as negative physical contact, critical comments, and showing anger. It was further expected that European American and African American mothers would show greater Inconsistency than Latino and Asian American mothers.

We also hypothesized that ethnicity would have a significant effect on the relationship between parenting practices and children's behavior problems. While the parenting practices were expected to relate either positively or negatively to children's behavior problems across ethnicity, these relationships were expected to be stronger for European American families as most parenting measures were designed according to theories based on European American parenting behaviors (Cardona et al., 2000; Chao, 1994; Dumas & Rollock et al., 1999). Many of these hypotheses were confirmed, though differences in patterns of results between the mother report data and the observational data lead to interesting assessment and interpretation questions.

The analyses of ethnic differences in the use of parenting practices showed differences in all three parenting domains. As revealed by the observational measures, European American mothers showed significantly more Prosocial Interactions than ethnic minority mothers. Asian American mothers showed significantly fewer

Prosocial Interactions. This finding is consistent with past research demonstrating that European American parents are more likely than minority groups to use authoritative parenting as the behaviors included in Prosocial Interactions fit with this parenting style (Chiu, 1987; Dornbusch et al., 1987; Radziszewska et al., 1996; Steinberg et al., 1991). Ethnic minority groups, on the other hand, are more likely to prioritize hierarchy and, therefore, less likely to use these behaviors (MacPhee et al., 1996; McDermott, 2001; Sue & Sue, 1999).

Because Latino and Asian American parents have been shown to be more restrictive and controlling than European American and African American parents (Chao, 1994; Chiu, 1987; Lin & Fu, 1990; Pullam-Brown, 1998), they were also expected to show less Inconsistency. This expectation was partially confirmed by the parent reports as Asian American mothers reported using less Inconsistency than the other groups.

Past research also shows that African American, Latino, and Asian American parents use more harsh discipline than European American parents (Cardona et al., 2000; Chiu, 1987; Hill & Sprague, 1999; Loeber et al., 2000; MacPhee et al., 1996; Pinderhughes et al., 2000). Thus, we hypothesized that these three groups would show more Hostile Interactions than the European American mothers in our sample. Our findings did not support this hypothesis. European American and African American mothers reported having more Hostile Interactions than Latino or Asian American mothers. The observational measures, on the other hand, did not show significance differences between the groups. These findings demonstrate that the ethnic minority

groups do not show greater hostile interactions than European American families but may, in fact, experience fewer hostile interactions. The contradictory findings between parent report and observational measures may reflect higher rates of hostile interactions for the European and African American mothers in this sample. However, as these findings were found for the mother reports and not the home observations, it is also possible that this finding reflects a greater willingness of European American and African American mothers to report this type of interaction. Asian American and Latino mothers may have been reluctant to disclose hostile interactions to a relative stranger. Additional studies are needed to test which measures more accurately reflect actual parenting behaviors.

In addition to the ethnic differences in the levels of prosocial, inconsistent, and hostile parenting, we hypothesized that there would be ethnic differences in the relationship between parenting practices and children's behavior problems. In particular, we expected the relationship between Prosocial Interactions and behavior problems to be stronger for European American families than for ethnic minority groups due to greater consistency between Prosocial Interactions and the value placed on democratic parenting and children's individuality and independence by European American parents (Chiu, 1987; Knight et al., 1993; O'Reilly et al., 1986; Szapocznik et al., 1978).

The findings confirmed this hypothesis as observations of Prosocial Interactions predicted children's behavior problems for European American families, with Prosocial Interactions related to fewer behavior problems. This relationship did not occur for the

ethnic minority families. For instance, observations of Prosocial Interactions did not relate to children's behavior problems for African American or Latino families. However, it predicted children's behavior problems for Asian American families based on parent report but not observation. In this case, reports of Prosocial Interactions related to *greater* behavior problems. It is possible that Asian American mothers engage in prosocial behaviors when their children demonstrate negative behaviors. Future studies examining parenting behaviors occurring prior to and following children's behavior problems for different ethnic groups are needed to clarify this effect. Furthermore, future studies are needed to examine positive parenting practices such as praise that are more consistent with the values of ethnic minority groups.

Unlike Prosocial Interactions, Inconsistency was expected to predict children's behavior problems similarly across ethnicity, as demonstrated by past research (Lindahl & Malik, 1999; McCoy et al., 1999). This relationship was confirmed as observations of Inconsistency significantly predicted behavior problems for each ethnic group, across marital status and parent education, and accounted for 13-15% of the variance in children's behavior problems across ethnicity.

Hostile Interactions were also expected to predict children's behavior problems across ethnicity. However, this relationship was expected to be weaker for ethnic minority groups as past research has shown differences in the effects of authoritarian parenting and harsh discipline on child adjustment based on the family's ethnicity, with physical discipline and authoritarian parenting impacting child adjustment less consistently for ethnic minority children (Blair et al., 1999; Deater-Deckard et al., 1996;

Dornbusch & Brown, 1992; Smith & Krohn, 1995; Williams, 2000). As with past research, the findings based on mother reports were mixed. Hostile Interactions significantly predicted children's behavior problems for European American and Latino families but not for African American and Asian American families.

However, observational measures of hostile parenting revealed a strong relationship with children's behavior problems for each ethnicity, with somewhat stronger relationships for European American and Asian American families ( $r^2 = .38$  for European Americans, .31 for African Americans, .23 for Latinos, and .41 for Asian Americans). The observational measures also revealed a significant relationship between parent education and Hostile Interactions, with greater education relating to fewer Hostile Interactions. Based on the strong relationships detected by the observational measures, it seems likely that Hostile Interactions relate to children's behavior problems across ethnicity. Furthermore, this study demonstrates that parent education likely serves as a protective factor against Hostile Interactions.

Examining the relationship between all three parenting practices and children's behavior problems revealed interesting ethnic differences and similarities. As expected, mother reports of Inconsistency and Hostile Interactions significantly predicted children's behavior problems for European American and African American families. Contrary to our hypotheses, mother reports of the three parenting domains did not predict child behavior problems for Latino families. For Asian American families, the results were mixed. Prosocial Interactions, Inconsistency, and marital status predicted behavior problems, with greater Prosocial Interactions and Inconsistency related to

greater behavior problems. Asian American mothers who lived with a partner reported more Prosocial Interactions. Thus, the mother reports demonstrated distinct differences from the expected relationship between parenting and children's behavior problems for Latino and Asian American families. These findings may stem from ethnic differences in the relationship between parenting and child behavior or may indicate ethnic differences in the sensitivity of report measures.

The observational measures found more consistency in this relationship between the ethnic groups across marital status and parent education. As expected, Prosocial Interactions, Inconsistency, and Hostile Interactions predicted children's behavior problems for European American families. Also consistent with our hypotheses, Inconsistency and Hostile Interactions significantly predicted children's behavior problems for African American families. For Latino and Asian American families, Hostile Interactions alone predicted children's behavior problems. These findings indicate a strong relationship between Hostile Interactions and children's behavior problems across ethnicity and no relationship between Prosocial Interactions and behavior problems for ethnic minority groups. Furthermore, the effects of Hostile Interactions seem to surpass the effects of Inconsistency on children's behavior problems for Latino and Asian American families.

The findings of this analysis demonstrate the differing effects of the three parenting practices on children's behavior problems based on ethnicity as well as type of measure used. In this case, the observational measures seem more sensitive than the parent reports as they provide greater consistency with the relationships found in the

previous analyses. It is possible that this difference reflects greater discomfort by some mothers in reporting some parenting behaviors, especially as the parent reports were administered as interviews, or that it reflects differences in their perceptions of their parenting behaviors from the behaviors observed in the study.

In summary, this study addresses several concerns found in past research. For instance, it included multiple sources and observational measures, which provided valuable information about the validity of the parenting measures used in the study. For example, Asian American and Latino mothers reported using less harsh discipline than African and European American mothers. However, home observations did not show these differences. It is possible that patterns of reporting are different among the groups. Mothers who have assimilated to the United States may be more accustomed to self-disclosure than mothers who have immigrated to this country more recently. The differences found between results based on parent reports versus those based on observations speak to the usefulness of multiple methods of measuring parenting behavior.

Secondly, this study confirms the importance of ethnicity as a factor in parenting and child adjustment. It demonstrates that ethnicity significantly influences the relationship between parenting and children's behavior problems across parent education and marital status among low-income families. For instance, this study suggests that Prosocial Interactions are likely to relate to fewer children's behavior problems in European American families but not in ethnic minority families. These ethnic differences likely reflect differences in parenting values, with European

American parents reporting a greater focus on democratic or authoritative parenting and children's independence than parents from ethnic minority groups, who report a greater focus on hierarchy and children's interdependence (MacPhee et al., 1996; McDermott, 2001; Sue & Sue, 1999). These findings indicate that tailoring interventions to the family's values would aid in treatment efficacy.

On the other hand, this study also demonstrates several similarities between the ethnic groups in the relationship between parenting and children's behavior problems. For instance, all of the ethnic groups showed a strong relationship between Hostile Interactions and behavior problems, whereas they showed a weak or no relationship between Prosocial Interactions and behavior problems. While Prosocial Interactions may not directly relate to behavior problems, these parenting skills may help replace and thereby reduce hostile parenting practices, which were shown to strongly predict children's behavior problems. Thus, these similarities in parenting effects can provide intervention programs with treatment objectives that apply to young children across several ethnicities.

Though this study addressed some of the concerns of past research on ethnicity and parenting, it also had several limitations in its sample and measures. One key limitation in the sample used was the variability within groups. In particular, acculturation level, which has been shown to affect parent-child interactions (Chiu, 1987), was not measured. Furthermore, the family's country of origin was not specified. Though people within an ethnic minority group tend to share some common

values, significant differences can exist between them in factors that interact with parenting such as parent education (Blair et al., 1999; Dumas & Rollock et al., 1999).

This sample also had limited variability regarding ethnicity, the children's ages, and the families' socio-economic status. A vast majority of the families in the Latino group were originally from Mexico, and a majority of the families in the Asian American group were originally from Vietnam. Therefore, while this homogeneity was intended to control some of the confounding factors that have been shown to affect child adjustment, the findings should be interpreted with caution to avoid inaccurate generalizations to families from different backgrounds. Because the sample focused on a specific age group of children within a specific population (i.e., low-income families enrolled in Head Start programs), the findings pertain to this population and cannot be generalized to groups across age and income levels.

Secondly, sound measures for ethnic minority groups have yet to be developed. Therefore, this study based its scales on recent theoretical constructs centered around ethnicity as well as on past studies that found consistent effects of parenting on child adjustment across ethnicity (Blair et al., 1999; Chao, 1994; Kaufmann et al., 2000; Lindahl & Malik, 1999; Radziszewska et al., 1996; Steinberg et al., 1991). However, the validity of the measures used to develop these scales has not been tested for all of the ethnic minority groups included in this sample. Future studies are needed to continue developing appropriate and comprehensive report and observational measures of parenting practices for these groups.

Finally, in order to reduce bias and obtain valid and reliable data, researchers examining ethnicity and parenting are expected to use multiple sources of information, including observational measures (Dumas & Rollock et al., 1999; McLoyd et al., 2000). However, observational measures also raise the issue of bias in coding. Research has shown that the ethnicity of coders influences their perceptions of parent-child interactions (Gonzales, Cauce, & Mason, 1996). This study matched the ethnicities of European American, Latino, and Asian American coders and families. However, it did not match African American families with African American coders, thereby possibly introducing bias to the observational measures for these families. Future studies comparing the effects of ethnicity on observational measures are needed to determine the most appropriate match between coders and families.

In conclusion, this study took a preliminary look into the effects of parenting on children's behavior problems across ethnicity. It expanded on past parenting research by examining specific parenting practices that are consistent with cross-cultural parenting studies, by using multiple measures, including detailed home observations of parent-child interactions, by examining families from several ethnic groups, and by considering significant contextual factors such as children's age, socio-economic status, and family structure.

The results of this study revealed both ethnic differences and similarities in the relationship between parenting and children's behavior problems among low-income families. For instance, Prosocial Interactions predicted fewer behavior problems for European American children but not for ethnic minority groups. This finding suggests

that positive parenting practices may differ in their effects for different ethnic groups. On the other hand, the relationship between hostile parenting interactions and child behavior problems was remarkable in its consistency and strength across all groups. Inconsistency also consistently related to children's behavior problems across all groups. These findings can be useful in the development of parenting interventions that are beneficial across ethnicities by demonstrating the need to target Hostile Interactions and Inconsistency when preventing or treating children's behavior problems. However, a larger body of research is needed to continue the development of consistent definitions of parenting practices, to create sound measures that relate to various ethnic groups, and to examine parenting effects for several different populations.

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