

Current Perspectives on Stress among Latino Adolescents

Introduction

Latinos¹ will reach one quarter (25%) of the United States population (about 97 million) by the year 2050 and one third of them will be youth under the age of nineteen (United States Department of Health and Human Services, USDHHS, 2001). The Mexican origin population is the largest of all Latino groups (66.9%), followed by Puerto Ricans (8.6%), Cubans (3.7%) Central and South Americans, (14.3%), and others (6.5%) (Ramirez Roberto R and G Patricia de la Cruz, 2003). These subgroups of Latinos are disproportionately affected by stressful living conditions that are jeopardizing their present and future health. Such conditions include poverty (Ramirez and De la Cruz, 2003; Salgado de Snyder, Cervantes and Padilla, 1990), lack of health insurance (Newacheck and McManus, 1989; Brindis, Driscoll, Biggs, and Valderrama, 2002-1), high school drop-out rates (Mackey, Fingerhut, and Duran, 2000), increasing health problems (e.g., obesity) (Freid, Prager, MacKay, and Xia, 2003), high teenage pregnancy rates (Mackey et al., 2000; COSSMHO, 1999), sexually transmitted diseases (Buzi, Weinman, and Smith, 1998), increasing rates of HIV infections (Brindis et al., 2002-2; CDC 2002; Berger and Rivera, 1993), substance abuse (e.g.: alcohol and cocaine) (De la Rosa, 2002; Kandel, 1995), and violence (Amaro, Messinger and Cervantes, 1996; Rice and Dolgin, 2002).

Considering the developmental and cultural changes in the community and the family, segments of the Latino adolescent population experience a complex set of issues, increasing their levels of stress. Researchers and mental health professionals should focus

on Latino youth, as they may be both at high risk and the most amenable to prevention and intervention of all populations (USDHHS, 2001).

In some Latino adolescents, stress is manifested in mental health problems such as generalized anxiety, depression, and suicide. Latino adolescents disproportionately suffer from some mental health disorders and many also engage in risky behaviors (e.g. substance abuse, unprotected sex, etc.) more often than do non-minority adolescents. According to the United States Department of Health and Human Services (DHHS) (Freid et al., 2003), the rate of Latino adolescents who seriously considered suicide in the year 2001 was 12.2% for males, second after white males. However, the highest rates of suicide consideration (26.5%) were for female Latinas. Latino and Latina youth from 9th to 12th grade overall had higher rates of attempted suicide than any other group; the male students were at 8.0% while, again, the female Latina rates (15.9%) were much higher. In an older survey, injurious suicide attempt rates were higher for Latina females 4.2%, followed by Latino males (2.5%), and then African Americans (DHHS, 1990). A study conducted by Rew et al. (2001) revealed that Latina adolescents had the highest rate of suicide attempts compared to other ethnic-gender groups. In addition, Latinas in the study also had relatively high reports of sexual abuse and suicide attempts by family members and friends. Latinas also have alarmingly higher rates of depression (27%). Latinas were the second highest

¹ The terms Latino and Hispanic will be used interchangeably through this chapter

ethnic group to report depressive symptoms. Acculturation stress due to conflictive gender roles in adolescent Latinas is believed to be the driving force of their higher rates of stress, depression and suicidality (National Coalition of Hispanic Health and Human Services Organization, 1999). Moreover, a study by Alegria et al. (2007) reported lifetime psychiatric disorders prevalence of 28.1% for Latino men and 30.2% for women. Increased rates of psychiatric disorders were observed among Latinos who are born in the United States, are proficient in the English language, and are third generation. Stressors associated with cultural transmutation, such as the erosion of strong family and social ties, might exert particular pressures on Latino men.

This report will address the following issues related to Latino and Latina adolescent stress: 1) the normative stressors that most adolescents encounter; 2) Latino and Latina-specific non-normative stressors; 3) consequences of the stressors for Latino and Latina adolescents; 4) Protective and coping factors that could be helpful for adolescents; 5) future studies and directions for research.

Normative Stressors in Adolescence

Models of Stress in Adolescence

Following the psychological theory of stress described by Lazarus (1966, 1990) and Lazarus and Folkman (1984), stress can be defined by a relation between person and environment that demands, taxes or exceeds psychological resources in a way that can be evaluated as harmful (negative) or challenging (positive). The psychological state of stress depends on cognitive factors such as values, beliefs, goals, and commitments along with self-esteem, sense of control, mastery, and environmental variables such as

demands, resources, and constraints. Once the individual perform a cognitive appraisal, he or she will typically engage in a coping process to manage the stress. Results from coping responses will be appraised again in a changing process that depends on both the individual and the environmental characteristics (Lazarus, 1990). This theory has been modeled as a dynamic feedback stress process of interaction (Pearlin, Lieberman, Menaghan, and Mullan, 1981). This stress process model has been adapted, modified, and further specified for the Hispanic population (RC Cervantes and Castro, 1985). However, the application of stress theory developed for adults to adolescents requires additional basic understanding of the influence of human developmental change. A distinction between developmental stress (the “storm and stress” of normal adolescence) and the non-normative acute or chronic life stressors that adolescents must appraise and cope with is essential in understanding the specifics of adolescent stress (Colten and Gore, 1991).

Petersen, Kennedy, and Sullivan (1991) developed a model to explain the developmental transition between childhood and adolescence. He also identified some “challenges” (to avoid the negative connotation of the concept “stressor”) encountered by adolescents. These authors classified the 5 areas of changes faced by children in early adolescence: 1) biological (adult appearance and size, reproductive capacity, endocrine changes, asynchrony among body parts, etc.), 2) cognitive (abstract thought, etc., peer groups, conformity, pressure to explore new experiences) 3) academic (changes

in school structure and format, etc.), 4) parental (parental reactions to physical changes, impeding separation, etc.) and 5) social (hopes and expectations for youth, occupational choices and opportunities). The model explains that simultaneous changes are related to more negative outcomes than sequential changes. For example, adolescents who are pubertal during the transition from elementary to secondary school have more negative outcomes than those whose pubertal change occurs after the transition.

Stressful life events in children are reported to be more devastating than for adults (Compas, 1987). The adolescent's inability to cope with stress could lead to severe consequences from academic failure, diminished academic motivation and school dropping, defiance of authority, anti-social behavior and violence, isolation, mental health problems such as anxiety, depression, eating disorders, the use of alcohol and other drugs, crime participation, suicide, and other serious consequences (De la Rosa, 2002; Guinn and Vincent, 2002; Robson and Cook, 1995).

Developmental Challenges

Adolescents experience normative bio-psychological transitions such as physical, sexual, cognitive and emotional changes together with social transitions (e.g., shift from middle to high school) (Colten and Gore, 1991). In addition, adolescents who have different environmental and socio-cultural roots, also experience distinctive challenges along with specific social expectations and pressures that influence their behavior.

Physical and sexual maturation occurs in adolescents when puberty arrives. Sexual changes are also accompanied by other aspects of physical appearance,

some of them embarrassing for adolescents (e.g., changes in voice, facial and body hair, acne, body shape and growth, distribution of fat in the body, etc.).

Cognitively, the fast development of the brain and its functions are evident in adolescence. Jean Piaget (1950, 1963) considered cognitive development to be a qualitative change that results from a combination of environmental influences and the development of the nervous system. Adolescents conquer the formal operational stage when they are able to think in abstract terms, using inductive reasoning and systematic propositional logic in solving problems. Current research focused on information processing and decision making (see review by Rice and Dolgin, 2002) suggests both qualitative and quantitative changes in multiple areas of human intelligence during adolescence.

Fast cognitive and emotional development enables the adolescent to evaluate what they learn and become more capable of moral reasoning and idealization. This maturation development also helps them to plan their future in the long-term rather than obtaining immediate gratification. In addition, curiosity, daydreaming, and the visual imagery increase, serving a practical purpose in finding alternative behaviors to solve problems and cope with stress (Gold and Henderson, 1990). Adolescents are also capable of thinking about their own thoughts and becoming acutely aware of themselves. Other consequences of this rapid cognitive change are not as positive (e.g., lack of attention, egocentrism, obsession with their appearance and behavior, and contradiction between their ethics and behavior) (Bus and Thompson, 1989; Elkind, 1978; Gold and Henderson, 1990; Vartanian, 1997; Vartanian and Powlishta, 1996).

According to the early studies of Stanley Hall (1904) adolescents find themselves in a period of storm and stress with rapid and extreme emotional and behavioral changes. Psychologists no longer subscribe to Hall's theory. Adolescents are considered to experience significant difficulties in comparison to other children and adults that are generally transitory or sporadic. Arnett (1999) reviewed the available literature concluding that authors who support the adolescent storm and stress theory usually refer to three problematic behaviors:

1) interpersonal conflicts generally with parents and other authority figures, 2) emotional swings, and 3) risky behaviors. Problematic behavior could be only to satisfy the curiosity in experiences considered of adulthood. Adolescents simply imitate adult behavior in issues such as cigarette smoking, alcohol use, sexual behavior, etc.

Latino Adolescent Non-Normative Stressors

Normative stress refers to those developmental changes that all youth experience. However, there are many groups of youth that face extremely adverse conditions and risk factors that shape their development and mental health (Colten and Gore, 1991). Latino and other minority adolescents in the United States share many risks. In addition to normative stress that most non-minority adolescents face, they also have to confront additional stressors related to prejudice and hostility,

marginalization, racism and xenophobia, poverty, environmental risks (i.e. old homes with lead paint, malnutrition, unsanitary conditions, etc.), cultural and language barriers, and immigration challenges (Amaro et al., 1996; Rice and Dolgin, 2002; Suárez-Orozco, 2001). Zambrana and Silva-Palacios (1989), conducted a study with 244 immigrant Latino adolescents in Los Angeles. Findings reflected several sources of stress in this population. The most important factors were related to family

issues such as parents getting sick and going to a hospital, having family members arrested, parents drinking, leaving relatives and friends when moving, being pressured by family members to speak only Spanish or English at home, and cultural and religious obligations. In addition, there were other factors associated with economic problems in the family; for instance, crowded homes, living in neighborhoods with

crime and caring for siblings. Another group of stressors were related to discrimination and marginalization, language barriers and academic stressors, especially at school. Finally, another cause of stress was related to peers, such as pressure to get into fights and not having enough Latino friends.

Hispanic families that migrated also had encountered stressors related to the immigration process, such as migratory status (documented vs. undocumented), migratory journey risks, cultural shock, communication problems, ignorance of how the system works, and separation

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Immigration and Broken Families: “Con un pie aquí y otro allá”

According to the United States Census (USDHHS, 2000) 2 in 5 Hispanics are foreign born. Latino families migrate to escape poverty, lack of professional opportunities and education, political and religious persecution, torture and death (Apoyo, 1997). Families migrate to improve their lives and to provide a better future for their children and economical support to other relatives living in their country of origin (Abalos, 1998). However, immigrants pay a high price in costs and risks during immigration and adjustment to their new environment. Migration implies losing family and friends, community ties, social roles, customs, jobs, money, and many other important personal irreplaceable possessions. Hispanics traditionally use both nuclear and extended family as vital support systems to deal with stress. Therefore, separation from family and close friends (*compadres, comadres, padrinos*) place Latinos at high risk for mental health problems (Canino and Canino, 1982).

Families coming to the United States with no legal status face even more stress and risks when crossing the border. Crossing the border includes exposure to heat exhaustion and dehydration (Adler, 2004), starvation, swimming across polluted waters, crossing deserts, traveling on unreliable transportation (Cuellar, 2002), vandalism, violence and even death from the *coyotes*, the United States Immigration and Naturalization Services officers (Suárez Orozco and Suárez Orozco (2001) and criminal gangs. In addition, women and girls face additional risks of being physically and sexually abused, raped, robbed or even murdered on their journey (Amnesty International, 1998).

Cuellar (2002) explains how Latinos, once on the other side of the frontier, face other stressors: discrimination, fear of deportation, dangerous work conditions, lack of health insurance and access to social security even as they contribute to the system with their taxes. Immigrant Latinos begin developing mental health problems (depression and other affective and psychiatric disorders) and substance abuse as they become more acculturated (Cuellar, 2002; Hovey, 2001; Vega, Kology, Aguilar-Gaxiola, Alderete, Catalano and Caraveo-Anduaga, 1998). A study by Torres Stone and Meyler (2006) found that non-metropolitan immigrant Latino adolescents experience stressors associated with parent-child communication, language acquisition, school, and community integration and parent's work status. In contrast, the youth also reported strong social and family ties, a strong sense of cultural identity, and access to cultural traditions. The Transactional Mental Health Stress Model for Migrants (Ensel and Lin, 1991) also describes how individual characteristics (self-esteem, intelligence, social skills, etc.), social resources and cognitions (expectations, hope, optimism, dreams, etc.) play an important role as mediating factors. Immigrant children and adolescents generally suffer separation from one or both parents since adults usually migrate first, mostly under the support of family networks living already in the United States (Suárez-Orozco, 2001). In some cases, the separation can last years, decades and even a lifetime. Some children arrive to the United States not remembering their parents at all, especially in the cases of undocumented immigrants. Adler (2004) describes how *coyotes* (smugglers who bring illegal immigrants into the United States) in Yucatan often separate children from their parents to cross the border. This

separation and the dependence on strangers can be truly terrifying and one of the most stressful experiences suffered by Hispanic adolescents (Zambrana and Silva-Palacios, 1989).

Acculturation Stress

Acculturation can be defined as a multidimensional process of socialization between 2 or more groups. The process usually involves dominant and non-dominant cultures (Berry, 2001). Acculturation is rooted in 2 aspects related to social, attitudinal, and behavioral issues: (1) degree of contact and the participation of each group with the other, and (2) degree of cultural maintenance of each group. Non-dominant individuals, experience various options: 1) *marginalization* (when an individual has little possibility or no interest in cultural maintenance and little interest in having contact with the other group), 2) *separation* (cultural maintenance and avoidance of interactions with other groups), 3) *assimilation* (no cultural maintenance but seeking regular interaction with other groups) and 4) *integration* (maintenance of cultural heritage as well as regular contact with other groups). Integration is also known as biculturalism. Biculturalism allows the individual to feel comfortable in 2 diverse cultural environments by simultaneously accommodating the mainstream culture while maintaining attachment to the culture of origin (Agar, 1991).

The individual psychological process of acculturation for Latinos, like many other immigrant groups, requires the assimilation of multidimensional and multilevel aspects including learning a second language, employing specified and unspecified social rules, customs, values, attitudes, resources, and functioning in compliance with the environment in order to be socially

competent. A second language is not the only form of communication that immigrants must learn. Social interactions are culturally structured (Suárez-Orozco, 2001) demanding understanding and practice of interpersonal expectations and interactions. Therefore, acculturation is frequently a stressful process at many levels (Kagitçibasi and Berry, 1989). Acosta, et al. (2004) further illustrates that the most significant stressful conditions encountered by Latino youth are poverty, stress within families, exposure to crime, poor access to health and mental health services, and exposure to violence. Although less significant problems, abuse and neglect, poor nutrition, and large family size were still considered at least somewhat serious.

Some studies reveal that more acculturated children with higher socioeconomic status show better coping skills (Moyerman D.R.; Forman B.D.) and internal locus of control (Guinn B, 2002). However, most studies show that young Latinos who became more acculturated are more likely to experience mental health and other problems including: stress, low self-esteem, school failure, eating disorders, increased sexual intercourse, substance abuse and behavioral problems (Cuéllar 2000, 2002; De la Rosa, 2002; Ford and Norris, 1993; Ho, 1992; Jane, Hunter and Lozzi, 1990). Adult Latino immigrants' mental health status gets worse with increased acculturation towards the United States culture, in what is currently known as the Immigrant Paradigm of Acculturation (Cuéllar, 2000, 2002). A study by Cervantes et. al. (2007) also concludes that acculturation stress has conceptualized the adolescent Hispanic stress construct as involving a multidimensional process of mutual influence between dominant and non-dominant cultures as well as the

influence of structural variables related to socioeconomic status (i.e., parental education, household income, number of persons living in the home, generation status, etc.). Moreover, Latinos with higher acculturation levels are more likely to have lower levels of family social support and higher levels of depression (Rivera, 2007).

Language Barriers

In addition to immigration and other acculturation strains, Latino adolescents who are not born in the United States, experience language barriers that constitute powerful stressors in the school setting. Many behavioral problems in Latino adolescents are related to socialization issues caused by language barriers. In addition, different rates of language acquisitions along with different preferences of the use of a language between parents and children, can facilitate intergenerational conflicts and communication problems in the family (Vega, Zimmerman, Warheit, Khoury and Gil, 1995). Parents may discourage children to speak in English, or vice versa to communicate only in Spanish, in an attempt to avoid marginalization and school failure (Rice and Dolgin, 2001).

Suárez-Orozco and Suárez-Orozco (2001) stated that immigrant Latino adolescents tend to stop using their first language. Spanish language competence is likely to atrophy over time since English is the first language at school where children spend most of their active time. They become comfortable using English in any context, including home.

In addition, children of first and second generation of immigrants who speak English with parents who only speak Spanish do not have the opportunity to practice their skills in writing, reading, and conversational English at home or

be helped with home-work. This situation may contribute to school failure increasing the risk of school drop-out.

Economic Disadvantage

Minority adolescents are more likely to be poor than White youths (Brindis, Driscoll, Biggs and Valderrama, 2002-1). Therefore, they encounter additional stressors, since socioeconomic status is associated with multiple problems. Latino adolescents are mostly concentrated in urban communities or barrios. Certain segments of Latino populations live in neighborhoods where there is violence, drug and alcohol use, gangs, academic failure, delinquency, and unsafe sexual promiscuity among adolescents (Rice and Dolgin, 2002). These are consequences of poverty, marginalization, segregation and distress, which are also the cause of other future problems such as broken families, school failure and drop-out, teenage pregnancies, HIV and AIDS and other sexually transmitted diseases, victimization, incarceration, and death. Latino adults are much more likely to live in poverty and have significantly lower income than non-Hispanic Whites (Ramirez and De La Cruz, 2003). This disadvantage may force both parents of another Latino family to work outside the home (Suárez-Orozco and Suárez-Orozco, 2001). Adolescents may also be encouraged to contribute to the family income by working (Rice and Dolgin, 2002). Some children and adolescents are often left without supervision and sometimes with the responsibility of raising younger siblings since day care is very expensive for these families. Latino adolescents may spend most of their unsupervised time on the streets, increasing their risk of becoming involved in gangs, drug use, crime, unprotected sex, and other serious problems.

Family Interactions and Conflicts

Many Latino families function under patriarchal principles, since their culture was influenced by traditional Roman Catholic practices. Within this structure, gender roles are clearly established for men and women. Latinas are often educated to accomplish a traditional role (household and maternal responsibilities) and socialized to accomplish this role with submissive and self-sacrifice attitudes (Flores, 1994). On the other hand, Latino males have been traditionally socialized to be “*el hombre de la casa*” (head of the household), protector and authority figure that enjoys certain privileges and freedom to the detriment of women (Rice and Dolgin, 2001; Perilla, 1999; Flores, 1994).

Familismo, another important characteristic of the Latino culture means devotion and *respeto* (respect) for the family. Family members share strong values of loyalty, respect, solidarity and reciprocity with other family members, including extended relatives. Keeping the family together is the first goal of its members to the point that even in cases of partner and child abuse, family members tend to maintain silence and to consider it a family matter (Perilla, 1999).

Latino parents often emphasize the values mentioned above as conflicting with principles promoted by the dominant North-American culture: Individualism, competitiveness and materialism. Conflicts within generations of Latino families are often related to the confrontation of these principles. Latino children are given less freedom and socialized to distrust strangers. This can sometimes make it difficult for adolescent Latinos to succeed in the United States (Rice and Dolgin, 2001). Abalos (1986) describes the Latino family as a “sealed container” that sometimes does not allow the children to be themselves.

The cultural transition process is faster and more intense for children than that of their parents because they attend school upon their arrival. Parents who are low or slightly acculturated may have conflicts with teenagers who are acculturated and are losing their primary cultural values. Conflictive values such as collectivism versus individualism may bring problems within Latino families, including conflictive customs and rules (Suárez-Orozco and Suárez-Orozco, 2001). In particular, a study by Samaniego and Gonzales (1999) found that family conflict, inconsistent discipline, maternal monitoring, and negative peer pressures fully accounted for the effects of acculturation status on delinquency in Mexican American adolescents.

Peer Pressure: “Las malas compañías”

Adolescence is a period in which relationships outside the family multiply and become more significant and deep. Peer group relationships serve as a source of emotional and instrumental support, security, development of leadership skills, and exploration of self-need (Hartup, 1983; Erikson, 1968). However, adolescents also experience tensions and pressure to conform to group norms in a constant balance between the urgency of being close to others and being assertive and independent. Within this balance, there is family influence as well. An atmosphere of support and acceptance of independence of the adolescent in the family is leads to the perception of peer groups as a source of support. On the other hand, families characterized by conflict and lack of support for individual development relates to an increased involvement of adolescents with groups and more conformity to group pressures (Shulman, Seiffge-Krenke, Levy-Shiff, 1995).

Latino families characterized by conflicts and lack of support for their adolescent members could lose their children to gangs (Duke, Martinez and Stein, 1997; Shulman et al., 1995). Some research suggests that the more acculturated Mexican Americans are the more sensitive and susceptible they become to antisocial peer pressure (Wall, Power, and Arbona, 1993).

School and Academic Performance

Studies report a decline in school achievement over the course of early and later adolescence (Petersen et al., 1991). School is a demanding environment with many sources of stress for adolescents. One of the most stressful events is violence in school, either physical or emotional, and being victimized in other ways (sexually, robbery, etc.). In addition, other factors such as school failure, social anxiety, peer pressure, apathy and dissatisfaction in school may lead the adolescent to drop out of school. Even though the dropout rates for adolescent Latinos improves with every new generation, data from the Census (Ramirez and De la Cruz, 2003) show that Latinos are less educated than non-Hispanic Whites. Latinos are less likely to finish high school, they have the highest school drop-out rates, and have less than a ninth-grade education in comparison to non-Hispanic Whites. In fact, nearly half, (44%) of Latino adolescents drop out of high school (DHHS, 2001). Latina females in particular drop-out of school more often than Latino males. These Latinas are at greater risk of becoming pregnant after they have dropped out and/or engaging in risky behaviors (National Coalition of Hispanic Health and Human Services Organization - COSSMHO, 1999). In addition, undocumented Latino immigrants (estimated in 7 million) are not allowed to continue their studies after

high school. This situation perpetuates the marginalized conditions and poverty of these immigrant children, condemning them to a very uncertain future. The educational opportunities for Latinos are limited due to several factors. Many Hispanic parents have low educational levels and economic status, many do not speak English fluently and are frequently unaware of how the educational system works.

These circumstances make the situation more difficult for parents to advocate for their children's educational needs. In addition, schools in urban barrios where most Latinos concentrate are poorly funded and the educational programs are inferior to other more privileged schools (Rice and Dolgin, 2002). These are serious problems since education is the means to access a better future and break the cycle of poverty and marginalization that repeats itself generation after generation. Also, Acosta et al. (2004) states that the most significant problems contributing to academic failure of Latino youth were reported to be poor relations between families and schools, poor or absent tutoring services, limited resources, poorly trained teachers, and concentration and language problems. In addition, Latino adolescents face other stressful events related to development transitions and challenges. Immigrant and non-immigrant Latino adolescents are likely to experience a variety of acculturative strains at school that affect their performance and aspirations to continue their studies; including such acculturative strains are language barriers and socialization problems for immigrant Latino adolescents. Another acculturative strain is the perceived prejudice and discrimination as impediments to personal success for United States born Latinos (Vega, et al., 1995). Discrimination and violence in North-American schools is a fear factor

for many minority adolescents (Rice and Dolgin, 2001). Children soon become aware of discrimination and hostility from peers against their race or ethnic background. Discrimination, prejudice and hostility not only come from other peers but also from teachers who often do not understand Hispanic subcultures and values. Some teachers are hostile because students speak English with an accent or use Spanish to communicate with each other (Suárez-Orozco and Suárez-Orozco, 2001).

Latinas: Gender Roles, Socialization and Conflictive Values

Traditionally, Latinas are socialized into conservative values and religious (Catholic) principles or cultural influences of gender roles. *Marianismo* implies being modest, submissive, self-sacrificing, passive and virginal. The main role of the Latina female is to keep the family together and united. Girls are taught to accept male dominance as the authority figure in the family and society. Men are the head of the household and providers of the family and also have certain privileges, such as freedom to make decisions for themselves and the rest of the family. In some households, promiscuity and the use of alcohol is tolerated and in a few cases acceptable. Females are not supposed to learn about sexual relations by conversation or experience, but be “pure” until they get married and to be a *buena mujer* (good woman). Fathers and older brothers are traditionally perceived as “*el hombre de la casa*” (the man and head of the family), protector and authority figure (Flores, 1994; Perilla, 1999; Rice and Dolgin, 2001). This way, young Latinas have less freedom than their counterpart males and might be closely supervised by parents and older brothers and taught to take their place in the home. They also might have household responsibilities such as cleaning, caring for younger

siblings or children from extended family members (Rice and Dolgin, 2001). The shift from a social system with traditional values that emphasizes definite roles for males and females to a system where there is greater freedom in sex roles and sex behavior, causes confusion and is a source of family conflicts and stress. For instance, the female traditional role changes once Latinas are in the United States. In most cases, both male and female have no choice but to work to make ends meet and in some cases work more than one job, increasing the levels of stress on both genders. These conflicting values may be creating additional stress between Latina girls, their parents and other family members. In fact, evidence shows how young immigrant Latinas report greater degrees of stressful change of events in association with family during the migration process as well as higher levels of stress related to cultural and family conflicts and generalized distress when compared to migrant males (Salgado de Snyder, Cervantes and Padilla, 1990). In many cases, this is the result of dual roles (raising a family, domestic work, and employment outside the home). It can also be stressful and depressing for males who struggle to find employment or who cannot earn enough to support their family, since they are socialized to be the family providers.

Consequences of Stressors for Latino Adolescents

Consequences on the Physical Health

Adolescence is a period of life that involves extensive change and challenges (Compas and Wagner, 1991; Petersen et al., 1991). The research consensus is that most of the variance in negative outcomes in adolescence related to stress is explained by psychosocial influences (Buchanan,

Ecles and Becker, 1992; Brooks-Gunn, Graber and Paikoff, 1994; Steinberg and Morris, 2001). Some adolescents could perceive the stressful conditions stimulating and respond in a positive way. However, others may find their situation overwhelming and be unable to cope. Distress could lead some adolescents to develop physical and mental health problems. Psychological stress has been linked to “associated immune modulation and risk for infectious diseases” (Glaser, Rabin, Chesney, Cohen, and Natelson, 1999) like infections, asthma, etc. Studies show, however, that high levels of short term or chronic stress can depress the immune system, placing the individual at higher risk of viral infections and prolonging the healing period (Harrison, 2000).

Growing evidence indicates that health problems of young Latinos have been on the rise. Such physical health problems include increasing rates of eating disorders and obesity that can lead to diabetes and cardiovascular disease. A study by Dallman, Pecoraro, Akana et al. (2003) revealed that “in stressed or depressed humans chronic stress induces either comfort food [high fat and carbohydrates] intake and body weight gain or decreased intake and body weight loss.” According to this study, some of the long term consequences of chronic stress can lead to “deleterious weight gain, abdominal obesity, type II diabetes, increased cardiovascular morbidity, and mortality.” Overweight in adolescents is a serious problem that is growing in the United States. Based on medical examinations of a Mexican study group (Freid et al., 2003), Latino adolescents between 12 and 19 years of age revealed high rates of overweight. Overall, young Latino males had the highest rate (27.5%) of overweight both by gender and by race and ethnicity. The rate for Latino females (19.4%) was also

high, but less than African-American females. One study linked overweight Latino adolescents with parents having a high school education or less and who live in poverty. It also revealed that the lack of health insurance or having a public health insurance program put Latino adolescents at greater risk for obesity (Haas et al., 2003). A recent study shows that regardless of gender, ethnicity, or socioeconomic status, adolescents who experienced greater levels of stress eat more fatty foods and snacks and less vegetables (Cartwright et al., 2003). The implications of this study are that long-term stress can lead to a greater risk of developing diseases (Cartwright et al., 2003).

Another stress induced/intensified health condition on the rise amongst minority youth (inclusive Latinos) is asthma. Teenagers express more psychological stress than children when trying to cope with the “social stigma of asthma” (A.D.A.M., 2004). The A.D.A.M. publication on asthma also identified both stress and depression to be associated with “more severe symptoms and even an increased risk of fatal asthma attacks”. Stress-reducing and relaxation techniques are recommended to alleviate symptoms and manage asthma. Although more non-Hispanic Whites and African Americans report and have a current prevalence of asthma, African Americans and Hispanics are at greater risk for death related asthma. Like African Americans, Hispanics have high rates (26%) of emergency room visits, the higher rate (36.9%) of urgent care visits, asthma attacks, sleeping difficulty (64.7%), limited activity (40.4%), and like Whites, Hispanics too display high rates (72.3%) of asthma symptoms. Such disparities in asthma rates have been attributed to poverty, low education, lack of or underinsurance, and environmental factors (CDC, 2004).

Consequences of Displaying Risk Behaviors

Substance abuse

Latino youth, in particular of Mexican descent, reported using more alcohol than any other substance. Data based on household interviews also indicated more alcohol use than any other substance. Findings showed that 19% of Hispanic adolescents between 12 and 17 years of age reported using alcohol in 1998; non-Hispanic Whites had a slightly higher (21%) rate. Similarly, 6% of Latino and 9% of White adolescents reported binge drinking. The second most used substance amongst Hispanics is cigarette smoking (DHHS, 2000; CDC, 2004). The rise of cigarette smoking amongst Hispanic youth is of great concern, particularly for Latina female adolescents who have the highest rates of teenage childbearing, presenting a potential rise in health related childbearing problems if preventive measures are not taken (Baezconde-Garbanati). The third most used (8%) drug by Hispanic youth is marijuana, which has similar rates across other cultural or ethnic adolescents (Kulis et al., 2003). However, cocaine use amongst Latinos was at an all time high of 1.4%, greater than rates for any other race or ethnicity in 1998 (DHHS, 2000). Latina adolescents reported using alcohol and drugs to relieve stress and depressive symptoms (COSSMHO, 1999). Issues of stress, in particular acculturative stress, have been linked to higher rates of substance use amongst Latino adolescents (De La Rosa 2002; Schinke, Moncher, Palleja, Zayas and Chilling, 1988). More recently, a study by Hussey, et al. (2006) reveals that second and third-generation Latino youth are more likely than first generation adolescents to engage in co-occurring sex and drug risk behaviors. These findings are most evident as early as the

second generation—the United States – born children of immigrants.

Unprotected sex

Adolescent and acculturative stress can also lead to Hispanic teenage risky sexual behaviors such as unprotected sexual practices, increasing the rates of teenage unwanted pregnancies, sexually transmitted diseases (STDs), and HIV infections and AIDS (Ford and Norris, 1993). According to the Department of Health and Human Services (Freid et al., 2003), Latina teenagers under the age of 18, had the second highest rate (5.8%) of teenage childbearing in 2001. Teenage pregnancy increases the rates of low birth weight as well as infant mortality rates more than any other child bearing age group (DHHS, 2000). A study on Latino adolescent females, shows that Mexican-American girls had the highest rates of teenage pregnancy (Pensa and Mathews, 2000).

Sexually active youth are at greater risk of contracting STDs. The wide spread of STDs amongst teens is due to having multiple sexual partners and engaging in unprotected sexual intercourse. Although African American teenagers contract more STDs than any other group, Hispanics are also at high risk (Buzi, Weinman, and Smith, 1998; Brindis, Driscoll, Biggs, and Valderrama, 2002). Likewise, HIV and AIDS in Latino and Latina adolescents is on the rise. Like African Americans, Hispanics also have disproportionately higher rates of AIDS, and the highest rate of heterosexually acquired AIDS (with the exception of Puerto Ricans who have higher rates of intravenous drug related HIV infections) (Berger and Rivera, 1993; CDC, 2002). Some of the reported barriers linked to the higher rates of STDs and HIV infections amongst Hispanics include: the lack of contraception knowledge, cultural and religious beliefs about contraception (in particular amongst

Mexican-Americans), lower rates of condom use, and lack of medical insurance or low insurance (Buzi et al., 1998; Rosenthal, Biro, Succo, Bernstein and Stanberry, 1997).

Protective Factors and Coping Skills

Understanding how healthy adolescents cope with stress, and the types of strategies they use to deal with stress, is important to help those adolescents with greater life difficulties or pressures, like the stressors many Latino and Latina teens face everyday. Strategies such as relaxation techniques, good sense of humor, peer support, family cohesion, strong self-esteem, physical and mental activity, problem solving skills, and external locus of control, are identified in the literature to help stressed people in general, and adolescents in particular (Copeland and Hess, 1995; Frydenberg and Lewis, 1993; Mates and Allison, 1992). There is also literature on gender differences in coping styles that describe boys as more likely to cope through playing and direct action while girls benefit more through social support (Frydenber and Lewis, 1993). However, research with Latino adolescents in particular and gender differences in Latino adolescents regarding coping with acculturation stress is limited, although increasing.

From the few studies of protective factors and coping skills in Latinos, a natural social support system is being identified as a crucial preventive factor to cope with stress, marginalization, racism and other stressors suffered by minorities (De La Rosa, 1988). It is also the most cited resource to cope with stress in the literature (Petersen et al., 1991). *Familismo* and *colectivismo* are Latino cultural characteristics, but are also powerful protective factors (Padilla, Cervantes, Maldonado and Garcia, 1988). There is evidence of the association between the lack of family

bonding (especially between mothers and adolescents) and stress (Kenny, Gallager, Alvarez-Salvat and Silsby, 2002; Zarza and Cervantes, 2004). Acculturation stress, conduct disorders, learning problems, impulsivity, hyperactivity, low grades at school, substance abuse and high-risk sexual behaviors in adolescent Latinas are related to lack of bonding with mothers (Zarza and Cervantes, 2004). Parental involvement is considered critical to prevent mental health problems and other consequences in Latino adolescents (Guinn and Vincent, 2002; Kenny et al., 2002) and adolescents in general (Pearce, Jones, Schwab-stone and Ruchkin, 2003). In addition, other studies show the importance of emotional support from peers to Latino adolescents and youth (Jarama, Belgrave and Zea, 1996).

Another type of resource that may help to moderate the effects of stressful situations are the internal coping responses, usually described as coping style (Lazarus and Folkman, 1984). Problem-focused coping responses to stress imply direct action (thoughts and instrumental behaviors) to fight the stressors, perceived as being under one's control (internal locus of control) and even representing a challenge for personal growth (positive reappraisal). On the other hand, emotion-focused coping styles are displayed when stressors appear beyond one's control or external locus of control (e.g. *fatalismo*). Latino adolescents who have high self-esteem are more likely to cope with stress and less likely to perceive external locus of control and, therefore, less likely to take direct action (Folkman and Moskowitz, 2000). Adolescent self-esteem develops from within and through empowerment and acknowledgment from parents, peers, teachers, and community. Empowerment is built through social

interaction and recognition of achievements at home, school settings, in sports, art or other activities where they feel challenged and respected at the same time (Guinn and Vincent, 2002).

Latino adolescents ethnic identity plays an important part on their self-esteem building. The development of an ethnic identity or the aspect to relate to one's membership in an ethnic group to achieve a secure sense of themselves helps to develop self-esteem and to have better mental health overall (Greig, 2003).

Recent studies also reveal that religion plays a significant role in the lives of Latinos and other adolescents as a protective factor for mental health and conduct problems (Pearce et al., 2003; Thomson and Gurney, 2003).

Future Direction for Research

The development of new research is necessary to understand the causes of stress and health problems in Latino youth. This research is needed in order to implement primary and secondary prevention programs that are sensitive to the real needs and cultural background of Hispanic adolescents. This section will cover several aspects for social research in Latino adolescents, as follows: 1) methodological improvement of current studies, 2) addressing the lack of assessment tools normed for Hispanic adolescents to measure stress and other mental health problems, as well as the lack of bicultural or bilingual mental health professionals; and finally 3) suggestions for future research.

The lack of reliable and valid testing research and evaluation instruments normed on contemporary samples of both Spanish-speaking and English-speaking Hispanics has been and continues to be a major barrier to the conduct of valid studies and culturally relevant clinical assessment for this population.

Methodologically, there is a need for an objective definition of acculturation in social science research in order to compare studies and generalize the results in Latinos. There is confusion between acculturation (assimilation to other culture but no primary cultural maintenance), according to Berry and Annis (2001) and biculturalism (integration of the new culture and maintenance of primary cultural heritage). Conflicting findings of studies performed regarding mental and physical

health in Latino adolescents could be related to this problem. In these studies, it is unknown if these children are acculturated or bicultural. These factors should be controlled when performing studies on acculturation and its consequences on Latino health. In addition, as Negy and Woods (1992) indicate, acculturation studies are often overlooking socioeconomic status as an important

positive correlate to acculturation. In other words, more acculturated adolescents generally come from backgrounds with higher standards of living and better educated parents. Negy and Woods study suggests that socioeconomic status and acculturation are intricately intertwined. Therefore, it is crucial to control the socioeconomic status variables to conduct social studies on acculturation stress in Latinos.

The lack of reliable and valid testing research and evaluation instruments normed on contemporary samples of

both Spanish-speaking and English-speaking Hispanics has been and continues to be a major barrier to the conduct of valid studies and culturally relevant clinical assessment for this population (U.S. D.H.H.S., 2001). Hispanic researchers and clinicians in the 1970s began a critical process of challenging the existing personality assessment methodologies and interpretation schemata for psychological tests that continues on today (Miranda, 1976). Measurement development should start with the uniqueness of the Hispanic subject's experience and the family-environment context and then adapt or reject existing instruments. Many concepts that are important in a culture may be missed if tests and procedures are not developed from within the culture by its own psychologists (Lonner, 1990). The National Institute of Mental Health-supported (Grant No. MH 24854) Spanish Speaking Mental Health Research Center at the University of California in Los Angeles developed and implemented 2 innovative acculturative stress scales. The Social, Attitudinal, Familial and Environmental (SAFE) scale was used in research as a dependent variable measure in order to investigate the relationship of stress with the independent variables of generation status and personality in samples of college students (Padilla, Alvarez and Lindholm, 1986; Mena, Padilla and Maldonado, 1987). The Hispanic Stress Inventory (HSI) was developed to be a more widely used instrument to assess adult acculturative stress in the general population of Hispanics (Cervantes, Padilla and Salgado de Snyder, 1991). Recently, the theoretically based Bicultural Stressors Scale has been developed for application to Hispanic adolescents (Romero and Roberts, 2003). The scale demonstrates that specifically designed instruments for

Hispanic adolescents can yield useful assessments regarding the effect of bicultural stress on subsequent depressive symptomatology. However, the major limitation of the scale is that it has been developed only for Hispanic adolescent and middle school students of Mexican descent in a rural bicultural environment. There is an immediate need for scales that address Latino acculturation stress in adolescents both for immigrant and second generation immigrant Latinos. In addition, there is a need for assessment tools that are gender specific.

In addition to methodological improvements and psychometric research, there is also a need for studies that cover the gaps that current research has left on normative and non-normative stressors in Latino adolescents. For instance, there is a lack of research on normative stressors related to the physical, sexual, and mental developmental changes of Latinos in comparison to other ethnic groups. For example, the perceptions of physical differences in young Latinas when compared to the dominant group (Whites) and the mental and physical health (i.e., anorexia, bulimia, obesity, stress, and depression) consequences of such perceptions. Additionally, there is a need of further studies on the effects of the mass media modeling the predominant cultural values and customs (i.e., White models) on Latino adolescents' perception of their bodies, self-esteem, cultural background and behavior.

This review found a need for research on non-normative stressors in Latino adolescent in intergenerational differences on acculturation levels and its consequences in the family (i.e., stress and conflicts between parents and adolescents) and in further research that focuses on the difference between

acculturated (assimilation but no maintenance of cultural background) and bicultural Latino adolescents (maintaining the culture) and their relationship to mental and physical health. This review points out that Latina adolescents are in higher jeopardy for mental health and suicide attempts. In addition, there is evidence of significant gender differences between Latino male and female adult stressors and the related mental health consequences (Salgado de Snyder et al., 1990). Nevertheless, there is a gap in the current research that addresses gender differences in Latino adolescents related to stressors, coping skills, resiliency and consequences in physical and mental health, 4) also, there is considerable research on coping skills for adolescents and even some studies on Latino adults coping responses (see Padilla et al., 1988). However, there are few studies on coping skills (cognitive and behavioral process to manage stress), mediating and protective factors in Latino adolescents (family, friends, self-esteem, etc.). These studies are essential to develop prevention and intervention programs, 5) in addition, the Immigrant Paradigm of Acculturation (Cuéllar 2000, 2002) or discrepancy between immigrant and non-immigrant health (both mental and physical) related to acculturation stress and other mental health disorders as well as substance abuse should be further examined in adolescents. In spite of the fact that immigrants, especially those undocumented, have a higher number of stressors and barriers for acculturation (language barriers, separation from family members, economic constrains, lack of education and work skills, discrimination, etc.) (Padilla et al., 1988) than non-immigrant Latinos, Latino immigrants overall display better physical and mental health (Cuellar, 2000, 2002; Ford and Norris, 1993; Ho, 1992; Hovey, 2001; Jane et al.,

1999; Vega et al., 1998). This discrepancy deserves more scientific attention focusing on possible explaining factors such as cognitive mediating variables (i.e. expectations, stress appraisal, locus of control, etc.) and other factors (i.e. reducing the number of stressors when migrating to the United States) that might elucidate these results in Latino adolescents.

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