Social support, risk, and adjustment of immigrant preadolescents

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SOCIAL SUPPORT, RISK, AND ADJUSTMENT OF IMMIGRANT PREADOLESCENTS

A dissertation submitted in partial fulfillment of the requirements for degree of

DOCTOR OF PHILOSOPHY

in

PSYCHOLOGY

by

Gastón Luis Bustos

2002
To: Dean Arthur W. Herriott  
College of Arts and Sciences  

This dissertation, written by Gastón Luis Bustos, and entitled Social Support, Risk, and Adjustment of Immigrant Preadolescents, having been approved in respect to style and intellectual content, is referred to you for judgment.

We have read this dissertation and recommend that it be approved.

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The dissertation of Gastón Luis Bustos is approved.

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Florida International University, 2002
Para mamá, papá, Caro, y Carmen, el amor de mi vida. Sin su paciencia, comprensión, apoyo y amor nunca hubiese podido alcanzar esta meta tan importante.
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The current study was designed to explore the salience of social support, immigrant status, and risk in middle childhood and early adolescence across two time periods as indicated by measures of school adjustment and well-being. Participants included 691 children of public elementary schools in grades 4 and 6 who were interviewed in 1997 (Time 1) and reinterviewed two years later (Time 2); 539 were U.S.-born, and 152 were foreign-born.

Repeated measures multivariate analyses of variance (MANOVA’s) were conducted to assess the effects of immigrant status and risk on total support, well-being, and school adjustment from Time 1 to Time 2. Follow-up analyses, including Student-Newman-Keuls post hoc tests, were used to test the significance of the differences among the means of support categories (low and high), immigrant status (U.S. born and non-U.S. born), risk (low and high) and time (time 1 and time 2).

Results showed that immigrant participants in the high risk group reported significantly lower levels of support than their peers. Further, children of low risk at Time
2 indicated the highest levels of support. Second, immigrant preadolescents, preadolescents who reported low levels of social support, and preadolescents of the high risk reported lower levels of emotional well-being. There was also an interaction of support by risk by time, indicating that children who are at risk and had low levels of social support reported more emotional problems at Time 1. Finally, preadolescents who are at risk and preadolescents who reported lower levels of support were more likely to show school adaptation problems. Findings from this study highlight the importance of a multivariable approach to the study of support, emotional adjustment, and academic adjustment of immigrant preadolescents.
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Introduction

Today’s America is a colorful matrix of cultures, religions, races, and ethnic groups. There is not another nation in the world as diverse in its composition. Millions of those who make the United States their home today are from other nations. The concept of immigration is not new in the United States. Since its very beginnings, the United States has been made up mostly of people from other places. Dating back to the 17th century, they came from Europe to seek wealth as the only way to success (Britannica Online, 2000). In the 21st century, immigrants have not changed their ideology; they come to this country to improve their lives. However, today success has varied meanings and immigrants come from both neighboring and remote lands. People leave their homes in places like Asia, Africa, and South America to seek freedom, education, and availability of resources. Throughout the centuries, the U. S. has set a worldwide example in providing opportunities for its new citizens to reach their objectives.

There are over 20 million foreign-born immigrants living in the United States today. The countries of origin and reasons for departure of the first immigrants are different from those of today. Until the first half of the 1900’s, most were from Western Europe. Changes in world economy, immigration policies, and an increased preference for familial- and skill-based selection of immigrants made Asia and Latin America responsible for 85 percent of the immigrant population by the 1980’s (Martin & Midgley, 1994). In order, the top countries of origin were Mexico, the Philippines, Vietnam, China, and Korea. The sum of all immigrants from the Caribbean (e.g., Dominicans, Jamaicans,
Cubans, and Haitians) would put this geographical region in second place in the list (U.S. Bureau of the Census, 1994).

The substantially increasing proportion of the immigrant population relative to natives of the United States is most noticeable in the younger cohorts. Children of immigrant families are expanding in numbers more rapidly than their American counterparts. From 1990 to 1997, the number of immigrant children grew by almost 50 percent, while that of children of parents born in the United States grew by only seven percent. In fact, by 1997, twenty percent of the children in the United States were immigrants (Hernandez & Charney, 1998). This percentage is expected to increase to 50 percent by the year 2030 (Day, 1996). Immigrant children already are the majority in many schools, neighborhoods, and cities across the country.

Research on children's well-being, emotional adjustment, and educational performance has increased dramatically in the last few decades. Children's feelings of loneliness, self-concept, depression and school achievement are dimensions of psychological well-being and adjustment that have received much attention (Canino, Early, & Rogler, 1980; Shuval, 1982; Aronowitz, 1984; Kao & Tienda, 1995; Brizuela & Garcia-Sellars, 1999). Educators and policy makers have also become keenly interested in the relationship between children's social relationships, risk factors, and adjustment (Bronfenbrenner & Crouter, 1983; Dunn, 1993; James, 1997).

Immigrant and native children are no different with respect to their basic needs. The importance of availability of resources that serve as a foundation for successful child development cuts across political and cultural borders (Alatorre Alva & de Los Reyes,
All children share the necessity of elements for physical and emotional protection. Proper housing, nutrition, clothing, vaccinations and health care, social and emotional support, schooling, and recognition of these needs from legislators are important elements in the complex interplay of forces affecting child development.

Social networks have been initially studied with adults (Antonucci, 1990), but their study in conjunction with social support and children's well-being is in its developing stages. It is only recently that this area of developmental psychology has blossomed (Belle, 1989; Cochran, Larner, Riley, Gunnarsson, & Henderson, 1990; Levitt, Guacci-Franco, & Levitt, 1993). Today the amount of research in this area is limited, but it shows a promising future. Studies of social support and psychological well-being of immigrant children are even less prevalent. In the past, immigrant samples were less available to researchers, and findings on immigrant children were difficult to generalize to mainstream America. Today, however, given the dramatic rise in the population of child immigrants and children of immigrants, research on the social forces that affect emotional well-being and education levels in this population is in greater need than ever before.

The study of academic achievement in relation to immigrant status is not an unfamiliar field to psychologists and other specialists, but the increasing heterogeneity of immigrants (e.g., nationality, immigrant generation) has raised new questions about the dynamics responsible for the results in this area of research. Statistical and methodological advances, as well as new emerging theories, have prompted those interested in the adjustment of immigrant children to look beyond academic achievement scores as predictor or outcome measures. The focus on proxy variables, such as standard
achievement scores, may obscure fundamental mechanisms responsible for children's level of adjustment. This review attempts to analyze academic achievement concurrently with underlying factors that describe the process of adaptation, or lack thereof, of immigrant children.

Although all children have basic needs, immigrant children may be at a disadvantage. Their lives are faced with a nonnormative event with the power to influence their families' ability to obtain tangible and intangible goods. There are a number of factors associated with migration that can influence how families adapt to life in a new culture. These factors may be influenced by political and social institutions in the form of legislation, by personal characteristics, such as belonging to a particular ethnic group or race, and by the dynamics within the family (Booth, Crouter, & Landale, 1997).

With the increasing heterogeneity of immigrants it has become more complicated to conclude who is at an advantage or disadvantage. Today's immigrants are from many socioeconomic, ethnic, political, cultural, and educational backgrounds. Factors likely to benefit those who migrate have been identified, but they are unlikely to be uniformly shared across certain groups of individuals (Guerra & Jagers, 1998; Rumbaut, 1997). Likewise, different factors associated with negative adjustment may affect different people differently.

Most immigrant children living in densely populated cities across the country are minorities, usually Black or Hispanic, and of low income. They are a group that has to face the cumulative adversities of low income and immigration. Living in a low income neighborhood puts the child's physical as well as psychological safety at risk. Children
from poor families are more likely to experience depression, low self-esteem, health problems, and to be aggressive (Canino, Early, & Rogler, 1980). In the case of immigrant families, secure employment may be difficult to find and caregivers may have no option but to work multiple jobs with irregular hours. This can result in an impediment for parents to provide adequate and consistent support for their children (Igoa, 1995), a vital necessity for the children’s well-being and success in any period of their lives.

Some immigrant families are obligated to adopt a new system of life more limited and with fewer available resources. In some cases, the family has to relinquish the lifestyle of the old country for one with lower living standards, and adults are forced to give up their professional credentials and careers that would allow for an easier transition. It has been found that this type of shift can impact the children’s well-being even when temporary (Kopala, Esquivel, & Baptiste, 1994).

The home may also be a setting for stressful events in the context of family dynamics (James, 1997). Immigration suspends or discontinues family and social networks in many families. Parents, siblings, extended family members, and other significant people may be left behind and their support is consequently out of reach. This may be especially critical for adolescents who experience prejudice, obstacles due to language differences, and dissonance of self-identity. Furthermore, according to the convoy model of social support (Levitt, Guacci-Franco, & Levitt, 1993), the composition of the supportive network of a preadolescent may be different from that of an adolescent. Preadolescents are more likely to seek support from extended family members while adolescents are more likely to seek support from their peers. The impact of people absent
from the network should be observed developmentally and in relation to the life stage of the child (Eisenbruch, 1988; Laosa, 1989). 

In sum, immigrant children and their families have to deal with a variety of issues. Some of these are part of the normative development of the family as a unit and others are the result of the nonnormative transition of migration and adaptation to a new culture. In addition, each family member is dealing with his or her normative and nonnormative development as well. The study of immigrant children and their lives brings new challenges to the scientific community. Studies have shown that the generalization of findings across groups has become increasingly difficult and that different groups of people may have different socialization processes, family dynamics, or life experiences. There is a particular need to study the social networks of immigrant children and how variations in the availability of social support affect immigrant child well-being and academic success. Also, events and circumstances that may act as social-ecological risk factors for these children's well-being and school adjustment should be considered. Furthermore, a longitudinal perspective regarding these mechanisms may shed light on the dynamic or rigid nature of these forces and their impact on individual change.

In the present study, immigrant and nonimmigrant children were compared on a number of social network, well-being, risk, and school achievement measures across a two-year period representing the transition to adolescence. The following sections of this introductory review will outline previous research on immigrant children and related issues. The first section will summarize findings on the well being of immigrant children and adolescents. The second section will examine the literature concerning academic
performance and adjustment of immigrant children. The third section will be a review of
the literature on ecological risk factors impacting the adjustment of immigrant children and
adolescents. The fourth section summarizes the literature on social support with
immigrant samples. The last section will include a summary of the reviewed literature and
explain the propose research.

Well-being of Immigrant Children and Adolescents

The welfare of individuals has always been a major focus of psychological
research. As new methods are developed, theories created, and populations studied,
boundaries are pushed back and discoveries are made. The study of immigrant children’s
well-being is relatively new, and each discovery brings a new set of challenges. Although
some researchers have not found differences in well-being between immigrant and
nonimmigrant child samples (Fuligni, 1998; Weinberg, 1979), others have reported lower
well-being in immigrant children (Baptiste, 1993; Cornille & Brotherton, 1993). This
section summarizes findings on the well-being of immigrant children and adolescents.

Rousseau, Drapeau, and Corin (1996) studied the relationship between academic
achievement, learning difficulties, and emotional problems in refugee children as perceived
by their teachers and parents. The authors were interested in the use of learning
difficulties as an indicator of emotional problems. Children were selected through cluster
sampling. They were between the ages of eight and twelve, born outside of Canada (the
host culture), and from Southeast Asia or Central America (N=156). Parents completed
the Child Behavior Checklist (CBCL) and teachers and school officials were surveyed
about the existence of learning difficulties in the immigrant child population. Academic
achievement was measured through grade point average and standardized test scores. Correlational analyses were the statistical tool of choice. The two groups had comparable GPA’s, but Central American children were rated as having more learning difficulties. School officials saw Central American children as having more learning difficulties and rated their behaviors as more extroverted and hyperactive. The global score for externalizing problem behaviors was related to learning difficulties for both groups. The researchers questioned the factors that influenced the school authorities’ ratings of the children, without discarding a possible bias. The researchers’ aim of predicting emotional problems via school achievement was not supported. Furthermore, the assessment of internalized symptoms, which may be masked by cultural expectations, may have been better assessed via self-reports.

Pawliuk, Gritzenko, Chan-Yip, Gantous, Mathew, and Nguyen (1996) observed children of immigrants’ psychological functioning in relation to social variables related to immigration. The sample consisted of 23 boys and 25 girls from six to seventeen years of age (M=11.7) of various ethnic backgrounds and socioeconomic status. Eleven of the children were first generation immigrants. Children completed a modified version of the Bicultural Involvement Questionnaire (alpha=.67) developed by Szapocznik, Kurtines, and Fernandez (1980). They also answered self-reports to assess depression, anxiety, and psychosomatic symptoms. Parents completed the Child Behavior Checklist (Achenbach & Edelbrock, 1983) to assess their children’s internalizing and externalizing behaviors and they provided sociodemographic information, such as family relationships.
Results concerning psychological functioning indicated that 23 percent of the sample showed extreme behavioral difficulties, according to parent reports. Forty percent of the children were rated by their parents in the clinical range of the social competence subscale. According to self-reports, 63 percent of the children scored lower than the self-esteem scale average. In addition, 23 percent of the sample scored in the clinical range for depression. The authors propose that the immigrant child’s feeling of alienation may be better assessed with measures of internalizing and covert behaviors.

Psychological well-being and educational achievement of immigrant adolescents were analyzed for the 1988 data of the National Education Longitudinal Study (NELS) (Kao, 1999). The first focus of the analysis was on the possible differences between first, second, and third generation immigrants for the outcome variables. The second focus was the determination of to what extent these differences could be explained by the children’s previous education, problems with the English language, problems learning, and involvement in specialized programs. Lastly, the relationship between generational differences in well-being and academic performance were observed. The subsample used was composed of 24,599 eighth graders and was selected due to its oversampling of Asian and Hispanic students, large number of recent immigrants and minorities, and the participants’ involvement in the school system. Psychological well-being was calculated with locus of control, self-concept, and alienation measures. Math and reading standardized test scores and GPA were indices of academic achievement.

Well-being scores of immigrant children were compared against a baseline score determined by that of third generation White students. Results for locus of control
indicated significantly lower levels for immigrant Asians, Hispanics, and Blacks. Similarly, immigrants of all racial and ethnic backgrounds reported feeling alienated. Low self-efficacy (locus of control) was determined to be associated with absence of English as home language, poorer grades, and negative school experiences (i.e., skipping classes or repeating a grade) for Hispanic and Black students. Feelings of alienation, although significant across immigrant groups, were associated differently to predictor variables; Asian and Hispanic first and second generation students were more likely to feel alienated. Reported self-esteem showed minor group differences, even after controlling for SES; adolescents with absence of English as home language were more likely to report lower levels. As reported in previous studies, there was a negative relationship between immigrant generation and academic achievement.

Vega, Khoury, Zimmerman, and Gil (1995) analyzed data from a longitudinal study in the South Florida area to learn how sociocultural and psychological factors affect the behavior of immigrant adolescents. Since one of the study's main interests was the assessment of illegal drug and alcohol use among Hispanic adolescents, which is significantly lower among female Hispanics, only male participants were selected. Hispanic, non-Hispanic White, and African-American students (n = 2,360) were interviewed and their parents and teachers completed the Child Behavior Checklist (CBCL). Ethnic background and level of acculturation problems were designated as predictor variables, with parents' CBCL and teachers' CBCL scores as outcome variables. Parents’ CBCL scores were significantly lower for Cubans and higher for African-Americans, respectively. Hispanic subgroups (i.e., Puerto Ricans, Colombians,
Nicaraguans, Cubans, and other Hispanic) did not have significantly different scores among themselves or compared to the other groups, although they were lower. Teachers’ CBCL scores indicated more behavioral problems for Puerto Rican and African-American students, while the only group to score significantly higher than the others in the Total Problems score was African-American.

Acculturation problems and well-being for first and second generation Hispanic adolescents were examined. Foreign-born Hispanics’ only significant source of acculturation stress was language problems and it exceeded clinical levels in both the teachers’ and parents’ CBCL. U.S.-born Hispanics’ ratings on the CBCL did not show significant sources of stress, while the Teacher Report Form (TRF) indicated three. Language conflicts, perceived discrimination, and perception of a closed society (above the clinical level) were significant sources of stress. Acculturation conflict was not. Parent-reported behavior problems were present only for first generation students, and teacher-reported problems were present for both first and second generation immigrants. SES and sociocultural differences among the Hispanic groups did not affect the results significantly.

School Adjustment of Immigrant Children

Research on the immigrant population has been inclining towards children's development and adjustment as a response to their increasing numbers since the 1960's (Hernandez, 1999). Research with adult immigrants is still widespread, but many scholars have realized the importance of studying a group consisting of more that one fifth of the child population of the United States. Most of these children are concentrated in specific
regions of the U.S. where they have become the majority. Their enrollment and influence on the American school system call for a documentation of their school performance and the social-ecological forces responsible for their level of performance. This section reviews research on the academic adjustment of immigrant children.

Early studies of immigrant groups and their school performance observed academic achievement in relation to English proficiency (Park, 1914; Gordon, 1964). These studies follow a theoretical orientation that explains immigrants' adaptation to American culture as a linear process. According to Park, immigrants must pass a sequence of adaptive stages before their assimilation into American society. After initial contact, the immigrant group experiences conflict which is followed by the majority's accommodation of the immigrant group. Assimilation into mainstream America then follows, and it is displayed by the immigrant group's second and subsequent generations having higher educational achievement, more involvement in activities with the host culture, and better command of the English language than do first generation immigrants (Matute-Bianchi, 1986). This linear process of assimilation implies acquisition of new language, social and survival skills while simultaneously relinquishing old ones.

Contemporary researchers, aware of the cultural and ethnic diversity in America, have argued for a more adaptive view of the process of assimilation in which immigrants do not replace old skills with new ones. In fact, a bicultural mode of adaptation may be more resourceful and functional than a monocultural approach (Szapocznik & Kurtines, 1980). Immigrant children may therefore use their various skills according to the demands of their everyday life situations and diverse social arenas. Others have criticized the linear
approach of assimilation for relying on one single factor (i.e., language) as predictor of
school achievement (Brizuela & Garcia-Stellers, 1999). Such univariate emphasis may
obscure the interplay of contextual and individual variables critical in other areas of
personal adjustment (Bonfenbrenner, 1979).

The orientation of current research on the academic achievement of immigrant
children has, for the most part, evolved into a discipline that encompasses child personal
variables as well as those of their cultural and social worlds (Hamilton, 1983; Sternberg &
Kolligian, 1991; Moll, 1992). In general, studies indicate that immigrant children perform
better academically than their nonimmigrant peers of the same cultural background
(Fuligni, 1988a,b; Hernandez & Charney, 1998; Nord & Griffin, 1999; Suarez-Orozco &
Suarez-Orozco, 1995). Nevertheless, results are not consistent across groups of children
from diverse sociocultural background and socioeconomic status. For example, a study of
Cuban, Haitian, and Jamaican immigrant midadolescent students reported a significant
difference in aspiration and achievement among these groups. Jamaicans scored higher
than Cubans in both dimensions, while Haitian participants displayed high aspirations and
low levels of achievement (Rumbaut, 1997). A smaller study in the same geographical
area indicated a lack of emphasis on academic achievement reported by parents of Haitian
immigrant students, symbolizing the relevance of family factors on academic performance
(DeSantis & Ugarriza, 1995).

Other related research reports a higher risk of school drop out for Latin-American
immigrants (Fuligni, 1997; Kao & Tienda, 1995). Fuligni's study of immigrants of Latino,
East Asian, Filipino, and European background living in California found ethnicity, study
time, and student attitudes to be associated to academic achievement. In contrast with most of the literature, however, U.S.-born Latino immigrants were more likely to have better grades than first generation Latinos. Interestingly, a related study by Suarez-Orozco and Suarez-Orozco (1995) reported that first generation Latinos had fewer problems with their parents, had higher expectations for achievement, and their activities were less peer oriented. The authors concluded that the results describing first generation Latinos at higher risk for dropping out of school may be the result of an alienating environment, economic hardship, and a sense of familism that may pressure the child to contribute to the family's economic situation by joining the work force. A study by Kao and Tienda (1995) also supported this position that social systems directly and indirectly linked to the child's life influence his or her academic achievement by finding a relationship between parents' level of education, optimism, and socioeconomic status and students' grades.

Portes and McLeod (1996) compared the adjustment of children of four immigrant groups that varied in geographical location and access to resources in America. Mexicans in California and Haitians in Florida represented the sample with limited resources. Vietnamese in California and Cubans in Florida represented the sample with more instrumental and social resources (i.e., governmental assistance and political asylum). Results indicated a relationship between parents' socioeconomic status and their children's academic achievement. Haitian and Mexican immigrant children were more likely to attend inner city schools and perform poorly. Parent reports for the Florida-based groups indicated an optimistic view of Cuban parents with regard to their children's future,
contrasted by Haitian parents' concern for their children's welfare and safety. Immigrant children living in economic hardship may assimilate into a social class characterized by poor school outcomes and negative school attitudes (James, 1997; Zhou, 1997; Waters, 1997). The inverse direction of the relationship between years in the U.S. and academic achievement for immigrants further supports this notion by illustrating the deteriorating nature of the living conditions of those in economically disadvantaged homes (Barr & Lacey, 1998; Fuligni, 1998b; Rumbaut, 1997; Kao, 1999).

Ecological Variables and the Well-Being of Immigrants

The family is one of humankind's institutions. Through the centuries it has evolved together with its members to accommodate their welfare and survival needs. The family can serve as a shelter as well as a base for rehearsal and preparation for the challenges of the world. Family dynamics are not uniform across individuals, and they may impact people differently. The following is a review of studies concerning family variables and what role these play in the well-being of immigrants.

De Santis and Ugarriza (1995) did a descriptive study of the differences between Cuban and Haitian families living in the U.S. They recruited 30 Haitian mothers and 30 Cuban mothers from the South Florida area. Mothers' length of residence in the U.S. was not to exceed four years and their children were not older than adolescence. Mothers completed a questionnaire of sociodemographic characteristics, household structure and function, concepts of child health and illness, and childrearing beliefs and practices. Results indicated that all Haitian families were nuclear, whereas 23 percent of Cuban households included extended family members. Seventeen percent of the Cuban families
shared household and child responsibilities with extended kin. Cuban mothers viewed familism as central in family functioning. The family is an interdependent unit that can serve as the source of tangible (e.g., employment opportunities, instrumental assistance) and intangible resources (e.g., support, love). Haitian mothers expect their children to be subordinate and respectful of elder kin. Obedience and respect for authority cultivate a sense of interdependence among family members as well as cooperation and noncompetitive behavior. However, all mothers believed American values and customs to be considered factors for intergenerational conflict. The more children acculturate, the more autonomous, individualistic, and nonfamily centered they become. The authors also indicate that Cuban and Haitian families' ability to rely on their extended members for assistance and support is a significant advantage, and families unable to do so may face distress, particularly for their children.

Munroe-Blum, Boyle, Offord, and Kates (1989) studied child immigrant status in Canada as a predictor of child psychiatric disorder, school performance, and service utilization. Subjects were 2852 children (251 immigrants) aged 6 to 16 from the Ontario Child Health Study living in urban and rural areas. Gender was evenly distributed (M=1443, F=1404, missing=5). Surveys were conducted with the female head of household of each child. The surveys measured psychiatric disorder with a checklist of items based on the Child Behavior Checklist (CBCL) and DSM III criteria. Child school performance and service utilization outcomes also were derived from the survey. Results indicate that immigrant children were two times more likely than nonimmigrants to live on low income, be at higher risk for social disadvantage, and live in over crowded conditions.
They were also one and a half times more likely to experience family dysfunction. Logistic regression analysis indicated that there were no differences for academic outcomes, and immigrant children were less likely to use health services. Immigrant status did not make an independent contribution to psychiatric disorder but family dysfunction did. The criteria used to diagnose psychiatric disorder in this study were based on clinical measures and therefore had a higher cutoff than would a measure based on non-clinical populations. The relationship between family dysfunction and well-being in immigrant children needs to be explored further with a detailed description of family characteristics, such as perceived support, and well-being measures that can assess significant differences without clinical standards.

Gil, Vega, and Biafora (1998) conducted a longitudinal study to determine how illicit drug use is associated to family structure and environment with a sample of 3413 African American, White non-Hispanic, and U.S.-born and foreign-born Hispanic boys. The participants completed questionnaires at three different times progressively from middle school to high school. The boys were placed in four different family structure categories: two parent family, single mother family, mother and other adult family, and changed family. Drug use was measured through a dichotomous variable and only subjects who were not users at Times 1 and 2 but were at time 3 were included in the analyses. Family pride (alpha > .87) and family cohesion (alpha > .77) were assessed by reliable measures previously used by the researchers. Family communication was also used to assess family environment.
Results showed that foreign-born Hispanics and non-Hispanic White adolescents were more likely to live in two-parent families. African Americans and U.S.-born Hispanics were most likely to live in single mother households, and foreign-born Hispanics the least likely. Illicit drug use initiation was least likely among adolescents of two-parent families. For adolescents from single-parent families, high drug use initiation was most common for U.S.- and foreign-born Hispanics only. Family factors were significant for all groups, having their strongest effects on drug use initiation for foreign-born Hispanics. This effect was related to the foreign-born Hispanic group having the highest rate of family deterioration from Time 1 to Time 2. Logistic regressions were used to determine the relationship between drug initiation and deteriorating changes in family variables for all groups. For U.S.-born Hispanics, there was a significant relationship for family variables at Time 1 and drug use. For foreign-born Hispanics, there was a similar relationship as well as one between drug use and change in family variables from Time 1 to Time 2, with decreased family pride as the strongest predictor.

Health status and risk behaviors of immigrant adolescents were assessed in a massive project that included 20,000 adolescents in grades 7 through 12. The National Longitudinal Study of Adolescent Health (Add Health), conducted in 1995, allowed researchers to gain insight into the physical health, emotional health (i.e., psychological distress and positive well-being), and self-reported risk behaviors of first, second, and third generation immigrants (Harris, 1999). First generation immigrants were those who were born in a foreign country, second generation immigrants were those who were born in the U.S. but whose parents were born in a foreign country, and the third generation
were those born in the U.S. and whose parents were also born in the U.S. Third generation participants were grouped with natives of the U.S., for their time in the U.S. is expected to have Americanized them to a level not significantly different from that of non-immigrants. Items from the CES-D Scale and Beck Depression Inventory were used to create two measures of emotional health. The first was a 15 item measure of depressive symptoms and the second a four item measure of positive well-being. Parents of 17,394 adolescents were interviewed at home to assess the structural and supportive properties of the family, its income, mother’s education, and parental supervision. Family structure described parental or guardian figures. Support was defined as a combination of income level and parental supervision.

Results support a linear pattern of assimilation that can be observed by generation with changes in degree of physical health and risk behaviors. First generation immigrants had significantly fewer physical problems and engaged in significantly fewer risky behaviors than second generation immigrants. Second generation immigrants had significantly fewer physical problems and engaged in significantly fewer risky behaviors than third generation immigrants. Results for emotional health, although lower for first generation immigrants, were not significant. Furthermore, the strong relationship between place of birth and physical health and engaging in risky behaviors was not reduced after controlling for family context. Another relevant finding was that of second generation children being likeliest to live with their biological parents, third generation children the least likely, and first generation children between these two. This is an area that deserves further inquiry. The author concluded that foreign birth acts as a protective factor,
regardless of country of origin and place of birth. The author also indicated the need to study a number of mechanisms potentially responsible for this protective effect (e.g., the children’s extended kin relationships, parenting behaviors, social networks, and social support).

The Children of Immigrants Longitudinal Study began in the Spring of 1992 (Time 1) and concluded in 1996 (Time 2). The San Diego Longitudinal Sample is a subsample of this major study that was examined to learn about the relationship between sociocultural factors and psychological adjustment of immigrant children (Rumbaut, 1999). Rumbaut analyzed Time 2 data which came from 2063 adolescents attending school in the area. Participants were interviewed at school and 90 percent were of Mexican, Filipino, or Vietnamese background. The adolescents were first (39%) or second (61%) generation immigrants. They provided personal information that was utilized to predict psychological well-being. The sets of predictor variables were (1) gender, national origin, age at arrival; (2) intrafamilial context and stressors; (3) extrafamilial context and stressors; (4) achievement aspiration; and (5) physical appearance and popularity with the opposite sex. Well-being measures of self-esteem and depression were assessed via the Rosenberg and CES-D scales, respectively.

Initial findings revealed a negative relationship between length of stay in the U.S. and number of people living in the household. Length of stay in the U.S. was also negatively related to the child living with both natural parents; this was most noticeable with the Mexican group. Significant gender differences were also found, with females more likely to be depressed and to have lower self esteem. Family structure and relations...
were significantly associated to well-being and academic achievement; children who lived with both natural parents and scored lower on parent-child conflict were better adjusted and had higher GPA's. Familism was found to be generally higher for first generation than second generation immigrant adolescents. Familism also showed a decline with length of stay in the U.S., supporting the notion of the salient role of individualism in American culture. The only Hispanic group of the sample, Mexicans, showed high family cohesion and familism and low parent-child conflict in first generation data, but reported average cohesion and conflict in second generation data. Ensuing multiple linear regression analyses examined the independent effects of the five predictor variables on self-esteem and depression. The entire sample showed significantly high levels of depressed affect and self-esteem. From the first set of variables, age at arrival showed a positive relationship with depression, with those who recently migrated being more depressed. Filipino and Vietnamese children had lower levels of self-esteem. Intrafamilial factors were the strongest determinants of self-esteem and depression; parent-child relations had the most significant effect. Family structure emerged as a protective factor against depression. Extrafamilial factors (e.g., unsafe school, teachers’ fairness) were related to depression only. Achievement aspirations were also related to self esteem. Satisfaction with one’s looks and popularity with the opposite sex showed positive relations with self-esteem and negative relations with depression.

Short and Johnston (1997) examined the influence of family variables on children’s adjustment after immigration. The stress-buffering model was tested in a sample of immigrant Chinese children and their mothers. Families that had migrated no earlier than
1993, had a child, and were of Chinese background were included in the sample. Mothers completed home surveys that included the Hassles and Uplifts scale, Mother Immigration Stress scale (MIS), CES-D [depression] scale, Symptom Checklist-90-Revised (SCL-90-R), Multidimensional Scale of Perceived Social Support, Parent Support Scale, and CBCL. Surveys were translated to Chinese script by seven bilingual mental health professionals. Ninety-seven mothers of 55 girls and 42 boys returned complete questionnaires. The average child age was eight and all participants lived in Canada.

In general, children of this study did not score differently in the number of behavior problems from nonimmigrant children their age. As hypothesized by the researchers, immigrant children whose mothers reported low levels of stress and distress had fewer adjustment problems. Regression analyses indicated a relationship between maternal support (support perceived by the mother) and girls’ outcomes, but maternal support acted as a protective factor for boys only in the presence of family stress. On the other hand, maternal distress was not buffered by any variable for either boys or girls; but acted as a significant predictor of boys’ behavioral adjustment. There was also an unexpected interaction: the higher the mother's perception of social support from her social network, the stronger the relationship between mother's distress and boy's behaviors.

The authors denote the inappropriate generalizability of the results to other immigrant groups. They also warn against the subjectivity of the mother's self reports which may contrast with the opinions of other family members. Furthermore, Short and Johnston suggest the inclusion of other family variables and or child variables. It is also
important to note the lack of covert subjective behaviors and experiences of the children in this study.

Social Support in Immigrants

Our awareness of human beings' need for social contact and relations is as old as our self-perception as social beings. We are social beings and therefore need others in our lives. We are able to provide and depend on those who are or are not our kin. Differences in preference regarding exchange for support have evolved as we have evolved as a social species, and the mechanisms responsible for these preferences are complex and often associated with a specific situation and one's customs. The following section will outline the literature on social support in immigrants.

Golding and Baezconde-Garbanati (1990) investigated ethnicity, culture, and social resources as predictors of social integration and social support. Data were from a larger study conducted by the National Institute for Mental Health. Interviews were conducted with 3131 adults residing in California. Subjects were 538 U.S.-born Mexican-Americans, 706 Mexico-born immigrants, and 1149 U.S.-born white Americans. Regression analyses showed that Mexico-born immigrants had social networks that emphasized spouse and children the most, were more likely to be married, and less likely to contact relatives outside the household. Mexico-born immigrants also reported less emotional support from their social networks. Differences in support from relatives was significant for Mexico-born immigrants only (younger subjects were less likely to receive support). The authors add that high regard for the family may result in distress if it is
absent or fragmented. They also suggest further research targeting cultural differences in social network characteristics and how these relate to well-being.

Gil and Vega (1996) conducted a study of stressors due to acculturation and how these relate to family dynamics. The sample was limited to Cuban and Nicaraguan children and one of their parents. The 674 Cuban and 211 Nicaraguan middle school students (6th and 7th grade) were from various schools in the South Florida area. Students were interviewed at school and parents by telephone. Measures assessed acculturation stress, family pride, familism, parent/child conflict, and family cohesion. Adolescent data showed that, overall, 25 percent of Cubans and 34 percent of Nicaraguans reported acculturation [family] conflict, which was positively correlated with acculturation level. Familism and acculturation for adolescents were positively correlated with time in the U.S, while family cohesion (parent-reported) was negatively correlated. These correlations indicate that the family’s importance as a source of support increases with time spent in the U.S. and increased acculturation [family] conflict. At the same time, however, familial bonds seem to dissolve. This change in family cohesion (e.g., wanting to spend free time with a family member) reported by parents may be related to the children's age. Children’s social networks change according to life experiences, and this sample is in its preadolescent stage, which is a transition from focus on family to focus on peers and the development of new relationships. Furthermore, the decrease in family cohesion, the increased need for family support, and the increase in [family] acculturation conflicts call for research in this area. Namely, studies are needed regarding sources of
support of immigrant preadolescents taking into consideration kinship beyond the nuclear family and fragmented networks due to migration.

In an effort to examine psychosocial stressors and coping responses of a Hispanic sample, Padilla, Cervantes, Maldonado, and Garcia (1988) interviewed a group of Mexican and Central American immigrants. Adult respondents (mean = 34 years) who had been living in the U.S. for less than ten years completed a stress and coping open-ended interview. After the general stressors and coping questions, the 31 males and 31 females also completed the anxiety and depression subscales of the SC-90-R.

The authors employed a content analysis method to assess each interview individually. Language problems and not having a job were the most common stressors for both males and females. When asked about the coping response for language problems for Hispanics in general, 59% mentioned taking English classes, but when asked about their personal coping responses, only four responded with studying as the solution; listening to others was the most common response. The most common personal response to dealing with the need of a job was to depend on family and friends. Psychological well-being measures showed slightly, although not significantly, higher scores for depression and anxiety for the Central American sample. There was, however, a significant gender difference indicating much higher levels of reported depression for males. Self-esteem was significantly higher for those with higher proficiency English. Self-esteem was also, although not significant, the strongest predictor of both depression and anxiety.
Keefe, Padilla, and Carlos (1979) conducted a three-year longitudinal study on the function of the extended family as a support system with a Mexican-American sample. The study had three data collection points. Time 1 data for 666 Mexican-Americans and 340 Anglo-Americans with a mean age of 42 were reported. Participants were interviewed for an average of 25 minutes. These interviews showed a marked difference in local extended-family integration for the Mexican-American and Anglo groups. While 9 percent of Mexican-Americans and 54 percent of Anglos indicated no kin present, 30 percent of Mexican-Americans and 1 percent of Anglos reported high integration. Furthermore, Mexican-Americans were significantly more likely than Anglos to use kinship as a source of emotional support about an emotional problem. This finding was still significant after controlling for proximity; Anglos were less likely to have kinship networks or family members in the area. Mexican-Americans consistently relied on family, whereas Anglos sought support from family and friends, even when family support was available. Both groups relied on the extended family, but Anglos tended to approach friends, neighbors, and co-workers significantly more. Real kin were the primary source of support for the Hispanic group.

Sources of support for school related issues were examined for a group of Hispanic adolescents (Morrison, Laughlin, San Miguel, Smith, & Widaman, 1996). Participants were 698 students in grades seven and eight. They answered a questionnaire of school related concerns (e.g., getting along with students, looks, getting along with family members, getting along with teachers, etc.) and the person(s) (parent, peer, teacher,
etc.) with whom they are most likely to talk about each concern. The students attended a predominantly Hispanic (62%) school in California.

Results for issues of greatest concern for the students placed getting along with other students, schoolwork, looks, getting along with family members, and getting along with teachers as the top five. Peers and teachers were the most common source of support for problems getting along with other students. Teachers and parents were the preferred sources of support for dealing with schoolwork concerns. Peers and siblings served as sources of support for problems with one’s looks. Parents were sought when concerns were related to getting along with a family member. Issues of dealing with teachers were most often discussed with parents. Boys were more likely than girls to choose nobody as source of support. Girls were more likely to approach teachers and less likely than boys to consult parents. In general, parents and teachers were the primary sources of support. The authors conclude with the possibility of this sample’s limited peer network as a result of their immigrant status and their traditional preference for authority figures for dealing with the issues discussed.

Summary and Conclusions

Preadolescence is a time in human development where individuals are capable of judging, interpreting, and responding to life experiences. They also respond to the feelings brought about by life experiences. In the case of immigrant children, there is a cumulative effect of challenges from both normative and nonnormative circumstances. Normative challenges include those associated with the expansion of peer and friend networks. Nonnormative challenges associated with being an immigrant, such as the absence of a
loved family member and unsatisfactory living conditions, may contribute further to negative psychological adjustment and school performance.

Immigrant children are more likely to report lower levels of perceived social support. They are also more likely to report lower levels of psychological well-being than their nonimmigrant peers. With respect to academic adjustment, the literature is inconclusive to whether immigrant children perform significantly differently from nonimmigrants. The same inconsistency in results is found in studies of academic performance over time. Furthermore, the majority of research in this area is cross-sectional and specific to adolescents, and there is a need to observe these factors prospectively and in the time period preceding adolescence (i.e., the transition from childhood to adolescence).

Previous research has shown that immigrant children’s psychological well-being and academic achievement are associated to a number of social factors. Immigrant children’s psychological well-being may be associated with social network variables, such as family structure and the availability of extended kin. Social support also emerged as a potential influence in immigrant children’s well-being. Research on the academic achievement of immigrant children in relation to length of stay in the U.S. is not conclusive, but school grades, in general, are reportedly associated with the presence of both natural parents, conditions of the neighborhood in which the child lives, conditions of the neighborhood in which the school is located, and the family's economic situation. Other family variables, such as school attitudes and support availability, are also associated with school performance and psychological well-being. However, although recent studies
of child well-being have observed a number of variables, most research on achievement has studied contextual variables in univariate fashion, without integrating them to provide a clearer vision of the pathway to educational failure or success. Furthermore, there is a need to examine the interplay between variables of risk and those of an adaptive and resilient nature, such as social support. Finally, such examination should avoid confounds rooted in language proficiency differences, and it should also investigate shifts in the force of the predictors of emotional and academic adjustment over time.

The Current Study

The current study was designed to explore school achievement and psychological well-being of immigrant and nonimmigrant preadolescents with a multivariate scope. The predictive influence of the interplay of risk and social support on preadolescents' adjustment was examined in relation to time and immigrant status. The following research questions were posed.

Research Question 1: Are there differences in immigrant preadolescents' perceived social support across time, and does this differ by risk status? Based on the developmental literature, the adolescent transition is an age of expanding social networks when new relationships are created, without necessarily ending old ones. Such expansion of the social network has been reported by Furman and Buhrmester (1985) and Levitt et al. (1993) in cross-sectional studies. Nevertheless, Time 1 data analysis of immigrant participants from the data pool for this study revealed that nonimmigrant children reported higher levels of total perceived social support that did immigrant children (Bustos, 2000). Thus, it was hypothesized that immigrant preadolescents would report higher levels of
perceived support at Time 2, but lower levels than nonimmigrants at both Time 1 and Time 2. Immigrant preadolescents of high risk status at Time 1 were expected to report the lowest levels of support.

Research Question 2: Are there differences in immigrant preadolescents' well-being across time, and does this differ by support level and risk status? A segment of the literature has reported lower levels of well-being for immigrant samples when compared with nonimmigrant samples, consistent with Time 1 analyses of the current sample (Bustos, 2000). Also, the literature shows evidence of a link between one's well-being and contextual risk factors. It was hypothesized that the significant difference in well-being would persist from Time 1 to Time 2. Further, it was hypothesized that immigrant preadolescents of high risk status who also reported lower levels of perceived support would report particularly lower levels of well-being at both times.

Research Question 3: Are there differences in immigrant preadolescents' school adjustment across time, and does this differ by support level and risk? The link between school performance and risk is well documented in the literature. This relationship was expected to persevere for immigrants as well. Further, mirroring the association between perceived social support and psychological outcome, perceived social support was expected to impact school adjustment outcome. It was hypothesized that immigrant preadolescents of high risk status who reported lower levels of social support would show the sharpest declines in school adjustment.

In general, the limited longitudinal research on preadolescent immigrant students indicates that they may face a number of issues associated with their psychological and
academic adjustment. Assessing their levels of perceived support and ecological risk in the transition to adolescence was expected to shed light on previously unanswered questions that relied on cross-sectional or univariate data.

Method

Sample and Procedure

Participants were part of a larger study (Levitt et al., 1998) of the social ecology of well-being in the transition to adolescence. Personal interviews were conducted in the spring of 1997 (Time 1) with 782 children in grades 4 and 6 of eight lower and middle income public elementary schools in a Southeastern metropolitan area. Repeat interviews were conducted in the spring of 1999 (Time 2) with 691 (88%) of the original sample. Most of the participants (82%) were in middle school at the time of the second interview. Tracking of participants through centralized school records, repeated contacts with parents, and modest incentives facilitated sample retention. Participants who were not reinterviewed had moved from the area. Only one participant refused the second interview. Participants who were reinterviewed were comparable to those who were not reinterviewed with respect to gender, ethnicity and economic status.

The present report is based on data for participants interviewed at both time periods with complete data on the study measures (N=691); 539 were U.S.-born, and 152 were foreign-born. Of the students in the immigrant subsample, 19% were from Afro-Caribbean countries, 67% were from Spanish-speaking countries, and 14% were from European countries. Immigrants constituted 12% of the African-American sample, 10% of the European-American sample, and 27% of the Hispanic-American sample. Of
these, 354 were girls and 337 were boys. Participants were 9 to 13 years of age at Time 1 (M = 10.68, SD = 1.14). The sample was ethnically diverse, including 220 African-American, 191 European-American, and 280 Hispanic-American children. Given the demographic characteristics of the area, it was not possible to equate economic status across ethnic groups. African-American (74.9%) and Hispanic-American (62.7%) children were more likely to be qualified for federally funded free lunches than were European-Americans (16.8%). Participants were interviewed at school in a location that ensured privacy. Interviewers were matched to participants by ethnicity. The mean duration of the interview was 31.80 minutes (SD = 9.18) at Time 1 and 38.27 minutes (SD = 9.69) at Time 2. For the present study, immigrant status was determined by the participants' place of birth, as indicated in school records. Children born outside of the U.S. were considered to be immigrants and children born in the U.S. were considered to be nonimmigrants.

**Measures**

Measures include indices of total social support, emotional and academic adjustment, and risk. All of the measures employed in the study are known to have high reliability and validity across the age range of the participants. Specific measures are described in the following sections.

**Social support**

Social support information was obtained through the Children's Convoy Mapping Procedure (Levitt et al., 1993). According to Levitt et al. (1993), internal consistency and test-retest reliabilities are high for the support measures derived from this procedure.
across the age ranges and ethnic groups included in the present study. Children first identified persons who were close and important to them in a concentric circle map, with the closest and most important persons in the inner circle. They then indicated which persons provided specific support functions. Specifically, they were asked to identify people “you talk to about things that are really important to you,” “who make you feel better when something bothers you or you are not sure about something,” “who would take care of you if you were sick,” “who help you with homework or other work you do for school,” “who like to be with you and do fun things with you,” and “who make you feel special or good about yourself.” A scale of total support perceived by each participant was created for analytic purposes by summing the number of support functions provided by all those included in each social convoy. Alpha reliability for the support scale was .83.

Emotional Adjustment Measures

A combination of self-rated and externally-rated indices were used to assess emotional adjustment. These included the Harter (1985) Self Perception Profile, the Children’s Loneliness Scale (Asher, Hymel, & Renshaw, 1984), and the Children's Depression Inventory (CDI) (Kovacs, 1985).

Self Concept. The Harter Self-Perception Profile is widely used to assess self concept in middle childhood and early adolescence. To moderate the time required for interviews, only the social, cognitive, and general self concept subscales were used, resulting in an 18-item scale. A sample item is “Some kids are often unhappy with themselves but other kids are pretty pleased with themselves. Participants first decide which description is true of themselves and then indicate whether the description is “sort
of true for me” or “really true for me.” Scores range from 1 to 4, with higher scores indicating more positive self concepts. The sample alpha reliability was .83.

**Loneliness.** The Children’s Loneliness Scale is a widely used scale consisting of 16 statements indexing loneliness and 8 filler items. Based on factor loadings reported by Cassidy and Asher (1989), the scale was abbreviated to 6 loneliness items and 4 filler items, to accommodate limitations on interview time. A sample item is “I feel alone at school.” Responses range from 1 “not at all true about me” to 5 “always true about me” and higher scores indicate greater loneliness. Alpha reliability was .67.

**Depressed Affect.** The short form version of the Children’s Depression Inventory (CDI-S) (Kovacs, 1992) was used to measure depressed affect of the children. The CDI assesses the presence and severity of affective, cognitive, and motivational components of depression and represents childhood depression as a collection of symptoms rather that as a sad, dysphoric mood. Selection of the short version of the scale is based on its usefulness with nonclinical populations. It consists of 10 3-choice items such as “I am sad once in a while”, “I am sad many times”, “I am sad all the time”; children chose the sentence that best described their feelings within the past two weeks. Scores range from 0 to 20, with higher scores indicating higher depressed affect. The alpha reliability for the sample is .74.

**School Adjustment**

A combination of self-ratings, teacher ratings, and school records were used to assess school adjustment. These included Stanford Achievement Test scores and Grade
Point Averages, the School Adaptation Scale, and indices of academic competence, school
efficacy, school conduct, and school attitudes.

*Academic Achievement*. Academic achievement was assessed with grade reports
and standardized achievement test scores (Stanford Achievement Test). Classroom grade
reports and SAT scores were obtained from centralized school records. Classroom grade
point averages were calculated as the mean of the participant’s end of year grades for
language arts (reading, English) and mathematics courses. Reading and math grades were
combined, as were reading and math SAT scores, to yield overall grade average and
achievement measures.

*School Adaptation*. A 14-item School Adaptation Scale developed by Alexander,
Entwistle, and Dauber (1993) was used to assess both positive and negative indicators of
child behavior problems as rated by teachers on a Likert format scale. Examples of items
include (a) very enthusiastic, interested in a lot of different things; (b) rather high strung;
(c) fights too much; (d) is creative or imaginative; (e) is disobedient at school. Scores
range from 1 to 6, with higher scores indicating better adaptation. The alpha reliability for
the sample was .87.

*Academic Competence*. Teachers rated participants’ academic competence on two
items from the teacher version of the Child Behavior Checklist (Edelbroch & Achenbach,
1984). These items were, “Compared to typical pupils of the same age”, “how hard is
he/she working?” and “how much is he/she learning?” The range was 1, “Much less” to 7,
“Much more.” The academic competence score was the mean of the two items.
School Attitudes. A 22-item School Attitude Scale was adapted from scales employed by Estrada (1993) and Ford and Harris (1996) with ethnically diverse populations. A sample item was, “Some things think that learning things at school is not very important, but other kids think that learning things at school is very important.” Students were asked to choose which side of each statement was either “Really True” or “Sort of True” for them. Scores ranged from 1 to 4, with higher scores indicating more positive school attitudes. The alpha reliability for the sample was .85.

School Conduct and School Effort. A summary variable was created for each of these teacher-rated variables in math and reading classes, as indicated by school records.

Ecological Risk

A cumulative risk index was created from six risk factors described below. Scores ranged from 0-7 with higher scores indicative of greater levels of risk. One point was assigned for five of the risk factors and up to 2 points was assigned for the risk factor that assessed whether one or both parents were living at home. The median score of ecological risk for the sample was 2.0.

School Economic Level. School economic level was based on whether more than 85% of the student body was eligible for the federally funded free and reduced lunch program. Those students in low economic level schools were assigned one point.

Free Lunch Eligibility. This measure indicated whether students were personally eligible for free lunch at school. Free lunch eligibility is a widely used measure of economic status in educational research. One point was assigned if the student was eligible.
Stressful Life Events. Those students who scored above the median on a scale of stressful life events received a point. The scale was adapted from a stressful life events scale for children developed by Johnson, (1986). The median score of stressful life events for the sample was 5.0.

Parent Not in Home. One point was given to students when one parent was missing from the home. Two points were assigned to students with both parents missing from the home.

Perceived Economic Hardship. A point was assigned to those students who scored above the median on a 5-point question that assessed how often their parents have problems paying for things that the family needs, like food, clothing and rent. The median score of economic stress for the sample was 3.0.

Neighborhood Satisfaction. A point was assigned to those students who scored below the median on a 3-point neighborhood satisfaction scale. The median score of neighborhood satisfaction for the sample was 2.30.

Results

Repeated measures analyses of variance were conducted to assess the effects of immigrant status and risk on total support, emotional problems, and school adjustment from Time 1 to Time 2. Three research questions were addressed and several hypotheses regarding immigrant and nonimmigrant preadolescents were tested. Research Question 1 involved an outcome measure of support, while Research Question 2 involved emotional adjustment, and Research Question 3 involved school adjustment.
Primary analyses were conducted to compare immigrants versus nonimmigrants. Secondary analyses were also conducted to make the same comparisons among three different categories of immigrants derived from the same sample. The first of these three categories was the first generation group, which included immigrant participants born outside of the United States whose parents were also foreign. The second was the second generation group, composed of children born in the U.S. whose parents were foreign born. Finally there was the third (or higher) generation of participants, children born in the U.S. whose parents were also born in the U.S. These secondary generation comparisons were designed to explore any possible effects unique to the second generation group that may have been lost when collapsing across second and third generations to create a single nonimmigrant category, as specified in the research questions. It was not possible to address these secondary analyses reliably and validly because, in order to obtain information about parent place of birth from parent surveys, 16 percent of the sample was lost; the number of immigrants was already small relative to others and was reduced considerably in the generational comparisons. There was also an unevenness across cells of the design with respect to generation group. More children were identified as Anglos in the third generation, even though some proportion of these were likely to have been third generation Hispanic or Afro-Caribbean. Nevertheless, to explore whether there might be a salient difference between the second generation group and the others, the secondary analyses, parallel to the primary analyses, were conducted by generation. These indicated a distinction between first generation and the other generations which mirrored the distinction between the immigrant and nonimmigrant
groups in the primary analyses. However, the number of significant effects in the secondary analyses was reduced because of reduced power in the analyses. Thus, the primary analyses pertinent to the study's research questions are reported in this section.

Means, standard deviations, and effects for each of the support, emotional problems, and achievement measures are presented in Tables 1, 2 and 3, respectively. The following results were obtained for each research question:

**Research Question 1: Are there differences in immigrant preadolescents' perceived social support across time, and does this differ by risk status?**

It was hypothesized that immigrant preadolescents would report higher levels of perceived support at Time 2, but lower levels than nonimmigrants at both Time 1 and Time 2. Immigrant preadolescents of high risk status at Time 1 were expected to report the lowest levels of support.

Means, standard deviations, and $F$ values for significant effects related to Hypothesis 1 are presented in Table 1. Square-root transformations for the social support means were performed because of skewed distributions on these measures. The analysis resulted in main effects for immigrant status and risk, indicating that immigrant preadolescents and preadolescents in the high-risk group reported significantly lower levels of support than did their peers.

There was also a marginal interaction of immigrant status by risk and a significant interaction of risk by time. As illustrated in Figure 1, analyses of simple effects by risk category revealed that immigrants reported significantly less support than nonimmigrants in the low risk category, $F (1, 430) = 16.09$, $p < .0001$, but not the high risk category,
F(1, 257) = 0.37. A test for simple effects of time within risk categories indicated that support increased significantly over time for low-risk students, F(1, 689) = 34.97, p < .0001, but not for high-risk students, F(1, 689) = 1.80.

Research Question 2: Are there differences in immigrant preadolescents' well-being across time, and does this differ by support level and risk status?

It was hypothesized that there would be a significant difference in emotional adjustment that would persist from Time 1 to Time 2, with immigrants reporting greater emotional distress. Further, it was hypothesized that immigrant preadolescents of high risk status who also reported lower levels of perceived support would report particularly lower levels of emotional adjustment at both times.

Means, standard deviations, and F values for significant effects related to Hypothesis 2 are presented in Table 2. Z-score transformations were conducted on the individual psychological well-being indices (loneliness, self-concept [reversed], and depression) and these were then combined to form Time 1 and Time 2 emotional adjustment measures labeled Emotional Problems. The analysis resulted in main effects for immigrant status, support, and risk. These results indicate that immigrant preadolescents, preadolescents who reported low levels of social support, and preadolescents at high-risk reported more emotional problems.

There was also an interaction of Support by Risk by Time. Simple effects analyses were performed by risk-support category. As can be seen in Figure 2, at Time 1, low risk participants with high support had fewer emotional problems than low risk participants with low support, F(1, 430) = 28.26, p < .0001, whereas emotional
adjustment did not differ significantly by support level for high risk participants, 
\( F(1, 257) = 1.96 \). At Time 2, however, it was the high risk participants with high support who showed fewer emotional problems compared to high risk participants with low support, 
\( F(1, 257) = 6.29, p < .02 \). There were no significant differences by support level for the low risk participants, 
\( F(1, 430) = 2.89, \) at Time 2. Thus, support appeared to be more important for the emotional well-being of high risk participants as they moved into the adolescent years, but less important for the low risk participants.

**Research Question 3: Are there differences in immigrant preadolescents’ school adjustment across time, and does this differ by support level and risk?**

Perceived social support was expected to impact school adjustment outcome. It was also hypothesized that immigrant preadolescents of high risk status who reported lower levels of social support would show the sharpest declines in school adjustment.

Means, standard deviations, and \( F \) values for significant effects related to Hypothesis 3 are presented in Table 3. Z-score transformations were conducted on the individual school achievement indices and these were then combined to form overall Time 1 and Time 2 achievement dependent measures. The repeated measures analysis indicated significant main effects for risk and support. Preadolescents who were at risk and preadolescents who reported lower levels of support were more likely to show school adaptation problems.

There was also an interaction of Immigrant Status by Risk by Support by Time, as depicted in Figures 3 and 4. Simple effects analyses within immigrant and nonimmigrant groups indicated the following: For immigrants at Time 1, there were no significant
effects of support at either the low risk, $F(1,99) = 1.75$, or the high risk, $F(1,49) = 0.75$, level. There was also no effect of support for low risk immigrants at Time 1, $F(1,99) = 0.72$. However, at Time 2, high risk immigrants with low support were significantly lower in achievement, compared to high risk immigrants with high support, $F(1,49) = 4.50, p < .04$. Thus, the hypothesized influence of support on achievement for high risk immigrants in transition to adolescence was confirmed.

A different pattern of effects was observed for nonimmigrant participants. Among low risk participants, those with high support showed higher levels of achievement at both Time 1, $F(1,329) = 8.70, p < .003$, and Time 2, $F(1,329) = 9.02, p < .003$. Support effects were not significant for high risk non-immigrants at either Time 1, $F(1,206) = 0.27$, or Time 2, $F(1,206) = 0.24$.

Discussion

The goals of the current study were (a) to assess the perceived social support, emotional adjustment, and school achievement of immigrant and nonimmigrant preadolescents and (b) to explore these variables with a multivariate scope that focused on the interplay of risk, immigrant status, and social support in the transition to adolescence. Discussion of the results will be presented separately for each research question.

Research Question 1: Are there differences in immigrant preadolescents’ perceived social support across time, and does this differ by risk status?

The first hypothesis, that immigrant preadolescents would report higher levels of perceived support at Time 2, was confirmed only for low-risk immigrants, but the increase was not exclusive to this subgroup. Low risk nonimmigrants also showed a pattern of
increased support. High risk immigrants and high risk nonimmigrants did not report any change in support levels. The second hypothesis, that immigrants would report lower levels of support at both times, was supported, congruent with previous research (Kao, 1999; Bustos, 2000). The last hypothesis was that sample-low scores of social support would be reported by the high-risk immigrant group at Time 1. Although high-risk immigrants did have the lowest means for support, they were not significantly lower than those for high-risk nonimmigrants and low-risk immigrants. There was, however, an significant interplay of risk and immigrant status that resulted in low-risk immigrants reporting lower levels of support than low-risk nonimmigrants.

The transition into adolescence is a period where new social relationships are established and explored. Social networks expand and opportunities for sources of support increase (Furman & Buhrmester, 1985; Levitt, Guacci-Franco, & Levitt, 1993). This study's results indicate that immigrants' support patterns mirror those of nonimmigrants. For all high-risk participants, whether immigrant or nonimmigrant, the change in support across the transition to adolescence is minimal. Support patterns also match for low-risk participants, in that increases in support across time were observed, yet the difference between immigrants and nonimmigrants in this category remains substantial. Thus, support appears to be less available for immigrants, regardless of risk status. This may be a source of distress, given the sense of family interdependence, importance of emotional support, and the increasing need of support from family that has been previously documented for immigrant adolescents (Gil & Vega, 1996; Padilla et al., 1988; Keefe et al., 1979).
Research Question 2: Are there differences in immigrant preadolescents' emotional adjustment over time, and does this differ by support level and risk status?

The first hypothesis, that immigrant participants would report more emotional problems than nonimmigrants at both times, was supported. Previous reports with respect to emotional adjustment have been mixed (Fuligni, 1998; Baptiste, 1993). However, the current results lend support to the findings of Corinille and Brotherton (1993), Pawliuk and colleagues (1996), and Kao (1999), suggesting that immigrant adolescents may be susceptible to emotional problems.

The second hypothesis, that high-risk immigrant participants with low levels of support would report the most emotional distress at both times, was not supported. In general, immigrants are at higher risk for emotional problems, but a closer examination reveals that the relationship between risk and support is more closely linked to emotional adjustment. At Time 1, children of high-risk and low support reported the highest levels of emotional problems, but not significantly higher than those of high-risk and high support. At Time 2, high-risk participants who reported low levels of support continued to show the highest level of emotional distress, but the high risk-high support group reported significantly less emotional distress and showed significant improvement over their high-risk, low support peers. Thus, for the high-risk group, the availability of support appeared to result in the higher support group making a more positive transition into adolescence.

For the low-risk group, differences began to fade at Time 2. For this group, support had a counterintuitive effect, with low levels resulting in less emotional distress,
and high levels resulting in more emotional problems. In fact, there were no differences in emotional problems within the low-risk group at Time 2, regardless of support. The transition into adolescence involves a transition of social and physical contexts for the individual, regardless of risk status. Middle schools, which typically receive students from a variety of elementary schools, may present a particularly different social landscape where opportunities and demands for new relationships with peers abound. Specifically, children move from a school setting which they share with the same group of classmates year-round to one where the grounds for social interaction may change from class to class. Changes in the social landscape may facilitate the adjustment of the low risk-low support students, but be a source of stress for the low risk-high support students who are comfortable with their existing social networks.

Research Question 3: Are there differences in immigrant preadolescents' school adjustment across time, and does this differ by support level and risk?

The first hypothesis was supported; perceived social support had a positive effect on school adjustment. Risk level also proved to be a predictor of lower school adjustment. Nevertheless, these main effects were obscured by the verification of the second hypothesis; high-risk immigrants with low levels of support had the lowest school adjustment at Time 2. In an attempt to clarify the discrepancies in the literature with regard to immigrant children and their academic adjustment over time, support and risk were observed in conjunction with immigrant status.

At Time 1, immigrants in the high-risk categories had comparable scores. The role of support became noticeable as children made the transition into adolescence and those of
high-risk and high support had scores more similar to their peers in the low-risk categories. Moreover, the downward negative trend for those of high-risk and low support noticeably increased the gap between these immigrants and those in the other risk-support categories. In general, support was more important for the academic adjustment of high-risk immigrants than for high-risk nonimmigrants. Thus, as suggested by Hamilton (1983), Sternberg and Kolligian (1991), Kao and Tienda (1995), and Moll (1992), there is a need to move away from univariate predictions toward a more complete approach to describe change (or lack thereof) over time within the immigrant population.

Summary and Conclusions

This study in the field of immigration research is an attempt to expand its boundaries to include less-well documented age groups and to consider the ecological context of the immigrant experience. Findings from the study highlight the importance of a multivariable approach to the study of support, emotional adjustment, and academic adjustment of immigrant preadolescents. Rooted in the convoy model of social support, this study first addressed the availability of social support to immigrant preadolescents over time under varying conditions of risk. Immigrant participants generally reported lower levels of support, with those of low-risk not showing the same support growth as their nonimmigrant counterparts. This finding may provide insight for research or support development programs designed to address the needs of immigrant children and adolescents and advise them of the need to make distinctions among immigrant groups with respect to ecological risks.
Although the emotional distress was higher for immigrant children, emotional well-being could be better predicted by the participant's level of risk and support. Support plays a major role in the improvement of the emotional well-being of children of high-risk, and it facilitates their somewhat difficult transition into middle school. Programs in elementary schools in less advantaged neighborhoods may be able to assess children's support levels via the relatively unobtrusive Convoy Model methodology, and develop strategies aimed at increasing the support levels of those children whose support levels are less that optimal. Further, the development of these high-risk children might be researched into adolescence, and their teenage pregnancy, illegal substance use, or dropout rates could be compared to children of other high-risk neighborhoods without similar social support programs.

School adjustment was also affected by support and risk. The approaches discussed in the preceding section may also apply to research and intervention targeted at the improvement of children's school adjustment. Furthermore, because high-risk immigrants who received low levels of support had the lowest levels of school adjustment in their middle school years, tailoring such research or intervention should also take into consideration immigrant status. Although attention to developmental stages and transitions has been the norm in the educational and psychological arenas, this attention has not been paid to the adaptation of immigrant children.

Finally, there is a need to expand the present results to better understand other periods of immigrants' life spans. There is a special need to observe these variables with younger cohorts, as well as with children whose migration experience is at its peak. The
growing number of diverse researchers increases the potential to conduct such studies in
the participants' native language and to follow culture-sensitive guidelines. Further, the
growing number of diverse immigrants may provide the grounds for research studies that
can compare differences among specific immigrant groups.
Table 1

Support: Means, Standard Deviations, and F Values for Significant Effects

<table>
<thead>
<tr>
<th>Effect</th>
<th>Mean (SD)</th>
<th>Mean (SD)</th>
<th>F(1,687)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Time 1</td>
<td>Time 2</td>
<td></td>
</tr>
<tr>
<td>Immigrant Status</td>
<td></td>
<td></td>
<td>8.18 ***</td>
</tr>
<tr>
<td>Immigrant</td>
<td>4.64 (1.42)</td>
<td>4.99 (1.47)</td>
<td></td>
</tr>
<tr>
<td>Non-Immigrant</td>
<td>5.07 (1.60)</td>
<td>5.39 (1.69)</td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>4.98 (1.57)</td>
<td>5.30 (1.65)</td>
<td>14.81 ****</td>
</tr>
<tr>
<td>Risk</td>
<td></td>
<td></td>
<td>17.64 ****</td>
</tr>
<tr>
<td>Risk x Time</td>
<td></td>
<td></td>
<td>4.50 **</td>
</tr>
<tr>
<td>Low Risk</td>
<td>5.17 (1.55)</td>
<td>5.62 (1.68)</td>
<td></td>
</tr>
<tr>
<td>High Risk</td>
<td>4.65 (1.55)</td>
<td>4.78 (1.46)</td>
<td></td>
</tr>
<tr>
<td>Immig. x Risk</td>
<td></td>
<td></td>
<td>3.60 *</td>
</tr>
<tr>
<td>Im/Low Risk</td>
<td>4.69 (1.35)</td>
<td>5.15 (1.50)</td>
<td></td>
</tr>
<tr>
<td>Im/High Risk</td>
<td>4.55 (1.55)</td>
<td>4.68 (1.38)</td>
<td></td>
</tr>
<tr>
<td>Non-Im/Low Risk</td>
<td>5.32 (1.58)</td>
<td>5.76 (1.71)</td>
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</tr>
<tr>
<td>Non-Im/High Risk</td>
<td>4.68 (1.56)</td>
<td>4.81 (1.48)</td>
<td></td>
</tr>
</tbody>
</table>

****p < .00001. ***p < .01. **p < .05. *p < .06.
Table 2

*Emotional Problems: Means, Standard Deviations, and F Values for Significant Effects*

<table>
<thead>
<tr>
<th>Effect</th>
<th>Time 1</th>
<th>Time 2</th>
<th>F(1,683)</th>
</tr>
</thead>
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<tr>
<td>Immigrant Status</td>
<td></td>
<td></td>
<td>13.41 **</td>
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<tr>
<td>Immigrant</td>
<td>.20 (0.90)</td>
<td>.14 (0.90)</td>
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<tr>
<td>Non-Immigrant</td>
<td>-.05 (0.80)</td>
<td>-.04 (0.81)</td>
<td></td>
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<tr>
<td>Risk Level</td>
<td></td>
<td></td>
<td>44.12 **</td>
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<tr>
<td>Low Risk</td>
<td>-.17 (0.77)</td>
<td>-.14 (0.75)</td>
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<tr>
<td>High Risk</td>
<td>.28 (0.83)</td>
<td>.24 (0.91)</td>
<td></td>
</tr>
<tr>
<td>Support Level</td>
<td></td>
<td></td>
<td>12.81 **</td>
</tr>
<tr>
<td>Low Support</td>
<td>.19 (0.84)</td>
<td>.13 (0.84)</td>
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</tr>
<tr>
<td>High Support</td>
<td>-.17 (0.78)</td>
<td>-.12 (0.81)</td>
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</tr>
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<td>Support x Risk x Time</td>
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<td></td>
<td>5.06 *</td>
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<td>Low Risk/Low Sup.</td>
<td>.06 (0.82)</td>
<td>-.07 (0.76)</td>
<td></td>
</tr>
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<td>Low Risk/High Sup.</td>
<td>-.33 (0.70)</td>
<td>-.19 (0.74)</td>
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</tr>
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<td>High Risk/Low Sup.</td>
<td>.34 (0.84)</td>
<td>.36 (0.88)</td>
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<tr>
<td>High Risk/High Sup.</td>
<td>.20 (0.83)</td>
<td>.07 (0.93)</td>
<td></td>
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</tbody>
</table>

**p < .00001. *p < .05.
Table 3

Achievement: Means, Standard Deviations, and F Values for Significant Effects

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<th>Effect</th>
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<th>Time 2</th>
<th>F(1,683)</th>
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<tr>
<td></td>
<td></td>
<td>M</td>
<td>(SD)</td>
<td>M</td>
</tr>
<tr>
<td>Risk Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Risk</td>
<td></td>
<td>.17</td>
<td>(0.71)</td>
<td>.16</td>
</tr>
<tr>
<td>High Risk</td>
<td></td>
<td>-.29</td>
<td>(0.70)</td>
<td>-.27</td>
</tr>
<tr>
<td>Support Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Support</td>
<td></td>
<td>.04</td>
<td>(0.75)</td>
<td>.22</td>
</tr>
<tr>
<td>High Support</td>
<td></td>
<td>.25</td>
<td>(0.77)</td>
<td>.33</td>
</tr>
<tr>
<td>Imm. x Risk x Sup. x Time</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Im/Lo Risk/Lo Sup.</td>
<td></td>
<td>.04</td>
<td>(0.75)</td>
<td>.22</td>
</tr>
<tr>
<td>Im/Lo Risk/Hi Sup.</td>
<td></td>
<td>.25</td>
<td>(0.77)</td>
<td>.33</td>
</tr>
<tr>
<td>Im/Hi Risk/Lo Sup.</td>
<td></td>
<td>-.45</td>
<td>(0.79)</td>
<td>-.57</td>
</tr>
<tr>
<td>Im/Hi Risk/Hi Sup.</td>
<td></td>
<td>.26</td>
<td>(0.78)</td>
<td>-.07</td>
</tr>
<tr>
<td>Non-Im/Lo Risk/Lo Sup.</td>
<td></td>
<td>0.04</td>
<td>(0.73)</td>
<td>-.02</td>
</tr>
<tr>
<td>Non-Im/Lo Risk/Hi Sup.</td>
<td></td>
<td>0.27</td>
<td>(0.65)</td>
<td>0.21</td>
</tr>
<tr>
<td>Non-Im/Hi Risk/Lo Sup.</td>
<td></td>
<td>-.29</td>
<td>(0.64)</td>
<td>-.27</td>
</tr>
<tr>
<td>Non-Im/Hi Risk/Hi Sup.</td>
<td></td>
<td>-.24</td>
<td>(0.74)</td>
<td>-.22</td>
</tr>
</tbody>
</table>

Support by Immigrant Status and Risk
Figure 2.

Emotional Problems by Risk and Support

LoRisk LoSup
LoRisk HiSup
HiRisk LoSup
HiRisk HiSup

Time 1  Time 2
Figure 3.

Achievement by Risk and Support: Immigrants

- LoRisk LoSup
- LoRisk HiSup
- HiRisk LoSup
- HiRisk HiSup
Figure 4.

Achievement by Risk and Support
Non-Immigrants

LoRisk LoSup
LoRisk HiSup
HiRisk LoSup
HiRisk HiSup

Time 1 Time 2
List of References


Appendix 1 - Measures
B. Now, I'd like to ask some questions about the people in your circles.

B1. Are there people you talk to about things that are really important to you? Tell me the number in the circle picture of each person you talk to about things that are really important to you.

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Other ____________________________

B2. Are there people who make you feel better when something bothers you or you are not sure about something? Tell me the number of each person who makes you feel better when something bothers you or you are not sure about something.

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Other ____________________________

B3. Are there people who would take care of you if you were sick?

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Other ____________________________

B4. Are there people who like to be with you and do fun things with you?

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Other ____________________________

B5. Are there people who help you with homework or other work you do for school?

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Other ____________________________

B6. Are there people who make you feel special or good about yourself?

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Other ____________________________
### WHAT I AM LIKE

<table>
<thead>
<tr>
<th>REALLY TRUE</th>
<th>SORT OF TRUE</th>
<th>REALLY TRUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>for me</td>
<td>for me</td>
<td>for me</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Some kids would rather play outdoors in their spare time

BUT Other kids would rather watch T.V.

---

**J1.**

Some kids feel that they are very good at their school work

BUT Other kids worry about whether they can do the school work assigned to them

---

**J2.**

Some kids find it hard to make friends

BUT Other kids find it's pretty easy to make friends

---

**J3.**

Some kids are often unhappy with themselves

BUT Other kids are pretty pleased with themselves

---

**J4.**

Some kids feel they are just as smart as other kids their age

BUT Other kids aren't so sure and wonder if they are as smart

---

**J5.**

Some kids have a lot of friends

BUT Other kids don't have very many friends

---

**J6.**

Some kids don't like the way they are leading their life

BUT Other kids do like the way they are leading their life

---

**J7.**

Some kids are pretty slow in finishing their school work

BUT Other kids can do their school work quickly

---

**J8.**

Some kids would like to have a lot more friends

BUT Other kids have as many friends as they want

---

PLEASE TURN OVER AND DO THE OTHER SIDE

---

66
| J9. | Some kids are happy with themselves as a person | BUT | Other kids are often not happy with themselves |
| J10. | Some kids often forget what they learn | BUT | Other kids can remember things easily |
| J11. | Some kids are always doing things with a lot of kids | BUT | Other kids usually do things by themselves |
| J12. | Some kids like the kind of person they are | BUT | Other kids often wish they were someone else |
| J13. | Some kids do very well at their classwork | BUT | Other kids don't do very well at their classwork |
| J14. | Some kids wish that more people their age liked them | BUT | Others kids feel that most people their age do like them |
| J15. | Some kids are very happy being the way they are | BUT | Other kids wish they were different |
| J16. | Some kids have trouble figuring out the answers in school | BUT | Other kids almost always can figure out the answers |
| J17. | Some kids are popular with others their age | BUT | Other kids are not very popular |
| J18. | Some kids aren't very happy with the way they do a lot of things | BUT | Other kids think the way they do things is fine |
HOW I FEEL AT SCHOOL

a. I like roller skating.

<p>| | | | | |</p>
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<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

- That's always true about me
- That's true about me most of the time
- That's sometimes true about me
- That's hardly ever true about me
- That's not true about me at all

1. I like to read.

<p>| | | | | |</p>
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<tr>
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<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

- That's always true about me
- That's true about me most of the time
- That's sometimes true about me
- That's hardly ever true about me
- That's not true about me at all

2. I like school.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
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<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

- That's always true about me
- That's true about me most of the time
- That's sometimes true about me
- That's hardly ever true about me
- That's not true about me at all

3. I feel alone at school.

<p>| | | | | |</p>
<table>
<thead>
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<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

- That's always true about me
- That's true about me most of the time
- That's sometimes true about me
- That's hardly ever true about me
- That's not true about me at all

4. I can find a friend in my class when I need one.

<p>| | | | | |</p>
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<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

- That's always true about me
- That's true about me most of the time
- That's sometimes true about me
- That's hardly ever true about me
- That's not true about me at all

PLEASE TURN OVER AND DO THE OTHER SIDE
5. I like science.

That's always true about me
That's true about me most of the time
That's sometimes true about me
That's hardly ever true about me
That's not true about me at all

6. I get along with my classmates.

That's always true about me
That's true about me most of the time
That's sometimes true about me
That's hardly ever true about me
That's not true about me at all

7. I feel left out of things at school.

That's always true about me
That's true about me most of the time
That's sometimes true about me
That's hardly ever true about me
That's not true about me at all

8. There are other kids I can go to when I need help in school.

That's always true about me
That's true about me most of the time
That's sometimes true about me
That's hardly ever true about me
That's not true about me at all

9. I like to paint and draw.

That's always true about me
That's true about me most of the time
That's sometimes true about me
That's hardly ever true about me
That's not true about me at all

10. I'm lonely at school.

That's always true about me
That's true about me most of the time
That's sometimes true about me
That's hardly ever true about me
That's not true about me at all
Remember, describe how you have been in the past two weeks....

**Example**
- I read books all the time.
- I read books once in a while.
- I never read books.

<table>
<thead>
<tr>
<th>Item 1</th>
<th>Item 6</th>
</tr>
</thead>
<tbody>
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<td>☐ I am sad once in a while.</td>
<td>☐ Things bother me all the time.</td>
</tr>
<tr>
<td>☐ I am sad many times.</td>
<td>☐ Things bother me many times.</td>
</tr>
<tr>
<td>☐ I am sad all the time.</td>
<td>☐ Things bother me once in a while.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item 2</th>
<th>Item 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Nothing will ever work out for me.</td>
<td>☐ I look O.K.</td>
</tr>
<tr>
<td>☐ I am not sure if things will work out for me.</td>
<td>☐ There are some bad things about my looks.</td>
</tr>
<tr>
<td>☐ Things will work out for me O.K.</td>
<td>☐ I look ugly.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item 3</th>
<th>Item 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ I do most things O.K.</td>
<td>☐ I do not feel alone.</td>
</tr>
<tr>
<td>☐ I do many things wrong.</td>
<td>☐ I feel alone many times.</td>
</tr>
<tr>
<td>☐ I do everything wrong.</td>
<td>☐ I feel alone all the time.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item 4</th>
<th>Item 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ I hate myself.</td>
<td>☐ I have plenty of friends.</td>
</tr>
<tr>
<td>☐ I do not like myself.</td>
<td>☐ I have some friends but I wish I had more.</td>
</tr>
<tr>
<td>☐ I like myself.</td>
<td>☐ I do not have any friends.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item 5</th>
<th>Item 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ I feel like crying everyday.</td>
<td>☐ Nobody really loves me.</td>
</tr>
<tr>
<td>☐ I feel like crying many days.</td>
<td>☐ I am not sure if anybody loves me.</td>
</tr>
<tr>
<td>☐ I feel like crying once in awhile.</td>
<td>☐ I am sure that somebody loves me.</td>
</tr>
<tr>
<td>Item</td>
<td>Description</td>
</tr>
<tr>
<td>------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>A1.</td>
<td>Very enthusiastic, interested in a lot of different things,</td>
</tr>
<tr>
<td></td>
<td>likes to express his or her ideas</td>
</tr>
<tr>
<td>A2.</td>
<td>Rather high strung, tense, and nervous</td>
</tr>
<tr>
<td>A3.</td>
<td>Fights too much; teases, picks on or bullies other children</td>
</tr>
<tr>
<td>A4.</td>
<td>Usually in a happy mood; very cheerful</td>
</tr>
<tr>
<td>A5.</td>
<td>Doesn't concentrate, doesn't pay attention for long</td>
</tr>
<tr>
<td>A6.</td>
<td>Is polite, helpful, considerate of others</td>
</tr>
<tr>
<td>A7.</td>
<td>Very timid, afraid of new things or new situations</td>
</tr>
<tr>
<td>A8.</td>
<td>Is awfully restless, fidgets all the time, can't sit still</td>
</tr>
<tr>
<td>A9.</td>
<td>Tells lies or fibs</td>
</tr>
<tr>
<td>A10.</td>
<td>Is creative or imaginative</td>
</tr>
<tr>
<td>A11.</td>
<td>Has a very strong temper; loses it easily</td>
</tr>
<tr>
<td>A12.</td>
<td>Keeps to himself or herself, spends a lot of time alone</td>
</tr>
<tr>
<td>A13.</td>
<td>Acts too young for his or her age, cries a lot or has tantrums</td>
</tr>
<tr>
<td>A14.</td>
<td>Is disobedient at school</td>
</tr>
<tr>
<td>Section A. Mark one box for each sentence.</td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Really true for me</td>
<td>Sort of true for me</td>
</tr>
<tr>
<td>------</td>
<td>-----------------</td>
</tr>
<tr>
<td><strong>EXAMPLE</strong></td>
<td></td>
</tr>
<tr>
<td>a.</td>
<td>Some kids would rather play a video game in their spare time,</td>
</tr>
<tr>
<td>a1</td>
<td>Some kids think that learning things at school is not very important,</td>
</tr>
<tr>
<td>a2</td>
<td>Some kids are willing to study hard to get good grades,</td>
</tr>
<tr>
<td>a3</td>
<td>Some kids are sure they will graduate from high school,</td>
</tr>
<tr>
<td>a4</td>
<td>Some kids find their school work boring a lot of the time,</td>
</tr>
<tr>
<td>a5</td>
<td>Some kids think that doing well in school is important for getting ahead in life,</td>
</tr>
<tr>
<td>a6</td>
<td>Some kids don't worry about doing their homework,</td>
</tr>
<tr>
<td>a7</td>
<td>Some kids have families who think that doing well in school is important for getting ahead in life,</td>
</tr>
<tr>
<td>a8</td>
<td>Some kids are not so sure they will go to college,</td>
</tr>
<tr>
<td>a9</td>
<td>Some kids think that how they do in school doesn't have much to do with the kind of job they will get when they grow up,</td>
</tr>
<tr>
<td>a10</td>
<td>Some kids really like school,</td>
</tr>
<tr>
<td>Question</td>
<td>True for Me</td>
</tr>
<tr>
<td>----------</td>
<td>-------------</td>
</tr>
<tr>
<td>a11</td>
<td></td>
</tr>
<tr>
<td>a12</td>
<td></td>
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<td>a13</td>
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<td>a14</td>
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<td>a15</td>
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<td>a20</td>
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<tr>
<td>a21</td>
<td></td>
</tr>
<tr>
<td>a22</td>
<td></td>
</tr>
</tbody>
</table>

STOP

73
VITA

GASTÓN LUIS BUSTOS

1993
A.A., Psychology
Miami-Dade Community College
Miami, Florida

1995
B.S., Psychology
Florida International University
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2000
M.S., Life-Span Developmental Psychology
Florida International University
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AWARDS AND HONORS

1992-1993
Miami-Dade Community College Dean's List

1994-1995
Florida International University Dean's List

1995
Golden Key Honor Society Membership Offer and Acceptance

1996
Florida International University, Biscayne Bay Campus,
Psychology Department, Highest Graduating Student Grade Point Average Award

ACADEMIC AND PROFESSIONAL EMPLOYMENT

1997
Interviewer; Research Assistant
Florida International University
Miami, Florida

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Teaching Assistant
Florida International University
Miami, Florida

1998-2000
Interviewer; Translator; Research Assistant
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2000-2001 Instructor, Psychology of Adolescence  
Florida International University  
Miami, Florida

2000-Present Project Coordinator, Project Team-Leader  
Florida International University  
Miami, Florida

PAPERS AND PRESENTATIONS


