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## Gender Differences in Antecedents to Academic and Personal Well-Being in Urban Youth: What Is the Role of Social Support?

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LOYOLA UNIVERSITY CHICAGO

GENDER DIFFERENCES IN ANTECEDENTS TO ACADEMIC AND PERSONAL  
WELL-BEING IN URBAN YOUTH: WHAT IS THE ROLE OF SOCIAL SUPPORT?

A DISSERTATION SUBMITTED TO  
THE FACULTY OF THE GRADUATE SCHOOL  
IN CANDIDANCY FOR THE DEGREE OF  
DOCTOR OF PHILOSOPHY

PROGRAM IN COUNSELING PSYCHOLOGY

BY

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CHICAGO, ILLINOIS

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## ABSTRACT

Urban youth are an important, yet understudied population. Moreover, the vast majority of existing research has focused on negative outcomes. Recently, there has been a trend in the field of adolescent research toward creating models that attempt to understand and explain why some members of at-risk populations are able to overcome adversities and to achieve successful adaptation. The present study investigated the relationships between perceived social support, gender, academic outcomes, and personal well-being in urban youth. Overall, perceived social support was found to be related to many outcome variables for males and females. Gender differences were found in the relationships between social support and both academic and personal well-being. In particular, the study found that social support was related to girls', but not boys' academic outcomes. In terms of personal well-being, results were mixed. The study also examined gender as a possible moderator between types of perceived social support (family, peer, and school) and academic and personal well-being. Results indicated gender did moderate some of the relationships between perceived social support and personal well-being. Lastly, gender differences were found between the relationships between academic achievement and well-being variables, with girls demonstrating more relationships between GPA and personal well-being. These findings are significant in that they highlight the importance of perceived social support and add to the literature attempting to delineate antecedents to positive development in urban youth

## CHAPTER ONE

### INTRODUCTION

Urban youth confront numerous impediments to attaining healthy developmental outcomes. Research has established that adolescents in low-income, urban areas experience a high number of stressors largely due to their environment. For example, urban low-income neighborhoods are typically characterized by high rates of crime, unemployment, school drop out, teen pregnancy, and welfare dependency (DuBois, Felner, Meares, & Krier, 1994; Duncan, Brooks-Gunn, & Klebanov, 1995; Gillock & Reyes, 1999). Stressors such as conflict, racism, poverty, and violence are more prominent in these areas (Mincy, Sawhill, & Wolf, 1990). Further, low-income urban youth are at higher risk than other children for a variety of additional stressful life experiences and related psychological problems (DuRant, Pendergrast, Slavens, & Linder, 1994).

Race and ethnicity are central issues of urban poverty, as there is a significant overrepresentation of people with minority status in low-income urban areas (McLoyd, 1998). For example, poverty rates for African-American youth are two and a half times those for White youth, with approximately 31% of African-American children and adolescents living in poverty (U.S. Census Bureau, 2000). Latino children are also more likely than White children to live in impoverished areas (U.S. Department of Education, National Center for Educational Statistics, 2003). In comparison to 9% of White

children, 28% of Latino children younger than the age of 18 live below the federal poverty level (National Center for Children in Poverty, 2002). Additionally, poor African-American and Latino youth are more likely than poor White youth to experience persistent poverty (Huston, McLoyd, Coll, & Garcia 1997).

There is ample evidence that the percentage of adolescents in the United States who are ethnic minorities will grow considerably over the next two decades (Way & Robinson, 2003); in fact, it has been projected that Latinos will constitute over 25% of the population by the year 2060 (US Census, 2000). Despite this population trend, there is limited research on factors affecting their well-being and the majority of the existing research focuses on negative outcomes (Marsella, 1998). Recently, however, there has been a trend in the field of adolescent research toward creating models that attempt to understand and explain why some members of at-risk populations are able to overcome adversities, challenges, and stressors and to achieve successful adaptation (Masten & Coatsworth, 1998). This shift in focus reflects a burgeoning recognition that it is necessary to understand the antecedents to healthy outcomes in order to develop prevention and intervention programs that promote adaptive behaviors (Plunkett & Bámaca-Gómez, 2003). For example, in order for prevention programs designed to help urban youth succeed in school to be effective, it is important to understand factors that influence positive academic outcomes in this population. This viewpoint is consistent with the growing field of positive psychology, which promotes the study of people's strengths and assets (Seligman & Csikszentmihalti, 2000) and is in line with a central

tenet of counseling psychology: identifying and fostering strengths in individuals from all cultural backgrounds (Gelso & Fretz, 1992).

Two critical outcomes often investigated in psychological research on at-risk adolescents are academic achievement and personal well-being. Existing research on these variables has uncovered a paradox in the overall functioning of minority adolescent girls and boys: while girls consistently outperform boys academically (Johnson, Crosnoe, & Thaden, 2006; Saunders, Davis, Williams, & Williams, 2004), they appear to be more at risk emotionally (Crick & Zahn-Waxler, 2003; Hankin, Mermelstein, & Roesch, 2007). Research suggests that differences in the salience of social support for males and females may help to explain these documented gender differences. Overall, females have been found to place greater importance on relationships and social support (Demaray & Malecki, 2002; Malecki & Demaray, 2006; Jackson & Warren, 2000; Schraedley, Gotlib, & Hayward, 1999). The significance of social support for females implies that while they will benefit more from available support, they may also suffer more when they do not perceive positive support from others.

#### *Perceived Social Support*

One of the principle premises of positive psychology is that prevention of psychopathology is most effective when efforts are focused on building individuals' strengths, rather than on repairing their deficits (Seligman & Csikszentmihalti, 2000). The positive psychology field hypothesizes that a set of buffers against psychopathology exists, which can provide the foundation for effective prevention programs (Suldo & Huebner, 2004). One such potential buffer is perceived social support. Social support is

defined as individuals' perception of supportive behaviors from their social networks (e.g., parents, teachers, classmates, friends, and school) that enhance functioning and/or may buffer them from adverse outcomes (Malecki & Demaray, 2002; Malecki & Demaray, 2006). Theory and research on perceived social support in adult populations suggest that individuals who report higher levels of social support in their relationships are in better physical and mental health than those with lower levels of support (Uchino, Cacioppo, & Kiecolt-Glaser, 1996). Perceived social support has been found to be moderately to strongly related to many personal, clinical, health, and social indicators for school-aged children and adolescents (Malecki & Demaray, 2006; Piko, 2000; Uchino et al, 1996).

From a resiliency framework, perceived social support may be even more important for low income, minority adolescents. Research from this perspective delineates potential protective factors or buffers, one of which is social support, for children and adolescents in high-risk settings or under stress (Becker & Luthar, 2002; Garmezy, Masten, & Tellegen, 1984; Luthar, 1991; Luthar, Cicchetti, & Becker, 2000). Literature from this framework has found that various sources of social support (e.g. family, peer, and school support) were associated with more positive outcomes, such as academic achievement, school engagement, and psychological adjustment as indicated by self-esteem and/or depressive symptoms (Becker & Luthar, 2002; Dubois, Felner, Brand, Adan, & Evans, 1992; Eccles, Early, Frasier, Belansky, & McCarthy, 1997; Gillock & Reyes, 1999; Levitt, Guacci-Franco, & Levitt, 1994).

### *Academic Achievement*

One outcome often investigated in psychological literature on urban, minority adolescents is academic achievement. Minority adolescents face a multitude of obstacles to being academically successful and tend to lag in academic achievements when compared to their White counterparts (Becker & Luthar, 2002; Sanchez, Colon, & Esparza, 2005; National Center for Educational Statistics, 2006). This achievement gap between ethnic minority and White students persists throughout elementary school and may even widen during secondary school (Phillips, Crouse, & Ralph, 1998). For example, Latino students have the highest high school drop out rate, with 36.5% of Latino immigrants dropping out of school (U.S. Department of Education, National Center for Educational Statistics, 2006). In general, ethnic minorities have been found to have lower grades and to perform less well on standardized tests of ability and achievement when compared to White students (Becker & Luthar, 2002; Sanchez, Colon, & Esparza, 2005; National Center for Educational Statistics, 2006). As a result of this disparity, a greater priority has been placed on identifying and examining the characteristics that lead to academic success and failure among minority students (Alfaro, Umana-Taylor, & Bamaca, 2006; Plunkett & Bamaca-Gomez, 2003; Sanchez, Colon, & Esparza, 2005; Gillock & Reyes, 1999).

In addition to investigating the achievement gap between ethnic minorities and White students, there is growing interest in exploring gender differences in the academic performance of minority groups (Johnson et al., 2006; Mickelson & Greene, 2006; Sanchez et al., 2005; Saunders et al., 2004; Taylor & Graham, 2007). Research indicates

that a persistent gender gap exists in academic achievement between girls and boys in which girls consistently outperform boys (Johnson et al., 2006; Saunders et al., 2004). This gender gap is significantly wider for minority populations than White students (Rong & Brown, 2001; Saunders et al., 2004). For example, research has found that urban, low-income minority females outperform males in the year following high school transition and that fewer females drop out of high school. (Reyes et al., 1994). This gender disparity in academic achievement for minority adolescents is extremely concerning as the relationships among educational achievement, particularly high school completion, and future life outcomes, especially employment and economic stability, have been well documented (Saunders et al., 2004).

### *Personal Well-Being*

Another important outcome increasingly being investigated in adolescent populations is personal well-being, along with its correlates, such as self-esteem. Adolescence has been characterized as a significant period of transition with a great number of biological, social, and psychological challenges to an individual's well-being. In contrast to their well-documented academic resiliency when compared to males, a considerable amount of theory and research points to greater emotional difficulties for girls than boys as they enter adolescence (Crick & Zahn-Waxler, 2003). In fact, female adolescents have been identified as an at-risk population who should be specifically supported by preventative mental health (Hankin et al., 2007).

Two factors that have been found to greatly impact well-being in adolescence are depression and self-esteem (Compas, Connor, & Wadsworth, 1997). In terms of

depression, youth who report depressive symptoms are more likely to also report low self-esteem, difficulties in academic performance, and problems in family functioning, (Deardorff, Gonzales, and Sandler, 2003; Hovey & King, 1996; Pesa, Cowdery, Westerfield, & Wang, 1997; Portes & Rumbaut, 2001; Romero & Roberts, 2004). While the literature points to few gender differences in the prevalence of depression in childhood, by middle to late adolescence depression increases in females at a rate twice that of males (Katragadda & Tidwell, 1998; Peterson, Sarigiani, & Kennedy, 1991). However, the bulk of the research in this area has focused on predominantly White, middle-class samples (McLaughlin, Hilt, & Nolen-Hoeksema, 2007; Roberts, Roberts, & Chen, 1997; Roberts & Sobhan, 1992). Finding from studies that have examined depression in low-income, urban minority samples are inconclusive. While a few studies have found no evidence of ethnic differences in adolescent depression (Doerfler et al., 1988; Garrison et al., 1990; Manson et al., 1990), most have reported that ethnic minority adolescents generally scored higher on self-reported depressive symptoms than members of the majority groups (Emslie, Weinberg, Rush, Adams, & Rintelmann, 1990; Kistner, David, & White, 2003).

Self-esteem is widely acknowledged to be an important factor in adolescent development and is often used as a proxy of personal well-being in studies on adolescent populations (Harter, 1993). Self-esteem is associated with how individuals feel, how they think, and how they behave (Kling et al., 1999), and has been found to be positively associated with general psychological well-being and negatively correlated with hopelessness and depression among adolescents (Harter, 1993). Empirical research has

demonstrated strong links between self-esteem and functioning in multiple psychological domains (Harter, 1998). Further, high self-esteem has been identified as a protective factor for high-risk youth, in that it insulates them from stress that stems from negative life events and protects against depression (Masten & Coatsworth, 1998; Piko & Fitzpatrick, 2003). In contrast, low self-esteem has been associated with depression, suicide, delinquency, substance use, and lower academic achievement (Harter, 1998).

Studies of self-esteem and related constructs in adolescent populations consistently report that girls have lower and less stable self-esteem when compared to boys (Carlson, Uppal, & Prosser, 2000). However, as is the case with depression, the vast majority of research on self-esteem in adolescence has been conducted with White middle-class populations (Carlson et al., 2000). Although studies of early adolescent White populations reliably report lower and less stable self-esteem among girls when compared to boys (Harper & Marshall, 1991; Kling et al., 1999), it has been suggested that these findings might not generalize to minority populations (Carlson et al., 2000). For example, some studies have found that African-American girls report higher self-esteem (Carlson et al., 2000; Dukes & Martinez, 1994) and have more positive physical and social self-images (Mboya, 1988) when compared to other ethnic groups. Overall, studies examining ethnic differences in self-esteem have been inconclusive (Kling et al., 1999).

#### *Gender Differences in the Role of Perceived Social Support*

Existing research on gender differences in academic achievement and personal well-being presents a paradox in the overall functioning of minority adolescent girls and

boys: while girls consistently outperform boys academically, they appear to be more at risk emotionally. One potentially important finding that may help to explain gender differences in both of these outcomes is the role of social support. Studies investigating social support in children and adolescents have revealed significant gender differences in both the amount of perceived social support reported and in the salience of social support in general. Previous research has revealed that females typically report receiving higher levels of perceived social support from multiple sources than do males (Demaray & Malecki, 2002; Malecki & Demaray, 2006; Jackson & Warren, 2000; Schraedley, Gotlib, & Hayward, 1999). For example, females tend to report larger social networks than males and turn to others for emotional support in stressful circumstances more than males do (Ashton & Fuehrer, 1993; Taylor et al., 2000). Further, the literature suggests that girls place a greater amount of importance on social support, as well as related constructs such as mattering and sense of belonging (Goodenow, 1993; Goodenow & Grady, 1993; Rayle, 2005; Smerdon, 2002). These reported gender differences in the experience of social support may help to explain differences in both academic achievement and personal well-being. Although females appear to be more generally affected than males by developmentally related stresses of adolescence, they also report higher levels of support from family and friends (Gore & Aseltine, 1995). These higher levels of support may be related to the finding that urban, low-income females tend to outperform males academically (Gillock & Reyes, 1999), while still suffering more emotionally due to experiencing a greater impact from interpersonal stressors.

### *Statement of Problem*

The purpose of the present study is to examine the relationships between social support, gender, academic outcomes, and personal well-being in an urban, primarily Latino, middle school sample. Past research indicates that females begin to outperform their male counterparts academically in middle school (Johnson et al., 2006). Additionally, middle school is within the timeframe during which girls' self-esteem begins to drop when compared to males', while their rate of depression rises to two to three times that of males' (Katragadda & Tidwell, 1998). However, there is a paucity of research examining the different constructs that may predict academic and personal well-being in Latino girls and boys. Research suggests that differences in the salience of perceived social support for adolescent males and females may help explain why minority girls are more academically resilient, yet more emotionally at risk. In general, girls have been found to place a greater importance on relationships and social support (Demaray & Malecki, 2002; Malecki & Demaray, 2006; Jackson & Warren, 2000; Schraedley et al., 1999). While this support can have a positive effect, i.e. girls who feel more connected to school perform better, it can also have a negative impact, i.e. girls are more affected by negative interpersonal relationships.

Additionally, the current investigation examines different sources of support (e.g. family, peer, and school) to determine if they play differential roles in males and females. There is a dearth of research investigating potential gender differences in different sources of support for this population and existing research has yielded conflicting results. For example, while some research has found that peer relationships may play a

larger role in girls' well-being than boys' (Cross & Madson, 1997; Ma & Huebner, 2008), others have found that peer support was important to both genders (Plunkett, Houlberg, Sands, & Abaraca-Mortensen, 2008).

The implications of the findings of the present study are important for both researchers and practitioners, particularly those involved in school-based prevention and intervention programming. In order to build and carry out successful, culturally relevant prevention and intervention programs, it is necessary to understand the antecedents to positive outcomes, such as academic achievement and sense of well-being. If significant gender differences exist in factors that lead to academic and personal resiliency in urban, minority adolescents, practitioners should take these differences into account when designing programs aimed at promoting academic achievement and/or personal well-being.

### *Hypotheses*

Based on past research, the hypotheses are the following:

- 1) Females will have more positive academic outcomes than males, as measured by grade point average (GPA) and educational aspirations. Females will show greater negative emotionality and lower self-esteem than males. Females will report greater levels of social support than males.
- 2) There will be gender differences in the relationships between overall social support, academic achievement, and personal well-being, such that the relationship between social support and academic achievement and the

relationship between social support and personal well-being will be stronger for females than for males.

- a) The relationship between social support total (family, peer, and school) and academic achievement will be stronger for females than males
  - b) The relationship between social support total and personal well-being will be stronger for females than for males.
- 3) There will be differences between the relationships of different types of social support (e.g. family, peer, and school) and academic achievement and personal well-being for females and males. Specifically, it is predicted that gender will serve as a moderator in the relationship between types of social support and academic achievement and personal well-being outcomes. In particular, being female was expected to strengthen the relationships between the types of social support and academic and personal outcomes
- 4) The relationship between academic achievement and well-being will be stronger for males than females.

## CHAPTER TWO

### LITERATURE REVIEW

The present study examines the role of social support in the relationships between gender, academic outcomes, and personal well-being in urban, primarily Latino, middle school students. The following sections will provide a review of the relevant literature on academic achievement, personal well-being, and social support. Instead of completing an exhaustive review of the literature on social support, this section will focus on studies that examined gender differences in social support, particularly those that explored different sources of support. Lastly, the purpose and rationale behind the current study will be presented.

#### *Gender Differences in Academic Achievement*

Given the well-documented relationships between educational achievement and future life outcomes (Saunders et al., 2004), there is growing interest in exploring gender differences in the academic performance of minority groups (Johnson et al., 2006; Mickelson & Greene, 2006; Sanchez et al., 2005; Saunders et al., 2004; Taylor & Graham, 2007). Research indicates that a persistent gender gap exists in academic achievement between girls and boys in which girls consistently outperform boys (Johnson et al., 2006; Saunders et al., 2004). This achievement gender gap is particularly concerning for both Latino and African-American populations. In terms of Latino youth, researchers have found that Latina females are more likely to finish high school

(Wojkiewicz & Donato, 1995) and tend to have higher GPAs (Lopez, Ehly, & Garcia-Vazquez, 2002) than their male counterparts. Further, Latina adolescents have been found to have higher academic motivation and educational aspirations than Latino adolescents (Plunkett & Bamaca-Gomez, 2003).

Studies examining African-American adolescents' academic achievement reveal similar patterns of gender differences. While the achievement gap between African-American and White students has been narrowing (National Center for Educational Statistics, 2006), the within-race gender gap among African-Americans persists (Saunders et al., 2004; Taylor & Graham, 2007). For example, African-American males have lower grades and test scores, are disproportionately placed in special education classes, are suspended or expelled more often, and are assigned to lower educational tracks when compared their female counterparts (Jordan & Cooper, 2003). Additionally, African-American females graduate from high schools at higher rates and are more likely to go to college and graduate schools than males (Wilds, 2000). The difference between the percentage of African-American males and females completing high school by age 19 has been found to be approximately twice the difference in other ethnic groups (U.S. Bureau of the Census, 2001). Similar to findings in Latino populations, African-American female adolescents have reported holding stronger academic intentions and higher levels of academic self-efficacy, and placing more importance on school completion than African-American male adolescents (Saunders et al., 2004).

This gender disparity in academic achievement for minority adolescents is extremely concerning as the relationships among educational achievement, particularly

high school completion, and future life outcomes, especially employment and economic stability, have been well documented (Saunders et al., 2004). For example, according to The U.S. Census Bureau (2006), adults 18 and older with a bachelor's degree earned an average of \$54,689, those with a high school diploma earned \$29,448, and those with less than a high school diploma earned \$19,915. Additionally, the disproportionate failure of African-American males in the educational system has been recognized as playing a key role in their overrepresentation in the criminal justice system and in their high unemployment rate (Garibaldi, 1992). For example, while African-American males represent only about 8.6% of the United States' K-12 public school enrollment, they make up almost 60% of all incarcerated youth (Garibaldi, 1992).

#### *Theoretical Explanations of Gender Differences in Academic Achievement*

While a complete understanding of the gender gap in academic achievement does not yet exist, theories from multiple perspectives have been posited to explain why minority males increasingly lag behind their female counterparts. From cultural-ecology theory, researchers have hypothesized that ethnic minority males often adopt an oppositional identity in which they display indifference or even contempt for being academically successful because such behavior is perceived as a threat to their developing ethnic and masculine identities (Gibson & Ogbu, 1991; Ogbu, 1991). Stereotype threat (Steele & Aronson, 1995) argues that negative stereotypes about ethnic minority males in terms of their intelligence and antisocial behavior lead to a heightened sensitivity, called stereotype threat (Steele & Aronson, 1995), in which minority males fear that their behavior will confirm the stereotypes associated with their group. In order

to protect their self-esteem, these individuals disidentify themselves from academic achievement (Steele, 1997). It has further been suggested that media portrayals of African-American and Latino youth reinforce cultural stereotypes that they are hostile, aggressive, and unintelligent, which may bias teacher's beliefs and cause them to treat minority males differently (Graham & Hudley, 2005).

From peer relations literature, researchers have found that popularity among African-American males in early adolescence is often associated with having a reputation as "tough" and "cool" rather than academically successful and engaged (Juvonen, Graham, & Schuster, 2003). Investigators examining zero tolerance policies have found that ethnic minority boys are more likely to be the recipients of harsh school disciplinary practices such as suspension, expulsion, and even corporal punishment (Gregory, 1997; McClure, 1994; Skiba, 2001). They are also more likely to be labeled as behaviorally disordered (Gregory, 1997), which often leads to social isolation and stigmatization within school (Saunders et al., 2004). There is growing evidence that both African-American and Latino boys often view their relationships with teachers as unsupportive and the school environment as hostile and unfair (Suarrez-Orozco & Qin-Hilliard, 2004).

In contrast to the experiences of minority males, minority females tend to have more positive experiences at school, which leads to an increase in their confidence in their academic skills and reinforces the potential for rewards from the school system (Gregory, 1997; Saunders et al., 2004). Research has suggested that one reason that females tend to have more positive school experiences is that the majority of teachers (particularly in elementary school) are female and, therefore, are more tolerant of and

better able to handle girls' behavior (Gregory, 1997). The socialization experiences of ethnic minority adolescent girls as compared to boys may contribute to their greater resiliency in school (Taylor & Graham, 2007). Research suggests that minority girls are more likely to perceive positive benefits from educational attainment, whereas males are more likely to question the relevance of a high school diploma when they observe high levels of unemployment regardless of educational attainment (Saunders et al., 2004). Additionally, literature on parenting practices argues that parents may exhibit more academically supportive behavior towards minority females than males (Plunkett & Bamaca-Gomez, 2003). For example, among Latinos with recent immigrant histories, adolescent girls are assigned many more home responsibilities than boys, such as taking care of younger siblings, which has been shown to influence the degree to which Latina adolescent girls assume personal responsibility for their school experiences (Suarez-Orozco & Qin-Hilliard, 2004).

#### *Gender Differences in Personal Well-Being*

Personal well-being is considered a crucial variable to investigate in adolescent populations, as adolescence is thought of as a time of "storm and stress" when individuals undergo a multitude of rapid changes in physical and emotional development that often lead to conflict (Hall, 1904). While adolescence is considered a pivotal and tumultuous period for both males and female, the majority of research points to significantly greater emotional difficulties for females (Crick & Zahn-Waxler, 2003; Hankin et al., 2007; Quatman & Watson, 2001). A great deal of attention has been given to negative changes in self-esteem and internalizing distress among girls, particularly during early

adolescence (Galambos, 2004). While many measures of well-being exist within the literature examining adolescents, two concepts often used as correlates for personal well-being are rates of depression and self-esteem (Compas et al., 1997).

### *Gender Differences in Depression*

Before the onset of puberty, girls and boys either do not differ in rates of depression or boys are slightly more likely than girls to be depressed (Angold & Rutter, 1992; Cyranowski, Frank, Young & Shear, 2000). The gender gap in depression rates occurs between the ages of 11 and 13 years, when the rise in rates for adolescent girls greatly surpasses the small increase for boys (Angold & Rutter, 1992; Angold, Costello, & Worthman, 1998). By age 15, females are twice as likely as males to have experienced a major depressive episode (Cyranowski et al., 2000). While there is a large body of research examining adolescent gender differences in depression, the vast majority includes primarily White adolescents, making it difficult to generalize to other ethnic/racial groups (McLaughlin et al., 2007; Roberts et al., 1997; Roberts & Sobhan, 1992). There is substantially less work investigating gender differences in multiethnic populations (McLaughlin et al., 2007). Further, what literature does exist largely focuses only on White and Black adolescent populations (McLaughlin et al., 2007), even though the Hispanic population is estimated to represent 13.3% of the total U.S. population (U.S. Census Bureau, 2002).

Research that has included Hispanic adolescents has consistently found higher levels of depression in Hispanic adolescents as compared to other racial/ethnic groups. For example, in several studies, Mexican-Americans and Latinos scored highest in self-

reported symptoms of depression compared to other ethnic and racial groups (Doi, Roberts, Takeuchi, & Suzuki, 2001; Roberts & Chen, 1995; Roberts, Roberts, & Chen, 1997; Roberts & Sobhan, 1992; Schraedly, Gotlib, & Hayward, 1999; Siegel, Aneshensel, Taub, Cantwell, & Driscoll, 1998). In terms of gender differences in depression in studies examining Hispanic adolescents, the results are consistent with the previous literature on the general population: girls reported higher rates of depressed symptoms than boys (Grant, Compas, Thurm, McMahon, & Gipson, 2004; Roberts et al., 1997; Siegal et al, 1998). In fact, several studies examining ethnic differences in the prevalence of adolescent depression found that Hispanic girls reported the highest prevalence of depression (Doi et al., 2001; McLaughlin et al., 2007; Roberts & Chen 1995; Roberts & Sobhan 1992; Roberts et al. 1997; Siegel et al. 1999).

#### *Gender Differences in Self-Esteem*

Global self-esteem, defined as “the level of global regard that one has for the self as a person” (Harter, 1993, p. 88), is another important proxy for well-being in adolescent populations. Low self-esteem has been associated with depression, suicide, delinquency, substance use, and lower academic achievement (Harter, 1990). High self-esteem, in contrast, is associated with more favorable scores on most measures of adjustment and psychological functioning (DuBois, Bull, Sherman, & Roberts, 1998; DuBois & Tevendale, 1999). Researchers have contended that early adolescence may be a particularly challenging time for maintaining high self-esteem, given the developmental and social complexities of that time period (Carlson, Uppal, & Prosser, 2000). Studies of self-esteem and related constructs in adolescent populations consistently report that girls

have lower and less stable self-esteem when compared to boys (Carlson et al., 2000; Kling, Hyde, Showers, & Buswell, 1999). In fact, in one recent meta-analysis, researchers found that 83% of the samples indicated lower global self-esteem for females as compared to male adolescents (Kling et al., 1999). However, as is the case with depression, the vast majority of research on self-esteem in adolescence has been conducted with White, middle-class populations (Carlson et al., 2000).

Although studies of early adolescent White populations reliably report lower and less stable self-esteem among girls when compared to boys (Harper & Marshall, 1991; Kling et al., 1999), it has been suggested that these findings might not generalize to minority populations (Carlson et al., 2000). For example, some studies have found that African-American girls report higher self-esteem (Carlson et al., 2000; Dukes & Martinez, 1994) and have more positive physical and social self-images (Mboya, 1988) when compared to other ethnic groups. Other studies, however, have reported no ethnic differences in mean self-esteem level and its correlates (Wade, 1991). The results of a recent large-scale meta-analysis of gender differences in self-esteem were inconclusive regarding the interaction of ethnicity and gender (Kling et al., 1999).

The lack of empirical data on the self-esteem processes of Hispanic girls is of particular concern. One study examining global self-esteem in early adolescent girls found that Hispanic girls had significantly lower reported global self-esteem than both African-American and non-Hispanic White girls (Carlson et al., 2000). Taken together with the above research suggesting that Hispanic girls have the highest rates of

depressive symptoms, these findings further highlight Hispanic females as a particularly high risk group in need of intervention and prevention programming.

*Theoretical Explanations of Gender Difference in Personal Well-Being*

Researchers from a variety of orientations have proposed several possible explanations for why female adolescents are more at risk emotionally than male adolescents. Social-biological models posit that interaction effects between biological changes and psychosocial experiences (e.g., pubertal timing issues and increased challenges associated with maturation) in adolescent girls' pubertal transition may produce unique vulnerabilities to life stressors and depressive symptoms during adolescence (Ge, Congor, & Elder, 2001). Given that girls typically begin experiencing pubertal development and the social transitions it brings approximately two years before boys, girls may encounter the developmental challenge of balancing adult- and peer-oriented identities sooner than boys, perhaps before they are as emotionally ready (Collins & Steinberg, 2006).

Cognitive models of adolescent depression theorize that attributional style is a key predictor of depressive symptoms in adolescents (Gladstone & Kaslow, 1995). Research has shown that girls are more likely than boys to experience, encode, and negatively interpret life events, suggesting greater cognitive vulnerability to depression (Hankin & Abramson, 2001). Studies have revealed a significant association between poor body image and depression (Cohen-Tovee, 1993) and have found that girls are more likely than boys to have a poor body image (Feingold & Mazzella, 1998). However, it is important to note that the degree to which gender differences in body image exist in African-

American and Latino populations has been largely unexamined and existing evidence suggests that African-American youth have fewer body image concerns than do White youth (Lawrence & Thelen, 1995). Additionally, research reveals that adolescent girls who adopt a more traditionally feminine personality style have higher levels of depressive symptoms (Nolen-Hoeksema, Girgus, & Seligman, 1989).

Another approach to understanding the emergence of gender differences in emotional well-being during adolescence emphasizes the differential role that interpersonal experiences play for adolescent girls as compared to boys (Rudolph & Hammen, 1999). Evidence suggests that interpersonal events may be different for boys and girls starting in adolescence. While adolescent girls' relationships and friendships are characterized by greater levels of intimacy, emotional support, and self-disclosure (Rose & Rudolph, 2006), boys' friendships tend to be based in companionship and shared activities (Maccoby, 1990). Girls' greater orientation toward and reliance upon interpersonal ties may be partially responsible for their greater difficulties with interpersonal stressors (Greene & Larson, 1991). Beginning in adolescence, girls report more negative interpersonal stress than boys, particularly in the peer domain (Rudolph & Hammen, 1999). Girls also report greater levels of negative affect and depression associated with interpersonal stress than do boys (Rudolph & Hammen, 1999).

In terms of Hispanic girls in particular, researchers have proposed theories to explain their greater levels of risk for experiencing depressive symptoms and low self-esteem compared to girls from other racial/ethnic backgrounds. Most notably, it has been proposed that Hispanic girls may be particularly at risk due to the conflicting gender roles

between traditional Hispanic cultural norms and those of mainstream American culture (Lugo, Steidel and Contreras 2003). While in Hispanic cultures, high emphasis is placed on the importance of family, particularly for females, mainstream American culture emphasizes the development of autonomy and individuation from the family during adolescence (Lugo et al., 2003). These conflicting cultural values may contribute to increased risk for depression and low self-esteem among Hispanic females (McLaughlin et al, 2000).

#### *Gender Differences in the Role of Perceived Social Support*

One potentially important finding that may help to explain gender differences in both academic and personal well-being in adolescence is the role of perceived social support. Social support is defined as individuals' perception of supportive behaviors from their social networks (e.g., parents, teachers, classmates, friends, and school) that enhance functioning and/or may buffer them from adverse outcomes (Malecki & Demaray, 2002; Malecki & Demaray, 2006). Theory and research in social support in adult populations suggest that individuals who report higher levels of social support in their relationships are in better physical and mental health than those with lower levels of support (Uchino et al., 1996). Social support has been found to be moderately to strongly related to many personal, clinical, health, and social indicators for school-aged children and adolescents (Malecki & Demaray, 2006; Piko, 2000; Uchino et al., 1996).

In terms of personal well-being, researchers have typically found that the perceived quality of family relationships, friendships, and/or school experiences is positively associated with psychological adjustment as indicated by self-esteem and/or

depressive symptoms (DuBois, Felner, Brand, Adan, & Evans, 1992; Eccles, Early, Frasier, Belansky, & McCarthy, 1997). However, little research exists on the predictors of psychological adjustment among minority and low-income adolescents (Way & Robinson, 2003). In terms of academic performance, previous research has revealed a small yet significant relationship between social support and academic success. For example, when investigating the relationship between social support and grade point average (GPA), Malecki and Elliott (1999) found a small but significant relationship between students' perceived support and their overall GPA. Additionally, they found a small, significant relationship between teacher support and GPA (Malecki & Elliott, 1999). Rosenfeld, Richman, and Bowen (2000) found that students with high support from three sources (parents, teachers, and friends) had better grades in a large, representative sample of middle and high school students than did students without such support.

From a resiliency standpoint, social support may be even more important for low income, minority adolescents. Resilience describes positive outcomes in the face of risk (Luthar, Cicchetti, & Becker, 2000). Researchers have attempted to delineate resources that act as “buffers” for at-risk adolescents in that they protect them from the negative impact of stressors. Perceived social support has been found to be a key stress-buffering resource that mediates the relationship between stress and adjustment (Benson and Deeter, 1992; Felsten and Wilcox, 1992; Licitra-Kleckler and Waas, 1993).

According to the stress-buffering model, while stressors can increase the risk for maladaptation, this risk can be reduced when sources of social support (e.g., family,

school, peers) are perceived as strong (Benson and Deeter, 1992; Cohen, 1991; Licitra-Kleckler and Waas, 1993). For example, Becker and Luthar (2002) found that parent and teacher support are two important factors contributing to the success of disadvantaged students. Peer support was found to be an important contributing factor, depending on the values of the peer group (Becker & Luthar, 2002). Additionally, Gillock and Reyes (1999) found a significant relationship between GPA and teacher support in a sample of tenth grade, low income, Mexican-American students and Levitt, Guacci-Franco, and Levitt (1994) found a significant relationship between social support and standardized test scores in a sample of multiethnic students. There is also evidence that social support may play a protective role in the relationship between SES and academic performance for students of low SES. Malecki and Demaray (2006) found a significant correlation between social support and GPA for a group of primarily Latino students of low SES, but no significant associations between social support and academic achievement for those students with a relatively higher SES.

Studies investigating social support in children and adolescents have revealed significant gender differences in both the amount of perceived social support reported and in the salience of social support in general. Previous research has revealed that females typically report receiving higher levels of perceived social support from multiple sources than do males (Demaray & Malecki, 2002; Malecki & Demaray, 2006; Jackson & Warren, 2000; Schraedley, Gotlib, & Hayward, 1999). For example, females tend to report larger social networks than males and turn to others for emotional support in

stressful circumstances more than males do (Ashton & Fuehrer, 1993; Taylor et al., 2000).

Further, the literature suggests that girls place a greater amount of importance on social support, as well as related constructs such as mattering and sense of belonging (Goodenow, 1993; Goodenow & Grady, 1993; Rayle, 2005; Smerdon, 2002). For example, researchers found that girls not only report a greater sense of belonging in school than boys, but that the relationship between sense of belonging and academic motivation was stronger for girls in middle school than for boys (Goodenow, 1993; Goodenow & Grady, 1993). Another study examining sources of support for school-related issues in Latino adolescents found that males had a significantly higher rate than females of choosing no one as a source of help for student concerns (Morrison, Laughlin, San Miguel, Smith, & Widamans, 1997). These reported gender differences in the experience of social support may help to explain differences in academic achievement. Although females appear to be more generally affected than males by developmentally related stresses of adolescence, they also report higher levels of support from family and friends (Gore & Aseltine, 1995). These higher levels of support may be related to the finding that urban, low-income females tend to outperform males academically (Gillock & Reyes, 1999).

It has been argued that females' sense of well-being is more strongly influenced by the availability and quality of social support (Cyranowski et al., 2000). For example, Slavin and Rainer (1990) found that high school girls perceived greater support from non-family adults and peers than did boys, and that girls' perceptions were more strongly

associated with depressive symptoms. Additionally, support from these sources was associated with reductions in depressive symptoms over time for girls but not boys. Mazza and Reynolds (1998) reported that, in a community sample of adolescents, higher social support predicted lower levels of suicidal ideation one year later among females only. Further, because females tend to turn to their social support when they experience stress, they are more likely than males to benefit from available support (Taylor et al., 2000). In fact, researchers examining adult populations have reported that the buffer effect of support in females seems stronger than that in males (Kaltiala-Heino, Rimpelä, Rantanen, & Laippala, 2001; Olstad et al., 2001).

These reported gender differences in the salience of social support are consistent with theory regarding sex role socialization of boys toward mastery and exploration of the world and girls toward interpersonal relationships (Block, 1983; Harter, 1998). Gilligan and other theorists have argued that there are significant, pervasive differences in the way males and females experience and understand social and personal aspects of relationships with others (Gilligan, 1982; Slavin & Rainer, 1990). Given that gender-role socialization intensifies in adolescence (Hill & Lynch, 1983), it makes sense that gender differences in the salience of social support would begin to emerge in early adolescence.

#### *Gender Differences in Sources of Perceived Social Support*

There is a paucity of research, especially among ethnic minority, low-income youth, examining different sources of social support to determine if they play differential roles for males and females. Many of the conclusions reached in investigations on social

support were based on examining the construct in a global way and/or often did not assess more than one specific type of social support. However, theoretical investigations of social support indicate that several aspects must be taken into account when examining this critical concept (Winemiller, Mitchell, Sutcliff, & Cline, 1993). In a factor-analytic study, Cauce, Felner, and Primavera (1982) identified three major sources of social support: family support, formal support (e.g. teachers, school counselors) and informal support (e.g. friends, classmates). Research examining each of these sources of support reveals inconclusive results in terms of gender differences.

#### *Family Support*

The influence of perceived family support on the psychological adjustment of adolescents has been increasingly investigated (Aseltine, Gore, & Colten, 1994; Luster & McAdoo, 1995). Studies have shown that self-worth and symptoms of depression are influenced by perceptions of support from family members (Harter & Whitesell, 1996; Luster & McAdoo, 1995). However, research on the effects of perceived family support in adolescents has revealed inconsistent findings in terms of gender differences. While some researchers have found the association between perceptions of family support and psychological adjustment to be moderated by gender, others have not. In their study on the relationships between depressive affect, life stress, and family and friends in adolescents, Rubin, Rubenstein, Stechler, Housman, Heeren, Halton, & Kasten (1992) noted that perceptions of family cohesion mitigated depressed affect only among girls in the sample. Kerr, Preuss, & Spring (2006) examined suicidal adolescents' perceptions of social support from family and peers in a sample of adolescents who had been

psychiatrically hospitalized. A central finding of their study was that female adolescents' perceptions, but not males', of low family support were related to greater levels of hopelessness, depressive symptoms, and suicidal ideation.

However, other studies investigating family social support in adolescents have either found no gender differences or a more complex picture has emerged. For example, Sheeber, Hops, Alpert, Davis, and Andrews (1997) found that less supportive, more conflictual family environments lead to higher levels of depressive symptoms for both males and females. Way and Robinson (2003) examined the longitudinal effects of family, friends, and school experiences on the psychological adjustment of a sample of low-income, minority adolescents. Their results did not find that gender moderated the association between family support, friendship support, or school climate and psychological adjustment (self-esteem or depressive symptoms). Instead, they found that family support, friendship support, and school climate appeared to have similar effects in the prediction of change in self-esteem and depressive symptoms over time for boys and girls. However, the researchers did comment that their finding of no gender difference might have been due to the relatively small sample size (100 participants).

Finally, it should be mentioned that few studies exist examining the possible moderating effects of gender on perceived family support in Latino adolescents. Researchers have contended that given Latinos' strong familistic orientation, characterized by an emphasis on deep emotional ties, respect for, and obedience to the family, gender differences in effects of family support may be different than for other cultures (Bamaca, Umana-Taylor, Shin, & Alfaro (2005). In fact, Bamaca et al. (2005),

in their study on Latino adolescents' perceptions of parenting behaviors and self-esteem, found that both mothers' and fathers' support was associated with high levels of self-esteem in boys and girls.

### *Peer Support*

Another important source of support that has been investigated in relation to psychological adjustment is friendships or peer relations. Peers are believed to play an increasingly important role in the lives of adolescents, as they seek to gain more control and autonomy through the adolescent years (Savin-Williams & Berndt, 1990). Overall, research has revealed that perceived friendship quality, peer support, or attachment to friends is positively associated with self-esteem (Buhrmester & Yin, 1997; Cauce, 1986; Keefe & Berndt, 1996; Ryan, Stiller, & Lynch, 1994) and negatively associated with depressive symptoms (Licitra-Kleckler & Waas, 1993). In terms of gender differences, a growing number of studies point to perceived peer support being more salient to the well-being of girls as compared to boys in adolescence, although the findings are somewhat inconsistent.

In a recent study by Ma and Huebner (2008) examining the extent to which the quality of parent and peer attachments relate to early adolescents' life satisfaction, females reported higher levels of attachment to peers and this attachment partially mediated the relationship between parent attachment and global life satisfaction. For boys, peer attachment did not mediate the relationship between parent attachment and global life satisfaction. (It is notable that both males and females reported similarly high levels of attachments to parents, however). Additionally, Licitra-Kleckler and Waas

(1993), examining the roles of perceived peer and family social support among high-stress adolescents, found that girls only reported higher levels of depression under conditions of low peer support. Interestingly, however, males experiencing high levels of peer support were more likely to engage in minor delinquency. Robinson (1995) investigated the relations between adolescent's perceptions of global self-worth and social support from significant others. She found that female subjects consistently reported higher levels of approval, emotional support, and instrumental aid from their best friends than did males; however, there was no consistent gender difference in the relation between perceived support and self-worth. Lastly, Moran and Eckenrode (1991) examined gender differences in the impact of social stress and social support on adolescents' emotional well-being. They concluded that adolescent males both gained somewhat greater benefits in terms of social support and paid substantially fewer costs in terms of social stress from their peer relationships when compared to females.

Researchers have posited that girls' personal well-being may be more influenced by peer relations than boys' due to gender differences between friendship behavioral patterns: while boys tend to stress independence, competition, and engage in goal-oriented activities with friends, girls empathize relatedness and self-disclosure (Cross & Madson, 1997; Hay & Ashman, 2003; Ma & Huebner, 2008). Although girls may have more close, intimate relationships during adolescence, these relationships may actually be harmful to their emotional well-being. Theorists have noted that adolescent girls' close friendships often involve frequent conversations about personal feelings and concerns

that can lead to increased introspection and self-disclosure that may be harmful to their emotional health (Moran & Eckenrode, 1991).

Theorists have suggested that societal norms that promote individuality and self-reliance for males and connectedness with others for females (Gilligan, 1982) may lead to adolescent girls becoming more vulnerable than boys to the negative effects of stress from peer relationships (Moran & Eckenrode, 1991). Gilligan (1982) contended that female adolescents more than males tended to depend on others in assessing their abilities. Moran and Eckenrode (1991) drew on the gender intensification hypothesis (Hill & Lynch, 1983) to argue that early adolescents may be the most vulnerable group for experiencing negative effects to their well-being from peer relations. The gender intensification hypothesis puts forth that an acceleration of gender-differential socialization occurs during early adolescence, especially for females (Hill & Lynch, 1983). One potential outcome for females may be a heightened preoccupation with connectedness that may lead to a greater susceptibility to social stress (Moran & Eckenrode, 1991).

However, similar to studies examining family support in adolescents, there are few studies investigating potential gender effects of peer support with large Latino samples. For example, Ma and Huebner's (2008) sample contained 1% Hispanic students and Licitra-Kleckler and Waas (1993) reported that their sample was from a high school that was over 95% White. This literature gap is significant because, given Latino's strong familial orientation, it is plausible that for Latina girls, peer relations will be less important than for girls of other ethnic backgrounds. In fact, one study that did include

43% Latino students in its sample found that family support, friendship support, and school climate had similar effects in the prediction of change in self-esteem and depressive symptoms over time for boys and girls (Way & Robinson, 2003).

### *School Support*

In addition to family and peer support, a growing number of studies have looked at the psychological and academic effects of students' perceptions of school support (Roeser, Eccles, & Sameroff, 1998; Sanchez et al., 2005; Way, 1998; Way & Robinson, 2003). Researchers have typically found that perceptions of school support and related constructs such as school climate and sense of belonging in school significantly predict psychological adjustment (Hoge et al., 1990; Kuperminc et al., 1997; Roeser et al., 1998). Middle school students' perceptions of school climate, for example, appear to predict self-esteem even after accounting for demographic factors such as IQ, sex, race, single-parent family, and socioeconomic status (Bachman & O'Malley, 1986; Hoge et al., 1990).

In terms of gender differences on effects of school support, again, the literature is inconclusive. Researchers have uncovered some findings that suggest girls may perceive greater school support and that the relationship between this support and academic motivation may be stronger for adolescent girls than for boys (Goodenow, 1993; Goodenow & Grady, 1993; Smerdon, 2002). Goodenow (1993) investigated early adolescents' sense of classroom belonging and support in a sample of 353, primarily White, middle school students. She found a greater impact of belonging on academic expectancies and a greater significance of teacher support for girls than boys. Gillock

and Reyes (1999) found that Mexican-origin boys had lower academic expectations than girls. They theorized that this difference might be due to differences in perceptions of support at school. However, other studies have found that school support is important for both male and female minority adolescents. Alafaro et al. (2006) investigated the impact of academic support, including teacher support, on Midwestern Latino 9<sup>th</sup> and 10<sup>th</sup> grade students' academic motivation. Results revealed that adolescents' perceptions of teacher support showed significant positive relationships with both girls' and boys' academic motivation. Additionally, Plunkett, Henry, Houlberg, & Abarca-Mortensen (2008) examined academic support by significant others and educational resilience in Mexican-origin, 9<sup>th</sup> grade students. They found that students' perceptions of teachers' support were the most important source of academic support in explaining variation in academic satisfaction and grade point average for both males and females.

Sanchez et al. (2005) examined the roles of sense of school belonging and gender in the academic outcomes of urban, 12<sup>th</sup> grade, Latino adolescents. While they expected that sense of belonging would play a stronger role in females' academic adjustment, they did not find a significant difference between males and females. However, Sanchez et al. (2005) pointed out that their failure to find a significant difference might have been due to the age of their sample. They theorized that their sample, which consisted of high school seniors, was developmentally different from past samples typically consisting of middle school students and that older adolescents may no longer care about fitting in to their school environment (Sanchez et al., 2005).

However, they also suggested another possibility: that the males and females in their study did not differ in their sense of belonging because of Latino cultural values that tend to stress interdependence and collectivism. Sanchez et al. (2005) asserted that as a result of Latino's emphasis on collectivism, a sense of relatedness may be particularly important to the success of Latino students and may weaken gender differences. Overall, it appears that academic sources of support may be particularly important to positive academic outcomes for Latino adolescents (Plunkett et al., 2008; Sanchez et al., 2005) and that, given conflicting evidence on possible gender differences in perceptions of support and its relations to academic outcomes, it is crucial to evaluate the perspectives of male and female adolescents separately (Plunkett et al, 2008).

#### *Purpose and Rationale for Current Study*

The purpose of the present study is to investigate the relationships between social support, gender, academic outcomes, and personal well-being in an urban, primarily Latino, middle school sample. Traditionally, research has focused primarily on negative outcomes in low income, minority adolescent populations. However, with the advent of the Positive Psychology movement and growing interest in the study of resiliency, investigators have begun to pay more attention to antecedents to positive developmental outcomes in at-risk populations. Although Latinos are projected to make up 25% of the population by the year 2060 (US Census, 2000), research on predictors of their personal and academic well-being in adolescence is limited. This gap in the literature on predictors of positive outcomes in Latino adolescents is particularly concerning given the importance that has been placed on developing culturally relevant prevention and

intervention programming for minority children and adolescents (Plunkett & Bámaca-Gómez, 2003). What research does exist for this population suggests that there are inconsistencies in the functioning of Latino male and female adolescents in that females appear more academically successful, yet have a greater likelihood of poor psychological outcomes. These gender differences in functioning have been shown to begin within the timeframe of middle school, making the current sample particularly appropriate to investigate the different constructs that may predict academic and personal well-being in Latino girls and boys.

Past research has offered some intriguing explanations for these gender differences. One theory offered in several studies contends that there are differences in both the experience and the salience of social support between adolescent males and females. These differences may help to explain why girls are more academically resilient, yet more emotionally at risk. Overall, girls have been found to place a greater importance on relationships and social support (Demaray & Malecki, 2002; Malecki & Demaray, 2006). While the majority of the literature on perceived social support emphasizes the potential benefits of such support, it has been suggested that social support can also have negative effects, particularly for females (Moran & Eckenrode, 1991). While girls' perceptions of greater social support, as well as their heightened emphasis on its' importance, may aid their academic achievement, at the same time, lack of positive social support may cause greater harm to girls' personal well-being.

Further, it has been shown that while female adolescents typically have significantly better academic performance than males, it does not translate into gains in

self-esteem (Quatman & Watson, 2001), perhaps because girls' self-worth is more related to their connectedness with significant others than their personal achievement (Gilligan, 1982). In contrast, research on adolescent males suggests that their sense of well-being may be more connected to personal achievement variables, such as athletic or academic achievements, and less related to their experiences of social relationships (Quatman & Watson, 2001). These differences are consistent with research on sex-role socialization of boys toward independence and mastery and girls toward social relatedness (Block, 1983; Harter, 1998), which has been found to intensify during early adolescence (Hill & Lynch, 1983).

Finally, past research on different sources of social support in urban, minority adolescents is sparse and has yielded no consensus regarding potential gender differences; therefore, the current investigation examines different sources of support (e.g. family, peer, and school) to determine if they play differential roles in males and females. The fact that existing literature has revealed conflicting evidence on possible gender differences in perceptions of support and its relations to academic and personal outcomes underlines the importance of evaluating the perspectives of male and female adolescents separately.

## CHAPTER THREE

### METHODS

#### *Participants*

The study participants included 157 urban adolescents from the following ethnic groups: 55% Latino, 13% Asian American, 9% Biracial, 9% African-American, 4% White. Ten percent of the sample did not report their ethnicity or race. Of the Latino participants, 90% were Mexican-American (with the remaining being Puerto Rican and Central American). The study participants were enrolled in a public, urban school in a large Midwestern city and ranged in age from 12 to 15 years ( $M = 13.26$ ,  $SD = .75$ ). The students' self-report of grades was 47.8% earning mostly C's, 36.8% earning mostly B's, 9.6% earning mostly D's or F's, and 5.9% earning mostly A's.

According to the data available from public state records, the study's sample roughly reflects the demographic profile of the school as a whole. The ethnic breakdown of the school is 68.4% Hispanics, 10.5% Black, 9.7% White, 11.3% Asian American and less than 1% Native American. Eighty-seven percent of the students enrolled in the school are categorized as low income (i.e., students who come from families whose incomes qualified for free breakfast and lunch programs in school, based on family incomes below the national poverty level).

In terms of immigration status, the majority (75%) of students at the school are second generation, born in the United States, while the remaining 25% were born in other

countries and immigrated to the United States as children. In the school as a whole, 39.5% of the students are eligible for transitional bilingual programs based on their English-language proficiency. While this is not an indication of primary language per se, it suggests that many of the students are bilingual. Academically, students in the study performed significantly lower than the state average in terms of standardized test scores (Illinois State Report Card, 2003).

### *Procedure*

Participants were recruited for the study in combination with a school-based outreach program aimed at enhancing decision making skills, career aspirations, and identity exploration. All students in the 7<sup>th</sup> and 8<sup>th</sup> grades were eligible for participation in the outreach program and research component. Prior to the beginning of the program, parents and/or guardians of the participants were sent an explanation of the program and the research component and asked to sign a written consent for their child to participate in both components. On the consent form, the questions about program participation and research participation were asked separately, allowing parents to consent to one or both of the components as they saw fit. Furthermore, it was explained that participation in the research was not required for participation in the program. The participant assents were worded similarly. None of the parental consents indicated that any child should be prevented from participating in either component. None of the assents indicated a refusal to participate in the research or the program. However, on the day that the survey was administered approximately 3% of the program participants did not participate in the research due to being absent from school. Since the surveys collected data anonymously,

it was impossible to know which students did not participate in the research and whether they might have differed significantly in some way from those students who participated. The participants responded to the research survey approximately one week prior to their participation in the outreach program in their home room classes, during the school day, as was requested by the school administrators and teachers. Surveys were read aloud for students in order to control for varying reading abilities. Additional research team members were present to answer any questions that participants had during the survey administration. For those students who preferred to respond to the survey in Spanish, Spanish versions of the questionnaire were available and read aloud by bilingual research team members. Only 5 of the participants preferred a Spanish survey, a percentage of participants that is lower than the school's percentage of English-language learners. This disparity can be explained by the fact that the majority of students receiving English language instruction are in younger grades and by the time most of the school's students reach 7<sup>th</sup> or 8<sup>th</sup> grade, they are able to participate in monolingual English instruction.

### *Instruments*

#### Dependent Variables

*Positive and Negative Affect Schedule (PANAS)* (Watson, Clark, and Tellegen, 1988).

The PANAS is a 20-item brief scale intended to examine predominant affective states. More specifically, the scale consists of two subscales (10 items each) measuring positive and negative affect respectively. Scores range from 10-50 for positive affect and 10-50 for negative affect with higher scores reflecting more frequent emotions in each category. Past research has shown that the PANAS has adequate construct validity (Watson et al.)

and acceptable reliability. The internal consistency reliability for this sample was estimated to be .72.

*The Hare Area-Specific Self-Esteem Scale* (Hare, 1979) is a ten-item questionnaire measuring respondents' perceptions of their worth and importance among their peers, in the home, and in the school environment. The Hare Scale has been used extensively with children and adolescents and past research has supported its validity and reliability (Hare, 1979). Scores range from 10 to 40 with higher scores indicating greater composite self-esteem. Internal consistency reliability for this sample was estimated to be .72 for the total scores on the Hare instrument and the subscales were found to have the following internal consistency estimates: self-esteem in family, .74; self-esteem with peers, .54; self-esteem within school, .58.

*Academic Achievement* will be measured by students' self-report of grades as having mostly A's, B's, C's, or D's and F's. Grades will be categorized as high (A/B), medium (C), and low (D/F).

*Denver Achievement Scale* (Dahlberg, Toal, & Behrens, 1998) is a 13-item questionnaire measuring respondents' achievement aspirations. The Denver Achievement Scale was developed as part of the Denver Youth Study through the Institute of Behavioral Science and was normed on African American males. Internal consistency reliability for this sample was estimated to be .78 for the total scores. For the purposes of the current study, three items (numbers 1, 7, and 8) were used to measure academic aspirations specifically. The items are the following: How important is it to...1) have a college education, 7)

study hard for good grades, 8) work hard to get ahead? These three questions were added together for each participant to attain a score for academic aspirations.

### Independent Variables

*The Vaux Social Support Record (VSSR)* (Vaux, 1988) is a nine-item questionnaire measuring a respondent's perceptions of the availability of emotional advice, guidance and social support from family, peers, and school personnel. Scores range from 0 to 18 on this scale with higher scores indicating greater perceived support. Good internal consistency estimates for the total, family and peer scales has been demonstrated in past research with older adolescent samples (mean alpha = .90, .80, and .84 respectively) and community samples (mean alpha = .90, .81, and .84, respectively). Internal consistency reliability for the total score for this sample was estimated to be .75 and for the subscales, reliability estimates were as follows: family support, .82; peer support, .78; and school support, .69.

### *Power Analysis*

Power is defined as the probability that a statistical significance test will reject the null hypothesis, which states there is no relationship between variables, or the ability of a statistical test to detect true differences in a relationship between variables and to avoid making type II errors (retaining the null hypothesis when it is, in fact, false) (Cohen, 1988). Power is conventionally set at .80, with a two-tailed significance level of  $p=.05$ , meaning the author has 80% confidence that in achieving a statistically significant result with a medium effect size. A typical research study in the behavioral science usually has

a medium effect ( $d=.50$ ), which indicates the strength of the relationship between two variables (Cohen, 1988).

In studies utilizing multiple regression tests, effect size is defined as the degree to which the criterion variable is related to the predictor variables in the population. Cohen (1988) defined effect sizes in multiple regressions as small ( $R^2=.02$ ), medium ( $R^2=.13$ ), and large ( $R^2=.26$ ). As the effect size gets smaller, the sample size required to achieve adequate power gets larger. That is, a larger sample size is needed to detect smaller differences. The effect size for the interaction in a regression analysis is the  $R^2$  change associated with the step in which the interaction term is added. In general, effect sizes for interactions are small to medium (Frazier, Tix, & Barron, 2004). For the current study, a power analysis was conducted to determine the number of subjects needed to have adequate power. The results indicated that 88 subjects would be required to detect a medium effect size ( $R^2=.13$ ) and 46 subjects would be required to detect a large effect size ( $R^2=.26$ ). However, 543 subjects would be required to detect a small effect size ( $R^2=.02$ ).

#### *Proposed Analysis*

The data in this study is available in archival form. All statistical analyses will be conducted using SPSS. The following statistical analyses will be used for each research question:

- 1) The first set of research questions was addressed to confirm that hypothesized differences between certain variables did, in fact, exist between males and females in this study. The hypotheses were the following:

- a. Females will have more positive academic outcomes than males, as measured by grade point average (GPA) and academic aspirations (Denver Achievement Scale Questions 1+7+8).
- b. Females will show less positive psychological outcomes, as measured by negative and positive emotionality and self-esteem, than males.
- c. Females will report greater levels of social support (total, peer, school, and family)

In order to test these hypotheses, an Analysis of Variance (ANOVA) was conducted to assess for mean group differences based on gender for academic outcomes, positive and negative emotionality, and self-esteem.

- 2) The second hypothesis was: there will be gender differences in the relationships between perceived social support total (family, peer, and school added together), academic achievement, and personal well-being, such that the relationship between social support and academic achievement and the relationship between social support and personal well-being will be stronger for females than for males. This hypothesis was further broken down into two sub-hypotheses:
  - a. The relationship between social support total and academic achievement will be stronger for females than males.
  - b. The relationship between social support total and personal well-being will be stronger for females than for males.

In order to evaluate these hypotheses, correlation matrices were computed separately for males and females. The correlations of males and females were then compared to determine if the strength of the correlation was significantly different between genders. To answer this question, Fisher  $Z$ 's Transformation procedure was utilized. This procedure transforms Pearson's correlation coefficients into normally distributed  $Z$ 's. If a bivariate correlation is statistically significant for both genders, the two can be compared using Fisher  $Z$ 's Transformation.

- 3) The third hypothesis was: there will be differences between the relationships of different types of perceived social support (family, peer, and school) and academic achievement and personal well-being outcomes for females and males. Specifically, it was predicted that gender would serve as a moderator in the relationship between types of social support and academic achievement and personal well-being outcomes. Being female was expected to moderate the relationships such that the relationships between the types of social support and both academic and personal well-being outcomes would be stronger for girls.

To test for moderation, a series of multiple regression analyses were performed. A moderator is defined as a variable that alters the direction or strength of the relationship between a predictor and an outcome variable, so that the nature of the impact of the predictor on the criterion varies according to the level or value of the moderator (Frazier et al., 2004). Hierarchical

multiple regression using interaction terms are the preferred statistical method for examining moderator effects when either the predictor or the moderator variable is measured on a continuous scale (Frazier et al., 2004). Moderator or interaction effects are tested with hierarchical regression analyses that compare an equation where all main effects are entered with a second equation that includes the interaction effect (Cohen & Cohen, 1983).

Specifically, regression analyses with interaction terms were conducted to examine whether gender moderated the relationship between the different types of social support (peer, family, and school) and academic and personal well-being outcomes. Before conducting the regression equations, interaction terms must be created. In order to remove any nonessential multicollinearity, highly correlated independent variables, the variables involved in the interaction terms are first centered around zero by computing the mean for each independent variable and then replacing each value with the difference between it and the mean. Interaction terms are then created representing the products of the two main effects (Aiken & West, 1991).

Separate hierarchical regression equations were computed for the eight outcome variables (GPA, Academic Aspirations, Self-Esteem Total, Peers, School, and Home, and Positive and Negative Emotionality). The main effects were entered into the equation first (peer support, family support, and school support) followed by the moderation or interaction terms, which were represented by the product of the two centered main effects (gender x peer

support, gender x family support, gender x school support). Eight separate regression equations for each of the dependent variables were conducted in order to determine if gender moderated any of the relationships. The presence of a moderator is established if the addition of the interaction term between the independent and moderator variables in the final step of the regression analysis explains a significant portion of the variance in the dependent variable (Baron & Kenny, 1986).

- 4) The last hypothesis was: the relationship between academic achievement and personal well-being will be stronger for males than females. In order to evaluate this hypothesis, correlation matrices were computed separately for girls and boys. Again, Fisher Z's Transformation procedure was utilized to assess if the strength of any of the correlations were significantly different between the genders.

## CHAPTER FOUR

### RESULTS

The present study was designed to examine the relationships between social support, gender, academic outcomes, and personal well-being outcomes in an urban, primarily Latino, middle school sample. Results of this study are presented in five major sections. The first section presents the descriptive statistics for all study variables and the bivariate relationships among the study variables for the entire sample. Following that section, the next four sections present the results for each research question.

#### *Preliminary Analyses*

Table 1 shows descriptive statistics on each of the study variables. Means and Standard Deviations for each of the variables are presented by gender. Pearson correlation coefficients were calculated for all major variables (Positive Emotionality, Negative Emotionality, Self Esteem-Peers, Self-Esteem-Home, Self-Esteem-School, Self-Esteem Total (Home+School+Peers), GPA, Academic Aspirations (Denver Achievement Scale questions 1+7+8), Social Support-School, Social Support-Family, Social Support-Peers, Social Support Total (School+Family+Peer) and the results are displayed in Table 2. Intercorrelations among variables ranged from small to strong. Correlations were strong between Social Support Total and the three subscales (Family, Peer, and School). These correlations were expected, as the Social Support Total score was computed by summing the sub-measures. Social Support Total and its' subscales were also correlated

with many of the outcome variables in the study. Social Support Total was correlated with Positive Emotionality, Self-Esteem Total and its' subscales (Family, Peer, and School), GPA, and Academic Aspirations. In terms of the subscales of Social Support, Family was correlated with Positive Emotionality, Negative Emotionality, Self-Esteem Total, Home, and School, and Academic Aspirations. Social Support Peer was correlated with Positive Emotionality, Self-esteem Total, Peers, and School. Social Support School was correlated with Positive Emotionality, Self-Esteem Total, Peers, and Home, and Academic Aspirations.

Table 1

*Means and Standard Deviations for All Study Variables*

	N	Mean	Std. Deviation	Observed Minimum	Observed Maximum
Positive Emotionality	157	33.45	6.93	10	63
Girls	88	33.51	6.83	20	63
Boys	69	33.45	6.93	10	47
Negative Emotionality	157	26.73	5.81	9	41
Girls	88	27.82	5.43	16	41
Boys	69	25.35	6.04	9	38
Self-Esteem-Peer	155	8.68	1.62	4	12
Girls	87	8.62	1.58	4	12
Boys	68	8.75	1.67	4	12
Self-Esteem-Home	154	12.70	2.68	5	16
Girls	86	12.45	2.91	5	16
Boys	68	13.00	2.35	5	16
Self-Esteem-School	150	8.43	1.75	3	12
Girls	86	8.41	1.62	4	12
Boys	64	8.45	1.92	3	12
Self-Esteem-Total	147	29.75	4.77	18	40
Girls	84	29.42	4.76	18	38
Boys	63	30.19	4.79	18	40
GPA	136	2.33	.64	1	3
Girls	77	2.44	.62	1	3
Boys	59	2.19	.66	1	3
Academic Aspirations	156	13.29	1.73	8	15
Girls	88	13.48	1.74	8	15
Boys	68	13.06	1.70	8	15
Social Support-Family	154	4.05	1.70	.00	6
Girls	86	4.00	1.81	.00	6
Boys	68	4.12	1.56	.00	6
Social Support-Peer	154	3.73	1.54	.00	6
Girls	87	4.24	1.50	.00	6
Boys	67	3.07	1.34	.00	6
Social Support-School	154	3.16	1.53	.00	6
Girls	86	3.31	1.47	.00	6
Boys	68	2.97	1.58	.00	6
Social Support-Total	152	10.93	3.40	2	18
Girls	85	11.52	3.45	2	18
Boys	67	10.19	3.21	3	16

Table 2

*Intercorrelations for All Study Variables*

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Positive Emotionality	--	.02	.48**	.30**	.41**	.38**	.21*	.16	.41**	.41**	.20*	.23**
2. Negative Emotionality		--	-.38**	-.13	-.42**	-.24**	-.15	-.04	-.15	-.25**	.06	-.13
3. Self-Esteem-Total			--	.66**	.83**	.82**	.29**	.14	.49**	.52**	.21*	.27**
4. Peer				--	.24**	.50**	.04	-.03	.26**	.15	.24**	.17*
5. Home					--	.49**	.26**	.20*	.51**	.64**	.09	.33**
6. School						--	.30**	.08	.30**	.27**	.23**	.13
7. GPA							--	.10	.26**	.18	.11	.27
8. Academic Aspirations								--	.24**	.24**	.10	.17*
9. Social Support-Total									--	.74**	.63**	.76**
10. Family										--	.13	.40**
11. Peer											--	.25**
12. School												--

\*  $p < .05$  \*\* $p < .01$ , two-tailed

*Research Question 1*

The first set of research questions looked at gender differences in academic outcomes, psychological outcomes, and levels of perceived social support. Specifically, the hypotheses were: a) females will have more positive academic outcomes than males, as measured by self-reported grade point average (GPA) and academic aspirations; b) females will show less positive psychological outcomes, as measure by negative and

positive emotionality and self-esteem, than males, and c) females will report greater levels of social support total (peer+family+school) and types of social support (peer, family, and school). In order to test these hypotheses, an Analysis of Variance (ANOVA) was conducted to assess for mean group differences based on gender for GPA, Academic Aspirations, Positive and Negative Emotionality, Self-Esteem (Total, Peers, Home, and School), and Social Support (Total, Peers, Family, and School). Results of the ANOVA (Table 3) showed that there were significant gender differences in GPA, with girls having a significantly higher GPA when compared to boys ( $F=5.401$ ,  $p<.05$ ), and in Negative Emotionality, with girls having higher levels of Negative Emotionality than boys ( $F=7.260$ ,  $p<.01$ ). Girls reported having higher GPA's ( $M=2.44$ ,  $SD=.62$ ) and higher levels of Negative Emotionality ( $M=27.82$ ,  $SD=5.43$ ). Contrary to predictions, results indicated no significant gender differences in Academic Aspirations, Positive Emotionality, or Self-Esteem. In terms of social support, girls reported significantly greater levels of Social Support Total ( $M=11.52$ ,  $SD=3.45$ ) and Peer Social Support ( $M=4.24$ ,  $SD=1.50$ ). Contrary to predictions, there were no significant gender differences in family or school social support. Overall, the results from the ANOVA indicated girls reported higher GPA's, greater Negative Emotionality, and higher levels of Total and Peer Social Support, consistent with means from Table 1.

Table 3

*Analysis of Variance: Gender Differences in Outcome Variables*

	DF	MS	F	p.
Positive Emotionality				
Between Groups	1	.149	.003	.96
Within Groups	155	47.28		
Total	156			
Negative Emotionality	1	236.02	7.26	.008**
Between Groups	155	32.51		
Within Groups	156			
Total				
Self-Esteem-Total				
Between Groups	1	21.56	.95	.33
Within Groups	145	22.76		
Total	146			
Peers				
Between Groups	1	.64	.24	.62
Within Groups	153	2.62		
Total	154			
Home				
Between Groups	1	10.86	1.51	.22
Within Groups	152	7.18		
Total	153			
School				
Between Groups	1	.08	.03	.87
Within Groups	148	3.07		
Total	149			
GPA				
Between Groups	1	2.17	5.40	.022*
Within Groups	134	.40		
Total	135			
Academic Aspirations				
Between Groups	1	6.71	2.27	.13
Within Groups				
Total				
Social Support-Total				
Between Groups	1	65.64	5.86	.017*
Within Groups	145	11.20		
Total	146			

Peers				
Between Groups	1	51.53	25.06	.000**
Within Groups	152	2.06		
Total	153			
Family				
Between Groups	1	.53	.18	.67
Within Groups	152	2.93		
Total	153			
School				
Between Groups	1	4.48	1.93	.17
Within Groups	152	2.32		
Total	153			

---

\*  $p < .05$  \*\* $p < .01$ , two-tailed

### *Research Question 2*

The second research question addressed gender differences in the relationships between perceived Social Support Total, academic achievement outcomes (GPA and Academic Aspirations), and personal well-being outcomes (Negative and Positive Emotionality and Self-Esteem Total, Peers, Home, and School). Hypotheses were: a) the relationship between Social Support Total and academic achievement variables will be stronger for females than males and b) the relationship between Social Support Total and personal well-being variables will be stronger for females than for males. In order to answer these questions, correlation matrices were computed separately for males and females. Tables 4 and 5 display the correlation matrices for girls and boys, respectively. Table 6 compares the relationships between all study variables and social support total for boys and girls.

In terms of females, correlations between Social Support Total and the outcome variables all fell within the significant range, as predicted, mainly within the moderate range. For academic achievement variables, Social Support Total was significantly and

positively correlated with both GPA and Academic Aspirations. For personal well-being variables, Social Support Total was positively correlated with Positive Emotionality, Self-Esteem Total, Self-Esteem Peers, Self-Esteem Home, and Self-Esteem School. Social Support Total was negatively correlated with Negative Emotionality, as expected.

For males, results showed the relationships between Social Support Total and outcome variables were mixed, with correlations ranging from nonsignificant to moderate. The first hypothesis that the relationship between Social Support Total and academic achievement would be stronger for females than males was supported. Social Support Total was not correlated with GPA or Academic Aspirations for males. The second hypothesis that the relationship between Social Support Total and personal well-being outcomes would be stronger for females than for males was partially supported. For males, Social Support Total was positively correlated with Positive Emotionality, Self-Esteem Total, and Self-Esteem Home. However, Social Support Total was not correlated with any of the other outcome variables related to personal well-being.

The correlations of males and females were then compared to determine if the strength of the correlations was significantly different between the genders. To answer this question, the Fisher Z's Transformation procedure was utilized. This procedure transforms Pearson's correlation coefficients into normally distributed Z's. If a bivariate correlation is statistically significant for both genders, the two can be compared using Fisher Z's Transformation. Table 7 lists the bivariate correlations that were significant for both males and females. Of all of the correlations, three were significant for both males and females: Social Support Total and Positive Emotionality, Social Support Total

and Self-Esteem Total, and Social Support Total and Self-Esteem Home. However, none of these three comparisons were found to have statistically significant differences in strengths.

In sum, results for this series of questions revealed partial support for the hypotheses. Overall, Social Support Total was correlated to academic outcome variables for girls only, as predicted. In terms of personal well-being, more outcome variables were correlated for girls than boys, although social support was correlated to some of the outcome variables for boys.

Table 4

*Intercorrelations for Study Variables: Females*

Variable	1	2	3	4	5	6	7	8	9
1. Positive Emotionality	--	-.21	.60**	.33**	.51**	.44**	.31**	.18	.42**
2. Negative Emotionality		--	-.39**	-.13	-.48**	-.12	-.19	-.16	-.36**
3. Self-Esteem-Total			--	.65**	.84**	.77**	.36**	.26*	.61**
4. Peer				--	.24*	.51**	.05	.01	.40**
5. Home					--	.42**	.37**	.26*	.54**
6. School						--	.33**	.19	.34**
7. GPA							--	.11	.31**
8. Academic Aspirations								--	.25*
9. Social Support-Total									--

\*  $p < .05$  \*\* $p < .01$ , two-tailed

Table 5

*Intercorrelations for Study Variables: Males*

Variable	1	2	3	4	5	6	7	8	9
1. Positive Emotionality	--	.28*	.33**	.27*	.25*	.33**	.10	.14	.43**
2. Negative Emotionality		--	-.36**	-.11	-.32**	-.37**	-.21	.05	-.10
3. Self-Esteem-Total			--	.67**	.82**	.88**	.26	.00	.39**
4. Peer				--	.25**	.50**	.08	-.07	.13
5. Home					--	.61**	.19	.15	.56**
6. School						--	.29*	-.04	.21
7. GPA							--	.05	.14
8. Academic Aspirations								--	.18
9. Social Support-Total									--

\*  $p < .05$  \*\* $p < .01$ , two-tailed

Table 6

*Comparison of Girls' and Boys' Relationships of Study Variables and Social Support**Total*

Variable	Girls	Boys
Positive Emotionality	.42**	.43**
Negative Emotionality	-.36**	-.10
Self-Esteem-Total	.61**	.39**
Self-Esteem-Peer	.40**	.13
Self-esteem-Home	.54**	.56**
Self-Esteem-School	.34**	.21
GPA	.31**	.14
Academic Aspirations	.25*	.18

\* $p < .05$ , \*\* $p < .01$ , two-tailed

Table 7

*Fisher's Z Transformations of Bivariate Correlations*


---

<i>Social Support Total and Positive Emotionality</i>		
	Zdiff	p
Z (female) = .45		
Z (male) = .46	.01	.06

---

<i>Social Support Total and Self-Esteem Total</i>		
	Zdiff	p
Z (female) = .71		
Z (male) = .41	.30	1.76

---

<i>Social Support Total and Self-Esteem Home</i>		
	Zdiff	p
Z (female) = .60		
Z (male) = .63	.03	.18

---

*Research Question 3*

The third research question attempted to assess gender differences between the relationships of different types of perceived social support (family, peer, and school) and academic achievement and personal well-being outcomes. Specifically, it was predicted that gender would serve as a moderator in the relationship between types of social support and academic achievement and personal well-being outcomes. Being female was expected to moderate the relationships such that the relationships between the types of social support and both academic and personal well-being outcomes would be stronger for girls. This question called for a series of blockwise hierarchical multiple regression

analyses to test for the possible moderating effect of gender on the relationships between types of perceived social support and academic and personal well-being outcomes. Prior to carrying out the regression analyses, predictor variables were centered in order to decrease multicollinearity between the main effects and the interaction term (Aiken & West). Gender was converted into dummy coding such that male=0 and female=1 for the purpose of analysis. All missing cases were deleted with a listwise procedure. The presence of moderation is established if the addition of the interaction term between the independent and moderator variables in the final step of the regression analysis explains a significant portion of variance in the dependent variable (Baron & Kenny, 1986).

For each of the academic and personal well-being measures, the analysis strategy involved the same two steps: first, main effects were entered and second, interactions terms were entered. Separate regressions were performed using these two steps for each of the outcome variables. A total of eight moderator regression analyses were conducted. The first hierarchical multiple regression analysis tested the hypothesis that gender moderated the relationship between types of social support and GPA. Results from this analysis are presented in Table 8. At step 1, gender, peer support, family support, and school support were entered into the model. Next, gender x peer support, gender x family support, and gender x school support were entered into the model. The overall model was significant ( $F=2.94$ ,  $p.<.01$ ), accounting for 18% of the variance in GPA. However, contrary to the hypotheses, none of the interaction terms accounted for any significant change in the amount of variance explained. The results did not support the hypothesis

that gender plays a moderating role in the relationships between types of social support and GPA.

The second hierarchical regression analysis tested the hypothesis that gender moderated the relationship between types of social support and academic aspirations. The same two steps listed for the first hierarchical regression were followed and the results are presented in Table 9. However, contrary to the hypothesis, results indicated the overall model was not significant ( $F=1.73$ ,  $p=.11$ ), suggesting gender does not moderate the relationships between types of social support and academic aspirations.

The third hierarchical regression analysis tested that hypothesis that gender moderated the relationship between types of social support and positive emotionality. The same two steps listed for the first hierarchical regression were followed and the results are presented in Table 10. According to the results, the overall model was significant ( $F=2.94$ ,  $p<.01$ ), accounting for 23% of the variance in positive emotionality. One of the interaction terms, gender x peer support was significant, indicating the interaction accounted for a significant change in the amount of variance explained. This result indicated that, in direct contrast to the hypothesis, being male moderated the relationship between peer support and positive emotionality, with the relationship between peer support and positive emotionality being stronger for boys. None of the other interaction terms accounted for any significant change in the amount of variance explained.

The fourth hierarchical regression analysis tested that hypothesis that gender moderated the relationship between types of social support and negative emotionality.

The same two steps listed for the first hierarchical regression were followed and the results are presented in Table 11. According to the results, the overall model was significant ( $F=3.66$ ,  $p.<.01$ ), accounting for 15% of the variance in negative emotionality. One of the interaction terms, gender x family support was significant, indicating the interaction accounted for a significant change in the amount of variance explained. This result was consistent with the hypothesis, indicating that being female moderated the relationship between family support and negative emotionality, with the relationship between the two variables being stronger for girls. None of the other interaction terms accounted for any significant change in the amount of variance explained.

The fifth hierarchical regression analysis tested that hypothesis that gender moderated the relationship between types of social support and self-esteem total. The same two steps listed for the first hierarchical regression were followed and the results are presented in Table 12. According to the results, the overall model was significant ( $F=9.6$ ,  $p.<.01$ ), accounting for 33% of the variance in self esteem total. Contrary to the hypotheses, none of the other interaction terms accounted for any significant change in the amount of variance explained indicating gender did not moderate the relationships between types of social support and total self-esteem.

The sixth hierarchical regression analysis tested that hypothesis that gender moderated the relationship between types of social support and peer self-esteem. The same two steps listed for the first hierarchical regression were followed and the results are presented in Table 13. According to the results, the overall model was significant ( $F=2.91$ ,  $p.<.01$ ), accounting for 13% of the variance in peer self-esteem. Contrary to the

hypotheses, none of the other interaction terms accounted for any significant change in the amount of variance explained indicating gender did not play a moderating role in the relationship between types of social support and peer self-esteem.

The seventh hierarchical regression analysis tested that hypothesis that gender moderated the relationship between types of social support and home self-esteem. The same two steps listed for the first hierarchical regression were followed and the results are presented in Table 14. According to the results, the overall model was significant ( $F=16.03$ ,  $p.<.01$ ), accounting for 44% of the variance in home self-esteem. Contrary to the hypotheses, none of the other interaction terms accounted for any significant change in the amount of variance explained indicating gender did not play a moderating role in the relationship between types of social support and home self-esteem.

The eighth hierarchical regression analysis tested that hypothesis that gender moderated the relationship between types of social support and school self-esteem. The same two steps listed for the first hierarchical regression were followed and the results are presented in Table 15. According to the results, the overall model was significant ( $F=3.04$ ,  $p.<.01$ ), accounting for 13% of the variance in school self-esteem. Contrary to the hypotheses, none of the other interaction terms accounted for any significant change in the amount of variance explained indicating gender did not play a moderating role in the relationship between types of social support and school self-esteem.

In sum, results from the analyses for this set of hypotheses provided support for one of the hypotheses: gender moderated the relationship between family social support and negative emotionality, with the relationship between those two variables being

stronger for girls. However, none of the other hypotheses were supported and, in fact, one finding was directly opposite of the hypothesis. The results revealed that while gender did moderate the relationship between peer social support and positive emotionality, the relationship between those two variables was, in fact, stronger for boys.

Table 8

*Tests for Moderating Effects of Gender on the Relationships between Types of Social Support and GPA*

Variable	B	SEB	Beta
Step 1.			
Gender	.25	.12	.19*
Peer Support	.09	.13	.22
Family Support	-.00	.13	-.00
School Support	-.08	.13	-.19
Step 2.			
Gender x Peer Support	-.06	.08	-.25
Gender x Family Support	.02	.07	.08
Gender x School Support	.12	.08	.45

\*  $p < .05$

Table 9

*Tests for Moderating Effects of Gender on the Relationships between Types of Social Support and Academic Aspirations*

Variable		B	SEB	Beta
Step 1.	Gender	.39	.31	.11
	Peer Support	-.20	.35	1.18
	Family Support	.10	.32	.09
	School Support	.24	.33	.21
Step 2.	Gender x Peer Support	.14	.21	.20
	Gender x Family Support	.08	.19	.13
	Gender x School Support	-.11	.21	-.16

Table 10

*Tests for Moderating Effects of Gender on the Relationships between Types of Social Support and Positive Emotionality*

Variable		B	SEB	Beta
Step 1.	Gender	-1.57	1.01	-.13
	Peer Support	2.97	1.14	.73*
	Family Support	1.23	1.04	.33
	School Support	-.37	1.08	-.09
Step 2.	Gender x Peer Support	-1.38	.68	-.57*
	Gender x Family Support	.06	.61	.03
	Gender x School Support	.39	.67	.15

p<.05

Table 11

*Tests for Moderating Effects of Gender on the Relationships between Types of Social Support and Negative Emotionality*

Variable		B	SEB	Beta
Step 1.	Gender	2.48	.97	.22*
	Peer Support	.10	1.09	.03
	Family Support	1.83	1.00	.55
	School Support	-.49	1.03	1.13
Step 2.	Gender x Peer Support	-.00	.65	-.00
	Gender x Family Support	-1.52	.59	-.77*
	Gender x School Support	.10	.64	.04

p<.05

Table 12

*Tests for Moderating Effects of Gender on the Relationships between Types of Social Support and Self-Esteem-Total*

Variable		B	SEB	Beta
Step 1.	Gender	-1.59	.74	-.17*
	Peer Support	1.39	.82	.46
	Family Support	.11	.75	.04
	School Support	.01	.78	.00
Step 2.	Gender x Peer Support	-.53	.49	-.29
	Gender x Family Support	.70	.44	.42
	Gender x School Support	.20	.49	.10

p<.05

Table 13

*Tests for Moderating Effects of Gender on the Relationships between Types of Social Support and Self-Esteem-Peers*

Variable		B	SEB	Beta
Step 1.	Gender	-.54	.28	-.17
	Peer Support	.06	.32	.05
	Family Support	-.33	.29	-.35
	School Support	.16	.30	.15
Step 2.	Gender x Peer Support	.15	.19	.23
	Gender x Family Support	.23	.17	.41
	Gender x School Support	-.03	.19	-.04

Table 14

*Tests for Moderating Effects of Gender on the Relationships between Types of Social Support and Self-Esteem-Home*

Variable		B	SEB	Beta
Step 1.	Gender	-.70	.37	-.13
	Peer Support	.73	.42	.42
	Family Support	.43	.38	.27
	School Support	.14	.39	.08
Step 2.	Gender x Peer Support	-.44	.25	-.41
	Gender x Family Support	.31	.23	.33
	Gender x School Support	.03	.25	.02

Table 15

*Tests for Moderating Effects of Gender on the Relationships between Types of Social Support and Self-Esteem-School*

Variable		B	SEB	Beta
Step 1.	Gender	-.35	.31	-.10
	Peer Support	.59	.34	.53
	Family Support	.11	.31	.11
	School Support	-.30	.33	-.26
Step 2.	Gender x Peer Support	-.20	.20	-.30
	Gender x Family Support	.07	.18	.12
	Gender x School Support	.20	.20	.28

#### *Research Question 4*

The final research question attempted to determine gender differences in the relationship between academic achievement and personal well-being. Specifically, it was hypothesized that the relationships between academic achievement (GPA) and measures of personal well-being (Positive and Negative Emotionality and Self-Esteem Total, Peers, Home, and School) would be stronger for males than females. In order to evaluate this question, correlation matrices were computed separately for girls and boys. Please refer to Tables 4 and 5 for correlation matrices for females and males, respectively. Table 16 compares the relationships between study variables and GPA for boys and girls.

Contrary to the hypothesis, for females, GPA was positively correlated with Positive Emotionality, Self-Esteem Total, Self-esteem Home, and Self-Esteem School. For males, GPA was only positively correlated with Self-Esteem School. Again, the Fisher Z's Transformation procedure was utilized to assess if the strength of any of the correlations were significantly different between the genders. If a bivariate correlation is statistically significant for both genders, the two can be compared using Fisher Z's Transformation. Table 17 lists the one bivariate correlation that was significant for both males and females. However, the comparison between GPA and Self-Esteem School did not find a statistically significant difference in the strengths of the correlations. Overall, contrary to the hypothesis, it appeared that for this sample, GPA was correlated with more personal well-being outcomes for girls than boys.

Table 16

*Comparison of Girls' and Boys' Relationships of Personal Well-Being Variables and GPA*

Variable	Girls	Boys
Positive Emotionality	.31**	.10
Negative Emotionality	-.19	-.21
Self-Esteem-Total	.36**	.26
Self-Esteem-Peer	.05	.08
Self-esteem-Home	.37**	.19
Self-Esteem-School	.33**	.29*

\* $p < .05$ , \*\* $p < .01$ , two-tailed

Table 17

*Fisher's Z Transformations of Bivariate Correlations*

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*GPA and Self-Esteem School*

	Zdiff	p
Z (female) = .34		
Z (male) = .30	.04	.24

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## CHAPTER FIVE

### DISCUSSION

The purpose of the present study was to investigate the relationships between perceived social support, gender, academic outcomes, and personal well-being in an urban, primarily Latino, middle school sample. Research suggests that differences in the salience of perceived social support for adolescent males and females may help explain why girls are more academically resilient, yet more emotionally at risk. In general, girls have been found to place a greater importance on relationships and social support (Demaray & Malecki, 2002; Malecki & Demaray, 2006; Jackson & Warren, 2000; Schraedley et al., 1999). While this support can have a positive effect, i.e. girls who feel more connected to school perform better, it can also have a negative impact, i.e. girls are more affected by a lack of positive interpersonal relationships. The current investigation also examined different sources of social support (e.g. family, peer, and school) to determine if they played differential roles for adolescent males and females.

Specifically, the following research questions were investigated: 1) females will have more positive academic outcomes, will show greater negative emotionality and lower self-esteem than males, and will report higher levels of perceived social support; 2) there will be gender differences in the relationships between overall social support, academic achievement, and personal well-being, such that the relationships between overall social support and the outcome variables will be stronger for females when

compared to males; 3) there will be differences between the relationships of different types of social support (family, peer, and school) and academic achievement and personal well-being for females and males, such that being female will strengthen the relationships between types of social support and the outcome variables; and 4) the relationships between academic achievement and personal well-being will be stronger for males than females.

### *Relationships of Variables*

Initially, preliminary statistics were performed on all study variables for the entire sample. Consistent with much of the previous research, perceived social support as a whole was correlated with all of the outcome variables, with the exception of negative emotionality. Social Support Total was positively correlated with Positive Emotionality, Self-Esteem Total and its' subscales (Family, Peer, and School), self-reported GPA, and Academic Aspirations. Additionally, the different types of social support (family, peers, and school) were correlated with many of the major outcome variables. These findings add to the growing body of literature highlighting the importance of perceived social support on urban adolescents' academic and personal well-being.

### *Research Question 1*

The first research question was designed to determine if the gender differences in academic and psychological outcomes reported in much of the literature did, in fact, exist in this sample. Past research has found that adolescent girls, particularly minorities, consistently outperform boys academically (Johnson et al., 2006; Saunders et al., 2004). In terms of psychological well-being, the bulk of the literature points to greater

difficulties for adolescent girls in terms of rates of depression and self-esteem levels when compared to boys (Crick & Zahn-Waxler, 2003; Hankin et al., 2007; Quatman & Watson, 2001). However, the vast majority of research in these areas has focused on White, middle-class adolescents and what research does exist that includes different ethnicities typically compares White and Black adolescents only (McLaughlin et al., 2007). Researchers have concluded that there is a dearth of literature exploring psychological outcomes in Latino adolescents (McLaughlin et al., 2007) and what research does exist is inconclusive (Kling et al., 1999). In terms of social support, previous literature indicates girls tend to report receiving higher levels of social support from a variety of sources; again, however, much of the research has focused on White, middle-class populations and may not generalize to other ethnicities.

In the current study, two significant gender differences in outcomes were found: girls had significantly higher self-reported GPA's and significantly higher levels of negative emotionality. The finding that girls had higher GPA's is in line with past research indicating that girls, particularly minority girls, consistently demonstrate better academic outcomes than their male counterparts (Johnson et al., 2006; Saunders et al., 2004). While it is important to note that the GPA's were self-reported and, therefore, may not be as accurate as grades reported by teachers or school staff, literature suggests that youth typically are fairly accurate reporters of their grades (Kuncel, Crede, & Thomas, 2005). This finding is consistent with the study's hypothesis and adds to the growing body of literature that minority girls have more positive academic outcomes. This result is concerning, given the well-documented relationships among educational

achievement and future life outcomes, especially employment and economic stability (Saunders et al., 2004). However, girls and boys were not found to differ in their levels of academic aspirations, contrary to some past research (Gillock and Reyes, 1999), indicating that the boys and girls in this sample had similar future aspirations. The finding that girls' and boys' reported academic aspirations were not significantly different may imply that although the girls in this sample had better academic outcomes at the time of the survey, boys were not feeling hopeless about their academic futures.

The finding that girls had higher levels of negative emotionality is also consistent with previous research showing that adolescent girls typically have higher rates of depression and other internalizing disorders (Crick & Zahn-Waxler, 2003; Hankin et al., 2007; Quatman & Watson, 2001). Further, some researchers have suggested that Latino girls in particular may have the highest rates of depression when compared to girls of other ethnicities (Doi et al., 2001; McLaughlin et al., 2007; Roberts & Chen 1995; Roberts & Sobhan 1992; Roberts et al. 1997; Siegel et al. 1999). The current study's finding adds weight to the call for girls to be considered an at-risk group who should be specifically supported by preventative mental health (Hankin et al., 2007).

However, contrary to predictions, results indicated no significant gender differences in positive emotionality or self-esteem. The finding that there was no gender difference between levels of positive emotionality is, in fact, consistent with past research indicating that females have a more intense style of emotional responding that emerges in both positive and negative domains (Grossman & Wood, 1993). Therefore, while girls have higher rates of negative emotionality, they also often have higher rates of positive

emotionality (Grossman & Wood). The fact that the girls may have higher levels of positive emotionality does not necessarily mean they are not struggling emotionally, as many theorists conceptualize positive and negative affect as separate, unipolar dimensions (Larson & Diener, 1987).

The finding that girls and boys did not differ significantly in self-esteem does contradict much of the literature, which has consistently found that girls have lower and less stable self-esteem when compared to boys (Carlson et al., 2000). However, it is important to note that the vast majority of this research has been conducted with White, middle-class adolescents, leading researchers to question the generalizability of the findings to different ethnicities and/or socioeconomic groups (Carlson et al, 2000; Kling et al, 1999).

In particular, there is a paucity of research examining self-esteem in Latino adolescents (Carlson et al., 2000). One study comparing global self-esteem in early adolescent girls found that Hispanic girls had significantly lower reported global self-esteem than both African-American and non-Hispanic White girls (Carlson et al., 2000). However, that study looked at females only and did not examine differences between genders. Given studies suggesting Hispanic adolescents have higher rates of depression overall, it may be that Hispanic females and males would both report lower levels of self-esteem than other ethnic groups (Roberts & Chen 1995; Roberts & Sobhan 1992; Roberts et al., 1997). In sum, while the results of the present study contradict the hypothesis, they add to the literature exploring self-esteem in minority adolescents.

In terms of social support, the finding that girls reported more overall social support and more peer support than boys is consistent with much of the past research (Demaray & Malecki, 2002; Malecki & Demaray, 2006; Jackson & Warren, 2000; Schraedley et al, 1999), although results have been inconsistent and some researchers have contended that these gender differences may be muted in Latino adolescents due to their cultural values (Bamaca et al., 2005). In fact, girls and boys did not differ significantly in the levels of perceived family and school support they reported. The finding that these adolescents reported similar levels of support from families is in keeping with the Latino's familistic orientation. Additionally, the fact that girls reported higher levels of perceived peer support is consistent with a growing number of studies that point to perceived peer support being more salient for girls (Ma and Huebner, 2008)

#### *Research Question 2*

The second research question addressed gender differences in the relationships between perceived social support total (family, peer, and school added together), academic achievement outcomes (GPA and academic aspirations), and personal well-being outcomes (negative and positive emotionality and self-esteem total, peers, home, and school). It was predicted that the relationships between the sum of social support and academic and personal well-being outcomes would be stronger for females than males. Overall, results for these questions revealed partial support for the hypotheses.

In particular, the hypothesis that the relationship between social support and academic outcomes would be stronger for females was supported. For this sample, perceived social support was positively related to GPA and academic aspirations for girls.

In contrast, boys' academic outcomes were not at all related to their levels of perceived social support. These results are consistent with previous research showing that, for girls, social support is more salient and has a greater influence on their academic performance (Goodenow, 1993; Goodenow & Grady, 1993; Morrison et al., 1997). The current study's findings highlight the importance of perceived social support on girls' academic achievement and add to the growing body of literature suggesting that social support may not play a large role for boys in terms of academic attainment. It may be that, for boys, social support is not as salient to their academic achievement and alternate methods to increase males' performance in schools should be explored.

In terms of the relationships between perceived social support and personal well-being, the results of the current study were mixed, much like the findings of past research. For girls, perceived social support was related to all well-being outcome variables, indicating a very strong connection between their perceived social support and their psychological health. For boys, perceived social support was related to some of the well-being outcomes (positive emotionality, self-esteem total, and self-esteem home), indicating that perceptions of social support were important to boys' psychological health also.

Overall, the results suggest that, unlike academic well-being, perceived social support is related to personal well-being for both genders. The findings of previous research on gender differences in social support are inconsistent. While some studies have shown gender differences in which girls' well-being was more related to social support than boys (Kerr et al., 2006; Rubin et al., 1992), other studies have found that

social support was equally important for both genders (Sheeber et al., 1997; Way & Robinson, 2003). Further, it has been suggested that due to the collectivistic culture of Latinos, characterized by an emphasis on deep emotional ties, respect for, and obedience to the family, gender differences in effects of social support may be different than for other cultures (Bamaca et al., 2005). In fact, Bamaca et al. (2005), in their study on Latino adolescents' perceptions of parenting behaviors and self-esteem, found that both mothers' and fathers' support was associated with high levels of self-esteem in boys and girls. Additionally, Way and Robinson (2003), looking at the longitudinal effects of family, friends, and school experiences on the psychological adjustment of a sample of low-income, minority adolescents, found that gender did not moderate the association between family support and psychological adjustment.

Interestingly, however, social support was not correlated for all of the personal well-being outcome variables for boys, as it was for girls, giving credence to the assertion that social support may be more important to girls for certain psychological outcomes. In particular, social support was not correlated with negative emotionality in boys, as it was in girls. This finding is significant because, in this sample, girls and boys differed in negative emotionality, with girls having significantly higher levels. Given girls' reportedly greater vulnerability to negative emotional outcomes, such as depression, it may be more important to girls' expression of negative emotions to perceive social support from others. In their study on the relationships between depressive affect, life stress, and family and friends in adolescents, Rubin et al. (1992) noted that perceptions of family cohesion mitigated depressed affect only among girls in the sample. Additionally,

Kerr et al. (2006) found that female adolescents' perceptions, but not males', of low family support were related to greater levels of hopelessness, depressive symptoms, and suicidal ideation.

Additionally, the finding that overall social support was correlated with self-esteem related to home for boys, but not for self-esteem related to school or peers is consistent with the suggestion that the Latino culture may lessen gender differences in the effects of social support on outcomes. If this assertion is correct, it makes sense that the differences between boys and girls will be the least in terms of outcomes associated with the family, while they may be less diminished at school or with peers. In the case of school or peers, sex differences in self-esteem may be more in line with past research's findings that girls are more affected by social support.

### *Research Question 3*

The third research question was designed to assess gender differences between the relationships of different types of perceived social support (family, peer, and school) and academic and personal well-being outcomes. Specifically, it was predicted that gender would serve as a moderator in the relationship between types of social support and academic achievement and personal well-being outcomes and that the relationships between the types of social support and both academic and personal well-being outcomes would be stronger for girls. Results for this research question indicated that one of the hypotheses was supported.

Past literature on gender differences in types of perceived social support is sparse and existing research inconclusive. While some studies have revealed gender

differences, especially in terms of peer support being more salient for girls' well-being (Ma & Huebner, 2008; Kerr et al., 2006; Rubin et al., 1992), others have not (Bamaca et al., 2005; Way and Robinson, 2003). In addition, much of the past research was conducted with White, middle-class samples, making the results difficult to generalize to other populations.

In the current investigation, two significant moderating effects of gender were found. The first effect was that gender was found to moderate the relationship between peer support and positive emotionality. However, the result was in opposite direction predicted by the hypothesis, showing instead that the relationship between peer support and positive emotionality was stronger for boys than girls. This finding is particularly interesting given previous literature suggesting that peer support is more important for girls' well-being (Licitra-Kleckler & Waas, 1993; Ma and Huebner, 2008). Additionally, results from the current study indicate that there was a significant gender difference in peer social support, with girls reporting a greater level of support.

To explain these findings, it is important to note that while girls did report higher levels of peer support overall, it was being male that moderated the relationship between peer support and positive emotionality. While girls may have reported having more peer support, the greater level of perceived support did not translate into greater levels of positive emotions. This finding does contradict some past research showing peer support as being more related to well-being outcomes for girls. However, much of the past literature examining gender differences in peer relationships has contended that while girls may have more friendships and may place a greater importance on them, these

relationships do not always lead to more positive psychological outcomes. In fact, some researchers have noted that adolescent girls' close friendships, which often involve frequent conversations about personal feelings and concerns, can lead to increased introspection and self-disclosure that may be harmful to their emotional health (Moran & Eckenrode, 1991). Therefore, it is plausible that while the girls in this sample did perceive more support from peers, this support did not lead to the expression of more positive emotions, as it did for the boys.

The second effect was that gender was found to moderate the relationship between family support and negative emotionality, with the relationship between family support and negative emotionality being stronger for girls. This finding is consistent with past research indicating that the association between perceptions of family support and psychological adjustment is moderated by gender (Kerr et al., 2006; Rubin et al., 1992). This result may be particularly important, given the present study's finding of higher levels of negative emotionality in girls, taken together with past research suggesting that Latino girls are at a particularly high risk for depression and other negative emotional outcomes due to the conflicting gender roles between traditional Hispanic cultural norms and those of mainstream American culture (Lugo et al., 2003). Given this high risk, it may be especially important to Latino girls' personal well-being to experience high levels of family support.

While peer and family support were found to moderate some of the outcome variables in the present study, relationships between school support and outcome variables were not moderated by gender. Again, the literature on gender differences in

the salience of school support is inconclusive. While some researchers have found that the relationship between school support and academic and personal well-being may be stronger for adolescent girls than for boys (Goodenow, 1993; Goodenow & Grady, 1993; Smerdon, 2002), other studies have found that school support is important for both male and female minority adolescents (Alafaro et al., 2006; Plunkett et al., 2008). Some researchers have suggested that Latino adolescents may not have these gender differences found in studies with primarily White sample due to their cultural values that tend to stress interdependence and collectivism (Sanchez et al., 2005).

#### *Research Question 4*

The final research question attempted to determine if gender differences existed in the relationship between academic achievement and personal well-being. Specifically, it was hypothesized that the relationships between academic achievement and personal well-being would be stronger for males than females. Past research has indicated that while female adolescents typically have significantly better academic performance than males, it often does not translate into gains in self-esteem (Quatman & Watson, 2001), perhaps because girls' self-worth is more related to their connectedness with significant others than their personal achievement (Gilligan, 1982). In contrast, research on adolescent males suggests that their sense of well-being may be more connected to personal achievement variables, such as athletic or academic achievements, and less related to their experiences of social relationships (Quatman & Watson, 2001). These differences are consistent with research on sex-role socialization of boys toward

independence and mastery and girls toward social relatedness (Block, 1983; Harter, 1998), which has been found to intensify during early adolescence (Hill & Lynch, 1983).

Contrary to the hypothesis, however, GPA was associated with more positive well-being outcomes for females. For girls, GPA was related to positive emotionality and self-esteem (total, home, and school). For males, GPA was only positively correlated with self-esteem related to school. These findings contradict the assertion that boys' personal well-being is more related to their individual achievement than girls. However, the findings of this study were constrained by the fact that the only achievement-related outcome variable was GPA. Given the literature suggesting that boys, particularly minority boys, are often disenfranchised from school and/or may often adopt an oppositional identity that is indifferent or contemptuous to academic success (Gibson & Ogbu, 1991; Ogbu, 1991), it may be that their self-worth and well-being is more correlated to nonacademic achievement variables, such as sports achievement.

However, it is important to note that boys' GPA was correlated with their self-esteem at school, indicating their academic achievement was playing a role in their self-esteem, albeit in a more limited manner than for girls. Further, boys' reported academic aspirations did not significantly differ from girls,' indicating similar levels of future academic hopes. It is plausible that minority girls' well-being is more influenced by academic achievement than non-minority girls because, as some research has suggested, minority females more often have positive experiences in school that lead to increases in their self-esteem, as well as reinforcing the potential for rewards from the school system (Gregory, 1997; Saunders et al., 2004).

*Implications for Theory and Practice*

The implications of the current study are important for both researchers and practitioners, particularly those involved in school-based prevention and intervention programming with urban youth. With the advent of the Positive Psychology movement and a growing interest in the study of resiliency, investigators have begun to recognize the importance of examining antecedents to healthy development in at-risk populations. In order to build and carry out successful, culturally relevant prevention and intervention programs, it is necessary to understand factors influencing positive outcomes. This investigation has particularly relevant implications for work with minority, especially Latino, adolescents, as well as professionals attempting to develop intervention or prevention programs that take gender differences into account.

Overall, this study adds to a growing body of literature highlighting the importance of perceived social support to the well-being of urban youth. While significant gender differences were found, levels of social support were related to many personal well-being outcomes for both genders. The results of the study suggest that prevention and intervention programs should work to increase the levels of social support perceived by adolescents as a way to increase their overall well-being and mental health. Programs should attempt to enhance all types of social support by involving school staff, family members, and peer groups, while also being culturally relevant, in order to best promote adaptive functioning.

The current study indicates that all types of social support have an impact on the well-being of both genders, however, there were some gender differences that

practitioners should take into account when developing prevention or intervention programs. In particular, this study's results are consistent with previous research indicating that minority girls are outperforming boys academically and that girls' greater success may be related not only to their perceptions of having more social support, but also to its' greater salience for girls. Given that boys are struggling academically and do not seem to be as helped by support from others as girls, it is important for researchers and practitioners to figure out alternate strategies to improve boys' performance.

Additionally, the results of the current study indicating that boys' academic performance was not related to their well-being (as it was for girls) adds to the theory that boys may be so disenfranchised from school that they do not consider their academic life to be a salient part of their identity. Considering how important academic achievement is to life outcomes, it is imperative that researchers and practitioners continue to work to untangle the reasons behind boys' disengagement in academic pursuits, as well as ways to help them connect to school and to incorporate academics into their identity. Given that boys' and girls' future academic aspirations were similar, it may be that boys at this stage of development are not yet completely disengaged from school, which underlines the need for appropriate and effective intervention strategies to foster boys' engagement in scholastic endeavors. Given the importance of family in the Latino culture, it may be helpful to involve the family to a greater extent in programs aimed at increasing academic success.

In terms of minority, particularly Latino, girls, the current investigation underlines the importance of social support to both their academic and personal well-being. This

study adds to existing literature indicating that social support is extremely salient for girls. While all types of social support were related to outcomes for girls, family support emerged as particularly important. Family support was shown to predict girls' expression of negative emotionality, with more family support leading to less expression of negative emotions. Given that the girls in this study expressed significantly more negative emotionality, which has been linked to depression and other psychological disorders, prevention programming should focus on increasing family support for both genders, with a particular eye to its' significance to well-being in girls. The familialistic culture of Latinos adds weight to its importance in prevention and intervention programming for both genders.

For girls, it has been shown that peer support may be a double-edged sword; while girls generally report higher levels of peer support and its greater salience to their lives, this support often does not translate into a greater sense of well-being. In fact, in the current study, it was boys that experienced a greater benefit from peer support in terms of their expression of positive emotions, even though girls reported receiving more support from peers. This finding is relevant to prevention and intervention programming in that it is important to recognize that not all support is good support. It may be helpful to teach youth, particularly girls, what constitutes positive support and what types of relationships may actually be harmful. It may be counterintuitive to adolescents that having friendships can be harmful to emotional health, depending on the quality of the relationship, therefore, educating them about the qualities of healthy and harmful relationships may help them to choose or create more positive relationships, thereby

increasing their personal well-being. It may be helpful to create spaces in which urban youth can interact positively with each other (i.e. after-school programs, athletic teams, or peer support groups) and to model what positive interactions look like to adolescents through adults' interactions with them, as well as utilizing role-play scenarios.

### *Strengths and Limitations*

In examining the results of the present study, both strengths and limitations should be addressed. The current investigation adds to the body of research exploring antecedents to academic and personal well-being in an understudied population. An important strength of this study is its' use of multidimensional indices of social support to explore different potential sources of support in urban adolescents, as opposed to considering social support as a global construct. Previous theoretical investigations of social support indicate that several aspects must be taken into account when examining this concept (Winemiller et al., 1993). Another strength of this study was that it uncovered important gender differences in the role of social support on academic and personal well-being. Given that previous research exploring gender differences in social support, particularly in urban youth, is sparse and has revealed conflicting results, this study adds to this important body of literature and has significant implications for both researchers and practitioners.

In terms of limitations, this study has a number of methodological considerations that should be considered when examining the results. One limitation was sample size. While a power analysis revealed that there was significant power to detect large and medium effect sizes, there was not enough power to detect small effect sizes when using

regression analyses with interaction terms. As researchers have contended that effect sizes for interactions are typically small (Frazier, Tix, & Barron, 2004), this study was limited in its' ability to detect subtle, yet still potentially meaningful, interactions.

Second, this investigation had a correlational, non-experimental design; therefore, it is impossible to determine the exact nature of the interrelationships among variables. Although variables such as social support and positive emotionality were correlated, that does not necessarily mean that increased social support led to greater positive emotionality. It is possible that, instead, individuals with higher levels of positive emotionality tend to perceive greater levels of support. Additionally, the constructs utilized in the current study, such as social support, may be developmental in nature and, as such, subject to change as a person ages.

Third, there has been some debate over whether the measures used in this study are appropriate for use with all adolescent samples. It has been noted that most measures of social support were developed for primarily European-American samples and may not be appropriate for use with other cultural groups due to variations in the definition and perception of these constructs (Bradley & Corwyn, 2004). Also, researchers have suggested that the construct of social support is extremely complex and difficult to measure. While this study divides social support into three different sources (peer, family, and school), it has been argued that it may be more useful to examine social support in terms of more precise distinctions, such as enacted support (Barrera, 1986) or to ask more specific questions about how support is perceived and/or utilized in various situations and/or in different emotional states. Additionally, the scale used to measure

academic aspirations consisted of three items pulled from the Denver Achievement Scale and summed; therefore, there is no research on the reliability/validity of using only these three items to measure future academic aspirations. The use of validated measures of academic aspirations for this population would be helpful in future studies.

Fourth, the demographics of the current sample must be taken into account when evaluating how generalizable the results are to other populations. Given that the majority of the sample identified as Latino/a, it is possible that their strong representation influenced the results. In particular, the collectivistic, family-oriented culture of Latinos may have influenced perceptions of social support, particularly family support, and may have lessened gender differences when compared to other populations.

Lastly, it is important to keep in mind that this study utilized self-report data. As with all self-report data, results are subject to how accurately and truthfully subjects were responding to the measures. There is always the possibility that participants are either under or over reporting certain behaviors, opinions, or achievements (i.e. GPA) based on many factors, including the inclination to respond in socially desirable ways, which leads to a bias in scores.

#### *Future Directions for Research*

The findings of the current study suggest several directions for future research. Given the limitations of the study based on its design, future studies would benefit from incorporating longitudinal designs that could examine these constructs over time to determine the portion of findings due to actual moderation effects. A longitudinal study

would be able to track changes in variables over time, thereby better determining whether increased social support truly led to more positive outcomes.

Future research should focus on further exploring some of the troubling gender differences uncovered in this investigation. In particular, the finding that girls reported higher levels of negative emotionality indicates that future studies should continue to examine the emotional processes of urban, minority girls in order to determine what specific factors lead to their greater emotional vulnerability and what can be done to mediate this vulnerability.

In terms of boys, the finding that they lag behind girls in terms of academic achievement is an area that continues to require exploration. Additionally, the results suggest that minority boys' academic well-being is not very related to their experience of social support. These findings are consistent with previous research and provide further evidence that boys may be disengaged from school and at an increased risk for negative academic outcomes. It is imperative that future research examines what factors are leading to minority boys' disengagement with school, as well as strategies to help them to become more academically successful. Given that the boys in the current investigation had similar future academic aspirations to girls, prevention and intervention programming should begin at an early age, preferably before high school, in order to intervene before boys potentially become more disengaged from academic life.

Lastly, it would be beneficial for future studies to continue to explore potential gender differences in perceived social support. The current study found some significant gender differences in its sample, but the relationships were often complex. It is not clear

whether these gender differences would be similar in different populations or if more gender differences would have emerged had the study had greater power. Future studies should continue to explore these constructs in boys and girls with diverse populations and with larger sample sizes.

### *Conclusion*

In summary, the present study investigated the relationships between social support, gender, academic outcomes, and personal well-being in urban youth. Gender differences emerged; with girls have higher GPA's, levels of negative emotionality, and higher levels of total and peer social support. Overall, social support was found to be related to many outcome variables for both males and females. Gender differences were found in the relationships between social support and both academic and personal well-being outcomes. In particular, the study found that social support was related to girls', but not boys' academic outcomes. In terms of personal well-being, results were mixed. While social support was found to be related to some outcome variables for both genders, it was related to all of the outcome variables for girls only. The study also examined gender as a possible moderator between social support and academic and personal well-being. Two moderator effects were found, suggesting that gender does, with certain variables, play a moderating role. Lastly, gender differences were found in the relationships between academic achievement and well-being variables, with girls demonstrating more relationships between GPA and personal well-being variables. These findings are significant in that they add to the literature attempting to delineate antecedents to positive development in urban youth.

## REFERENCES

- Aiken, L. S & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: Sage Publications, Inc.
- Alfaro, E., Umaña-Taylor, A., & Bámaca, M. (2006). The influence of academic support on Latino adolescents' academic motivation. *Family Relations, 55*, 279-291.
- Angold, A., Costello, E. J., and Worthman, C. M. (1998). Puberty and depression: The roles of age, pubertal status and pubertal timing. *Psychological Medicine, 28*(1), 51-61.
- Angold, A., Rutter, M. (1992). Effects of age and pubertal status on depression in a large clinical sample. *Development and Psychopathology, 4*(1), 5-28.
- Aseltine, R. H., Gore, S., & Colten, M. E. (1994). Depression and the social developmental context of adolescence. *Journal of Personality and Social Psychology, 67*, 252-263.
- Ashton, W. A. & Fuehrer, A. (1993). Effects of gender and gender role identification of participant and type of social support resource on support seeking. *Sex Roles, 28* (7-8), 461-476.
- Bachman, J. G., & O'Malley, P. M. (1986). Self-concepts, self-esteem, and educational experiences: The frog pond revisited (again). *Journal of Personality and Social Psychology, 50*, 35-46.
- Bamaca, M. Y., Umana-Taylor, A. J., Shin, N., & Alfaro, E. C. (2005). Latino adolescents' perception of parenting behaviors and self-esteem: Examining the role of neighborhood risk. *Family Relations, 54*(5), 621-632.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182.
- Becker, B. E., & Luthar, S. S. (2002). Social-emotional factors affecting achievement outcomes among disadvantaged students: Closing the achievement gap. *Educational Psychologist, 37*, 197-214.

- Benson, L. T. & Deeter, T. E. (1992). Moderators of the relation between stress and depression in adolescents. *School Counselor, 39*, 189-194.
- Block, J. H. (1983). Differential premises arising from differential socialization of the sexes: Some conjectures. *Child Development, 54*(6), 1335-1354.
- Buhrmester, D. (1990). Intimacy of friendship, interpersonal competence, and adjustment during preadolescence and adolescence. *Child Development, 61*, 1101–1111.
- Carlson, C., Uppal, S., & Prosser, E. C. (2000). Ethnic differences in processes contributing to the self-esteem of early adolescent girls. *Journal of Early Adolescence, 20*, 44-67.
- Cauce, A. M. (1986). Social networks and social competence: Exploring the effects of early adolescent friendships. *American Journal of Community Psychology, 14*, 607-628.
- Cauce, A. M., Felner, R. D., & Primavera, J. (1982). Social support in high-risk adolescents: Structural components and adaptive impact. *American Journal of Community Psychology, 10*, 417–428.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Earlbaum Associates.
- Cohen, S. (1991). Stress during childhood and adolescence: Sources of risk and vulnerability. In Cummings, E. M., Greene, A. L., and Karraker, K. H. (eds.), *Life-Span Developmental Psychology: Perspectives on Stress and Coping*. Erlbaum, Hillsdale, NJ.
- Cohen, J., & Cohen, P. (1983). *Applied multiple regression/correlation analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Cohen-Tovee, E. M. (1993). Depressed mood and concern with weight and shape in normal young women. *International Journal of Eating Disorders, 14*(2), 223-227.
- Collins, W. A., & Steinberg, L. (2006). Adolescent development in interpersonal context. In W. Damon, R. M. Lerner (Series Eds.), & N. Eisenberg (Vol. Ed.), *Handbook of child psychology: 6th ed., Vol. 3. Social, emotional and personality development* (pp. 1003-1067). New York: John Wiley.
- Compas, B. E., Connor, J., & Wadsworth, M. (1997). Prevention of depression. In Weissberg, R. P., and Gullotta, T. P. (eds.), *Healthy Children 2010: Enhancing Children's Wellness: Issues in Children's and Families' Lives* (pp. 129–174) (Vol. 8.). Sage, Thousand Oaks, CA.

- Crick, N. R. & Zahn-Waxler, C. (1997). The development of psychopathology in females and males: Current progress and future challenges. *Development and Psychopathology, 15*(3), 719-742.
- Cross, S. E., & Madson, L. (1997). Models of the self: Self-construal theory and gender. *Psychological Bulletin, 122*, 5-37.
- Cyranowski, J. M., Frank, E., Young, E., & Shear, M. K. (2000). Adolescent onset of the gender difference in lifetime rates of major depression: A theoretical model. *Archives of General Psychiatry, 57*, 21-27.
- Dahlberg, L. L., Toal, S. B., & Behrens, C. B. (1998). *Measuring Violence-Related Attitudes, Beliefs and Behaviors among Youths: A Compendium of Assessment Tools*. Atlanta, Georgia: Centers for Disease Control and Prevention.
- Deardorff, J., Gonzales, N. A., & Sandler, I. N. (2003). Control beliefs as a mediator of the relation between stress and depressive symptoms among inner-city adolescents. *Journal of Abnormal Child Psychology, 31*, 205-217.
- Demaray, M. K., & Malecki, C. K. (2002). Critical levels of perceived social support associated with student adjustment. *School Psychology Quarterly, 17*, 213-241.
- Doi, Y., Roberts, R. E., Takeuchi, K., & Suzuki, S. (2001). Multiethnic comparison of adolescent major depression based on DSM-IV criteria in a US-Japan study. *Journal of the American Academy of Child and Adolescent Psychiatry, 40*, 1308-1315.
- DuBois, D. L., Felner, R. D., Meares, H., and Krier, M. (1994). Prospective investigation of the effects of socioeconomic disadvantage, life stress, and social support on early adolescent adjustment. *Journal of Abnormal Psychology, 103*, 511-522.
- DuBois, D., Bull, C. A., Sherman, M. D., & Roberts, M. (1998). Self-esteem and adjustment in early adolescence: A social-contextual perspective. *Journal of Youth and Adolescence, 27*, 557-583.
- DuBois, D. L. & Tevendale, H. D. (1999). Self-esteem in childhood and adolescence: Vaccine or epiphenomenon? *Applied and Preventive Psychology, 8*, 103-117.
- Dukes, R. L., & Martinez, R. (1994). The impact of ethnicity on self-esteem among adolescents. *Adolescence, 29*, 105-115.
- Duncan, G. J., Brooks-Gunn, J., and Klebanov, P. K. (1995). Economic deprivation and early childhood development. *Child Development, 65*, 296-318.

- Eccles, J., Early, D., Frasier, K., Belansky, E., & McCarthy, K. (1997). The relation of connection, regulation, and support for autonomy to adolescents' functioning. *Journal of Adolescent Research, 12*, 263-286.
- Emslie, G. J., Weinberg, W. A., Rush, A. J., Adams, R. M., & Rintelmann, J. W. (1990). Depressive symptoms by self-report in adolescence: Phase I of the development of a questionnaire for depression by self-report. *Journal of Child Neurology, 5*, 114-121.
- Feingold, A. & Mazzella, R. (1998). Gender differences in body image are increasing. *Psychological Science, 9*(3), 190-195.
- Felsten, G., and Wilcox, K. (1992). Influences of stress and situation-specific mastery beliefs and satisfaction with social support on well-being and academic performance. *Psychological Reports, 70*, 291-303.
- Frazier, P., Tix, A., & Barron, K. (2004). Testing moderator and mediator effects in counseling psychology research. *Journal of Counseling Psychology, 51*, 115-134.
- Galambos, N. L. (2004). Gender and gender role development in adolescence. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (2nd ed., pp. 233-262). Hoboken, NJ: John Wiley.
- Garibaldi, A. M. (1992). Educating and motivating African American males to succeed. *Journal of Negro Education, 61*(1), 4-11.
- Garnezy, N., Masten, A., & Tellegen, A. (1984). The study of stress and competence in children: A building block for developmental psychopathology. *Child Development, 55*, 97-111.
- Garrison, C. Z., Jackson, K. L., Marsteller, F., McKeown, R., & Addy, C. (1990). A longitudinal study of depressive symptomatology in young adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry, 29*, 581-585.
- Ge, X., Best, K. M., Conger, R. D., & Simons, R. L. (1996). Parenting behaviors and the occurrence and co-occurrence of adolescent depressive symptoms and conduct problems. *Developmental Psychologist, 32*(4), 717-721.
- Gelso, C. J. & Fretz, B. R. (1992) *Counseling psychology*. San Diego, CA: Harcourt Brace Jovanovich.
- Gibson, M., & Ogbu, J. (1991). *Minority status and schooling: A comparative study of immigrant and involuntary minorities*. New York: Garland.

- Gilligan, C. (1982). *In a Different Voice: Psychological Theory and Women's Development*. Cambridge, MA: Harvard University Press.
- Gillock, K. L. & Reyes, O. (1999). Stress, support, and academic performance of urban, low income, Mexican–American adolescents. *Journal of Youth and Adolescence*, 28, 259–282.
- Gladstone, T. R. G. & Kaslow, N. J. (1995). Depression and attributions in children and adolescents: A meta-analytic review. *Journal of Abnormal Child Psychology*, 23(5), 597-606.
- Goodenow, C. (1993). Classroom belonging among early adolescent students: Relationships to motivation and achievement. *Journal of Early Adolescence*, 12(1), 21–43.
- Goodenow, C., and Grady, K. E. (1993). The relationship of school belonging and friends' values to academic motivation among urban adolescent students. *Journal of Experimental Education*, 62(1), 60–71.
- Gore, S., and Aseltine, R. H. (1995). Protective processes in adolescence: Matching stressors with social resources. *American Journal of Community Psychology*, 23(3), 301-328.
- Graham, S., Taylor, A., & Hudley, C. (1998). Exploring achievement values among ethnic minority early adolescents. *Journal of Educational Psychology*, 90, 606–620.
- Grant, K. E., Compas, B.E., Thurm, A. E., McMahon, S. D., & Gipson, P. Y. (2004). Stressors and child and adolescent psychopathology: Measurement issues and prospective effects. *Journal of Clinical Child and Adolescent Psychology*, 33(2), 412-425.
- Greene, A. L. & Larson, R. W. (1991). Variation in stress reactivity during adolescence. In Cummings, E. Mark (Ed); Greene, Anita L (Ed); Karraker, Katherine H (Ed). *Life-span developmental psychology: Perspectives on stress and coping*. (pp. 195-209). Hillsdale, NJ, England: Lawrence Erlbaum Associates, Inc.
- Gregory, J. F. (1997). Three strikes and they're out: African American boys and American schools' responses to misbehavior. *International Journal of Adolescent Youth*, 7, 25–34.
- Hall, G. S. (1904). *Adolescence: Its psychology and its relations to physiology*,

*anthropology, sociology, sex, crime, religion, and education* (Vol. 2). New York: Appleton.

- Hankin, B. L., & Abramson, L. Y. (2001). Development of gender differences in depression: An elaborated cognitive vulnerability-transactional stress theory. *Psychological Bulletin, 127*, 773–796.
- Hankin, B. L., Mermelstein, R., & Roesch, L. (2007). Sex Differences in Adolescent Depression: Stress Exposure and Reactivity Models. *Child Development, 78*(1), 279-295.
- Hare, B. (1979). Racial and socioeconomic variation in preadolescent area-specific and general self-esteem. *International Journal of Intercultural Relations, 1*, 31-51.
- Harper, J. F., & Marshall, E. (1991). Adolescents' problems and their relation to self esteem. *Adolescence, 26*, 799-808.
- Harter, S. (1990). Processes underlying self-esteem formation. In R. Montemightor, G. R. Adams, & T. P. Gulotta (Eds.), *Advances in adolescent development, Vol. 2. From childhood to adolescence: A transitional period?* (pp. 205-239). Thousand Oaks, CA: Sage.
- Harter, S. (1993). Causes and consequences of low self esteem in children and adolescents. In Baumeister, R.F. (Ed.). *Self-esteem: The Puzzle of Low Self-Regard*. New York: Plenum Press.
- Harter, S. (1990). Self and identity development. In S. S. Feldman & G. R. Elliot (Eds.), *At the threshold: The developing adolescent* (pp. 352-387). Cambridge, MA: Harvard University Press.
- Harter, S. & Whitesell, N. R. (1996). Multiple pathways to self-reported depression and psychological adjustment among adolescents. *Development and Psychopathology, 8*, 761-777.
- Hay, I. & Ashman, A. F. (2003). The development of adolescents' emotional stability and general self-concept: The interplay of parents, peers, and gender. *International Journal of Disability, Development, and Education, 50*, 78-91.
- Hill, J.P. and Lynch, M.E. (1983). The intensification of gender-related role expectations during early adolescence. In Brooks-Gunn, J. & Petersen, A. (Eds). *Girls at puberty*. New York: Plenum.
- Hoge, D. R., Smit, E. K., & Hanson, S. L. (1990). School experiences predicting changes

- in self-esteem of sixth- and seventh-grade students. *Journal of Educational Psychology*, 82, 117-127.
- Hovey, J. D. & King, C. A. (1996). Acculturative stress, depression, and suicidal ideation among immigrant and second-generation Latino adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry*, 35(9), 1183-1192.
- Huston, A., McLoyd, V. C., & Coll, C. G. Poverty and behavior: The case for multiple levels of analysis. *Developmental Review*, 17(3), 376-393.
- Jackson, Y. & Warren, J. S. (2000). Appraisal, social support, and life events: Predicting outcome behavior in school-age children. *Child Development*, 71, 1441-1457.
- Johnson, M. K., Crosnoe, R., & Thaden, L. (2006). Gendered Patterns in Adolescents' School Attachment. *Social Psychology Quarterly*, 69(3), 284-295.
- Jordan, W. J., & Cooper, R. (2003). High school reform and Black male students: Limits and possibilities of policy and practice. *Urban Education*, 38,196-216.
- Juvonen, J., Graham, S., & Schuster, M. (2003). Bullying among young adolescents: The strong, the weak, and the troubled. *Pediatrics*, 112, 1231-1237.
- Kaltiala-Heino, R., Rimpela, M., Rantanen, P., & Laippala, P. (2001). Adolescent: The role of discontinuities in life course and social support. *Journal of Affective Disorders*, 64(2-3), 155-166.
- Katragadda, C. P. & Tidwell, R. (1998). Rural Hispanic adolescents at risk for depressive symptoms. *Journal of Applied Social Psychology*, 28(20), 1916-1930.
- Keefe, K., & Berndt, T. (1996). Relations of friendship quality to self-esteem in early adolescence. *Journal of Early Adolescence*, 16, 110-129.
- Kerr, D., Preuss, L., & King, C. (2006). Suicidal adolescents' social support from family and peers: Gender-specific associations with psychopathology. *Journal of Abnormal Child Psychology*, 34 (1), 103-114.
- Kistner, J. A., David, C. F., & White, B. A. (2003). Ethnic and sex differences in children's depressive symptoms: Mediating effects of perceived and actual competence. *Journal of Clinical Child and Adolescent Psychology*, 32, 341-350.
- Kling, K. C., Hyde, J. S., Shower, C. J., & Buswell, B. N. (1999). Gender differences in self-esteem: A meta-analysis. *Psychological Bulletin*, 125, 470-500.
- Kuncel, N. R., Crede, M., & Thomas, L. L. (2005). The validity of self-reported grade

point averages, class ranks, and test scores: A meta-analysis and review of the literature. *Review of Educational Research*, 75, 63-82.

- Kuperminc, G., Leadbeater, B. J., Emmons, C., & Blatt, S. J. (1997). Perceived school climate and problem behaviors in middle school students: The protective function of a positive educational environment. *Journal of Applied Developmental Science*, 1, 76-88.
- Lawrence, C. M, Thelen, M. H. (1995). Body image, dieting, and self-concept: Their relation in African-American and Caucasian children. *Journal of Clinical Child Psychology*, 24(1), 41-48.
- Levitt, M. J., Guacci-Franco, N., & Levitt, J. L. (1994). Social support and achievement in childhood and early adolescence: A multicultural study. *Journal of Applied Developmental Psychology*, 15, 207-222.
- Licitra-Kleckler, D. M., & Waas, G. A. (1993). Perceived social support among high-stress adolescents: The role of peers and family. *Journal of Adolescent Research*, 8, 381-402.
- Lopez, E. J., Ehly, S., and Garcia-Vazquez, E. (2002). Acculturation, social support, and academic achievement of Mexican and Mexican American high school students: An exploratory study. *Psychology in the Schools*, 39(3), 245-257.
- Lugo Steidel, A., & Contreras, J. M. (2003). A new familism scale for use with Latino populations. *Hispanic Journal of Behavioral Sciences*, 25, 312-330.
- Luster, T., & McAdoo, H. P. (1995). Factors related to self-esteem among African American youths: A secondary analysis of the High/Scope Perry preschool data. *Journal of Research Adolescence*, 5, 451-467.
- Luthar, S. S. (1991). Vulnerability and resilience: A study of high-risk adolescents. *Child Development*, 62, 600-616.
- Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development*, 71, 543-562.
- Ma, C.Q. & Huebner, E.S. (2008). Attachment relationships and adolescents' life satisfaction: Some relationships matter more to girls than boys. *Psychology in the Schools*, 45(2), 231-249.
- Maccoby, Eleanor E. (1990) Gender and relationships: A developmental account. *American Psychologist*, 45(4), 513-520.

- Malecki, C. K. & Demaray, M. K. (2006) Social support as a buffer in the relationship between socioeconomic status and academic performance. *School Psychology Quarterly*, 21(4), 375-395.
- Malecki, C. K., & Elliott, S. N. (1999). Adolescents' ratings of perceived social support and its importance: Validation of the Student Social Support Scale. *Psychology in the Schools*, 36, 473-483.
- Manson, S. M., Ackerman, L. M., Dick, R. W., Baron, A. E., & Fleming, C. M. (1990). Depressive symptoms among American Indian Adolescents: Psychometric characteristics of the CES-D psychological assessment. *Journal of Consulting and Clinical Psychology*, 2, 231-237.
- Marsella, A. J. (1998). Urbanization, mental health, and social deviancy: A review of issues and research. *American Psychologist*, 53(6), 624-634.
- Masten, A. S & Coatsworth, J. D. (1998). The development of competence in favorable and unfavorable environments: Lessons from research on successful children. *American Psychologist*, 53(2), 205-220.
- Mazza, J., & Reynolds, W. (1998). A longitudinal investigation of depression, hopelessness, social support, and major and minor life events and their relation to suicidal ideation in adolescents. *Suicide and Life-Threatening Behavior*, 28, 358-374.
- Mboya, M. M. (1988). A comparative analysis of the self-concept and academic achievement of Black and White high school students. *School Psychology International*, 9, 197-201.
- McClure, P. (1994). Behind the numbers: The over representation of minorities in special education. *The Phelps-Stokes Fund DIALOGUE* 4: 14.
- McLaughlin, K.A., Hilt, L.M., & Nolen-Hoeksema, S. (2007). Racial/ethnic differences in internalizing and externalizing symptoms in adolescents. *Journal of Abnormal Child Psychology*, 35, 801-816.
- McLoyd, V. C. (1998). Socioeconomic disadvantage and child development. *American Psychologist*, 53(2), 185-204.
- Mechanic, D. (1989). Socioeconomic status and health: An examination of underlying processes. In J. P. Bunker, D. S. Gomber, & B. S. Kehrer (Eds.), *Pathways to health: The role of social factors* (pp. 9-26). Menlo Park, CA: Henry J. Kaiser Family Foundation.

- Mickelson, R. (1990). The attitude–achievement paradox among Black adolescents. *Sociology of Education*, 63, 44–61.
- Mincy, R. B., Sawhill, I. V., and Wolf, D. A. (1990). The underclass: Definition and measurement. *Science*, 248, 450-452.
- Moran, P.B. & Eckenrode, J. (1991). Relationships during adolescence: Gender differences in the costs and benefits of peer relationships. *Journal of Adolescent Research*, 6, 396-402.
- Morrison, G. M, Laughlin, J., San Miguel, S., Smith, D. C, & Widaman, K. (1997). Sources of support for school-related issues: Choices of Hispanic adolescents varying in migrant status. *Journal of Youth and Adolescence*, 26(2), 233-252.
- National Center for Children in Poverty (2002). *Basic facts about low-income children: Birth to age 18*. New York, NY: National Center for Children in Poverty, Columbia University Mailman School of Public Health.
- Nolen-Hoeksema, S., Girgus, J. S., & Seligman, M. E. (1991). Sex differences in depression and explanatory style in children. *Journal of Youth and Adolescence*, 20(2), 233-245.
- Ogbu, J. U. (1991). Minority coping responses and school experience. *Journal of Psychohistory*, 18(4), 433-456.
- Olstad, R, Sexton, H, & Sogaard, A. J. (2001). The Finnmark Study. A prospective population study of the social support bugger hypothesis, specific stressors and mental distress. *Social Psychiatry and Psychiatric Epidemiology*, 36(12), 582-589.
- Pesa, J. A, Cowdery, J. E, Westerfield, R. C, & Wang, M. (1997). Self-reported depression and risk-taking behaviors among Hispanic adolescents. *Psychological Reports*, 81(1), 235-243.
- Petersen, A. C., Sarigiani, P.A, & Kennedy, R. E. (1991). Adolescent depression: Why more girls? *Journal of Youth and Adolescence*, 20(2), 247-271.
- Piko, B. (2000). Perceived social support from parents and peers: Which is the stronger predictor of adolescent substance use? *Substance Use & Misuse*, 35, 617–631.
- Piko, B. & Fitzpatrick, K. (2003). Depressive symptomatology among Hungarian youth: A risk and protective factors approach. *American Journal of Orthopsychiatry*, 73(1), 44-54.

- Phillips, M., Crouse, J., & Ralph, J. (1998). Does the Black–White test score gap widen after children enter school? In C. Jencks & M. Phillips (Eds.), *The Black–White test score gap* (pp.229–272). Washington, DC: Brookings Institution Press.
- Plunkett, S. W. & Bámaca-Gómez, M. Y. (2003). The relationship between parenting and adolescent academic outcomes in Mexican-origin immigrant families. *Hispanic Journal of Behavioral Sciences*, 25, 222-239.
- Plunkett, S. W., Henry, C.S., Houlberg, B.J., Sands, T., & Abarca-Mortensen, S. (2008). Academic Resilience in Mexican-origin ninth grade students from intact families. *The Journal of Early Adolescence*, 28, 333.
- Portes, A. & Rumbaut, R. (2001). *Legacies: The story of the immigrant second generation*. Berkeley: University of California Press.
- Quatman, T. & Watson, C.M. (2001). Gender differences in adolescent self-esteem: An exploration of domains. *Journal of Genetic Psychology*, 162(1), 93-117.
- Rayle, A.D. (2005). Adolescent gender differences in mattering and wellness. *Journal of Adolescence*, 28, 753–763.
- Roberts, R. E., & Chen, Y. C. (1995). Depressive symptoms and suicidal ideation among Mexican Origin and Anglo adolescents. *Journal of American Academy of Child and Adolescent Psychiatry*, 34, 81-90.
- Roberts, R. E., Roberts, C. R., & Chen, R. Y. (1997). Ethnocultural differences in prevalence of adolescent depression. *American Journal of Community Psychology*, 25, 95-111.
- Robert, R. E. & Sobhan, M. (1992). Symptoms of depression in adolescence: A comparison of Anglo, African, and Hispanic Americans. *Journal of Youth Adolescence*, 21, 639-651.
- Robinson, N. S. (1995) Evaluating the nature of perceived support and its relation to perceived self-worth in adolescents. *Journal of Research on Adolescence*, 5(2), 253-280.
- Roeser, R. W., Eccles, J. S., & Sameroff, A. J. (1998). Academic and emotional functioning in early adolescence: Longitudinal relations, patterns, and prediction by experience in middle school. *Development and Psychopathology*, 10, 321-352.
- Romero, A. J. & Roberts, R. E. (2003). Stress within a bicultural context for adolescents of Mexican descent. *Cultural Diversity and Ethnic Minority Psychology*, 9, 171-184.

- Rong, X. L. & Brown, F. (2001). The effects of immigrant generation and ethnicity on educational attainment among young African and Caribbean Blacks in the United States. *Harvard Educational Review* 71(3), 536–565.
- Rose, A.J. & Rudolph, K.D. (2006). A review of sex differences in peer relationship processes: Potential trade-offs for the emotional and behavioral development of girls and boys. *Psychological Bulletin*, 132(1), 98-131.
- Rosenfeld, L. B., Richman, J. M., & Bowen, G. L. (2000). Social support networks and school outcomes: The centrality of the teacher. *Child and Adolescent Social Work Journal*, 17, 205–226.
- Rubin, C., Rubenstein, J. L., Stechler, G., Heeren, T., Halton, A., Housman, D., & Kasten, L. (1992). Depressive affect in “normal” adolescents: Relationship to life stress, family, and friends. *American Journal of Orthopsychiatry*, 62, 430-441.
- Rudolph, K. D., & Hammen, C. (1999). Age/gender as determinants of stress exposure, generation, and reactions in youngsters: A transactional perspective. *Child Development*, 70, 660–677.
- Ryan, R. M., Stiller, T. D., & Lynch, T. H. (1994). Representations of relations to teachers, parents, and friends as predictors of academic motivation and self-esteem. *Journal of Early Adolescence*, 14, 226-249.
- Sánchez, B., Colón, Y., & Esparza, P. (2005). The role of sense of school belonging and gender in the academic adjustment of Latino adolescents. *Journal of Youth & Adolescence*, 34, 619-628.
- Saunders, J., Davis, L., Williams, T., and Williams, J. H. (2004). Gender differences in self-perceptions and academic outcomes: A study of African American high school students. *Journal of Youth and Adolescence*. 33(1): 81–90.
- Savin-Williams, R. C., & Berndt, T. J. (1990). Friendship and peer relations. In S. Feldman & G. R. Elliot (Eds.), *At the threshold: The developing adolescent*. Cambridge, MA: Harvard University Press.
- Schraedley, P. K., Gotlib, I. H., & Hayward, C. (1999). Gender differences in correlates of depressive symptoms in adolescents. *Journal of Adolescent Health*, 25, 98–108.
- Seligman, M. & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55(1), 5-14.

- Siegel, J., Aneshensel, C., Taub, B., Cantwell, D., & Driscoll, A. (1998). Adolescent depressed mood in a multiethnic sample. *Journal of Youth and Adolescence*, 27(4), 413-427.
- Sheeber, L., Hops, H., Alpert, A., Davis, B., & Andrews, J. (1997). Family support conflict: Prospective relations to adolescent depression. *Journal of Abnormal Child Psychology*, 25, 333-344.
- Skiba, R. J. (2001). When is disproportionality discrimination? The overrepresentation of Black students in school suspension. In W. Ayers, B. Dohrn, & R. Ayers (Eds.), *Zero tolerance: Resisting the drive for punishment in our schools* (pp.176-187). New York: New Press.
- Slavin, L. A., & Rainer, K. L. (1990). Gender differences in emotional support and depressive symptoms among adolescents: A prospective analysis. *American Journal of Community Psychology*, 18, 407-421.
- Smerdon, B. (2002). Students' perceptions of membership in their high schools. *Sociological Education*, 75(4), 287-305.
- Steele, C.M. (1997). A threat in the air: How stereotypes shape intellectual identity and performance. *American Psychologist*, 52(6), 613-629.
- Steele, C. M; Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology*, 69(5), 797-811.
- Suárez-Orozco, C., & Suárez-Orozco, M. M. (1995). *Transformations: Immigration, family life, and achievement motivation among Latino adolescents*. Stanford, CA: Stanford University Press.
- Suldo, S. M. & Huebner, E. S. (2004). Does life satisfaction moderate the effects of stressful life events on psychopathological behavior in adolescence? *School Psychology Quarterly*, 19, 93 - 105.
- Taylor, A. & Graham, S. (2007). An examination of the relationship between achievement values and perceptions of barriers among low-SES African American and Latino students. *Journal of Educational Psychology*, 99(1), 52-64.
- Uchino, B., Cacioppo, J., & Kiecolt-Glaser, J. (1996). The relationship between social support and physiological processes: A review with emphasis on underlying mechanisms and implications for health. *Psychological Bulletin*, 119(3), 488-531.
- U.S. Census Bureau. (2002). The Hispanic population in the United States (Current

- Population Reports, P20-545). Washington, DC: U.S. Census Bureau.
- U.S. Department of Education, National Center for Educational Statistics. (2003). *The condition of education 2003* (NCES 2003-067). Washington, DC: Author.
- U.S. Bureau of the Census (2001). *Census of the Population, General Population Characteristics, United States, 2000*. U.S. Government Printing Office, Washington, DC.
- U.S. Department of Education, National Center for Educational Statistics (2006). *The Condition of Education 2006* (NCES 2006-064). Washington, D.C.: Author.
- U.S. Census Bureau (2000). *Census 2000 Briefs and Special Reports: Overview of Race and Hispanic Origin, March 2001*.
- Vaux, A. (1988). *Social support: theory, research and intervention*. New York: Praeger.
- Wade, T. J. (1991). Race and sex differences in adolescent self-perceptions of physical attractiveness and level of self-esteem during early and late adolescence. *Personality and Individual Differences, 12*, 1319-1324.
- Watson, D., Clark, L., Tellegen, A (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54*(6), 1063-1070.
- Way, N. (1998). *Everyday courage: The lives and stories of urban teenagers*. New York: New York University Press.
- Way, N. & Robinson, M.G. (2003). A longitudinal study of the effects of family, friends, and school experiences on the psychological adjustment of ethnic minority, low-SES adolescents. *Journal of Adolescent Research, 18*, 324-346.
- Wilds, D. J. (2000). *Minorities in Higher Education 1999-2000*. American Council on Education, Washington, DC.
- Winemiller, D. R., Mitchell, M. E., Sutliff, J., & Cline, D. (1993). Measurement strategies in social support: A descriptive review of the literature. *Journal of Clinical Psychology, 49*, 638-648.
- Wojtkiewicz, R. A. & Donato, K. M. (1995). Hispanic educational attainment: The effects of family background. *Social Forces, 74*(2), 559-574.

## VITA

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