

DISSERTATION

ACADEMIC RESILIENCY AND THE POST-SECONDARY CHOICES OF
MEXICAN AMERICAN AND NON-HISPANIC WHITE STUDENTS

Submitted by

Malinda E. Trujillo, M.S.

Psychology Department

In partial fulfillment of the requirements

For the Degree of Doctor of Philosophy

Colorado State University

Fort Collins, Colorado

Summer 2008

UMI Number: 3332768

INFORMATION TO USERS

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleed-through, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

UMI[®]

UMI Microform 3332768

Copyright 2008 by ProQuest LLC.

All rights reserved. This microform edition is protected against unauthorized copying under Title 17, United States Code.

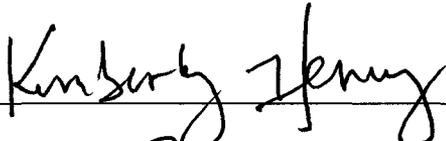
ProQuest LLC
789 E. Eisenhower Parkway
PO Box 1346
Ann Arbor, MI 48106-1346

COLORADO STATE UNIVERSITY

June 16, 2008

WE HEREBY RECOMMEND THAT THE DISSERTATION PREPARED UNDER OUR SUPERVISION BY MALINDA TRUJILLO ENTITLED ACADEMIC RESILIENCY AND THE POST-SECONDARY CHOICES OF MEXICAN AMERICAN AND NON-HISPANIC WHITE STUDENTS BE ACCEPTED AS FULFILLING IN PART REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY.

Committee on Graduate Work



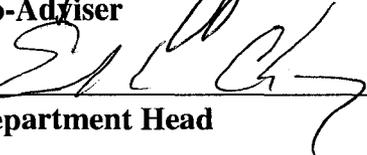




Adviser



Co-Adviser



Department Head

ABSTRACT OF DISSERTATION

ACADEMIC RESILIENCY AND THE POST-SECONDARY CHOICES OF MEXICAN AMERICAN AND NON-HISPANIC WHITE STUDENTS

This study examined the factors that contribute to the college attendance of dropouts, at-risk students, and control students. Research on dropouts and at risk in-school students typically tends to focus on the factors that inhibit their academic success. Concentrating on risk factors overshadows what might be gained by studying students who are academically successful despite the obstacles and risk factors (Arellano & Padilla, 1996). The academic resiliency literature has shown that a student's academic success depends in part on the "goodness of fit" between contextual events (the family and school environments) and their adaptive resources such as personal attitudes and external support systems (Alva & Padilla, 1995).

The purpose of this study is to evaluate whether the environmental and personal resources which foster the academic success of Mexican American and Non-Hispanic White high school students and dropouts also foster their decision to attend a post-secondary school. The variables of interest included are parental social support, parental involvement in school activities, peer social support, peer school engagement, and student school engagement. Results were analyzed using logistic regression. Using logistic regression the log-odds of attending a post-secondary school were regressed on peer social support, peer school engagement, parental support, parental involvement, and student school engagement. In this way, the odds of attending post-secondary school as a

function of the predictors of interest and relevant control variables were assessed. The results were discussed from an intervention framework.

Malinda E. Trujillo
Psychology Department
Colorado State University
Fort Collins, CO 80523
Summer 2008

ACKNOWLEDGEMENTS

This work would not have been completed without the help and support of many people whom I would like to thank and acknowledge. First, my graduate committee, Drs. Ernest Chavez, Jerry Deffenbacher, Kim Henry, and Michael De Miranda. I asked you to be my committee members because your wealth of knowledge and dedication to the fields of psychology and education inspired me. Furthermore, I knew that you were people who would have the integrity and dedication to encourage me to produce a work that was thorough and that I could be proud of. Second, I would like to thank my parents, stepparents, and brother who taught me that education was a gift that should not be wasted and provided their love, time, and tears so that I could achieve my dream of attaining a higher education. Third, I would like to thank my colleagues and friends who encouraged me to carry on even when things got rough. I am proud to call you friends and colleagues and am thankful that I could share this adventure with you. Fourth, I would like to thank Donna Merwarth and Miguel Gonzalez for their unending knowledge about PC's. Words cannot express my gratitude. Fifth, I would like to thank my sixth grade teacher Dr. Frank Gertino, America McNeil, and Keith McNeil. They showed me that a degree was so much more than a fancy title. They used their talents to teach and inspire those who needed it most and took a vested interest in my educational achievement for that I will be forever grateful.

INTRODUCTION

Latina/os are the second largest ethnic group after Non-Hispanic Whites in the public schools of the United States; they are also the youngest and the fastest growing ethnic group in the country. According to the U.S. Census Bureau, the Latina/o population reached 43.1 million in 2004 (U.S. Census Bureau, 2005b), and it is predicted that by the year 2025, one fourth of all public school students will be Latina/o (Gregory, 2003). Along with Latina/os being the fastest growing group in the public schools, they also have the highest dropout rate. An Urban Institute Educational Policy Center report (2001) found that only 53.2% of Latina/os graduate from high school while 74.9% of Non-Hispanic Whites graduate from high school. Additionally, only 12% of Latina/os have received a bachelors' degree compared to 30% of Non-Hispanic Whites. Even of those Latina/os who complete high school, only 53% are considered "minimally prepared" for enrollment in a four-year college compared to 70% of Non-Hispanic White high school graduates (Pew Hispanic Trust, 2005). It is also reported by the National Center for Education Statistics (2003) that Mexican Americans (the largest Latina/o subgroup) have the highest dropout rate of 49%.

The educational gap that Latina/os face has been considered one of the greatest struggles facing the Latina/o community (National Center for Education Statistics, 2003). These educational disparities have the potential to deter Latina/os from the financial stability that higher education and professional jobs secure in the U.S. In an ever-

growing economy where companies demand highly educated and skilled workers, it is critical that Latino/a youth achieve a post-secondary degree (Horn & Chen, 1998). According to research, there are several barriers that contribute to the educational disparities that Latina/os face. These barriers include: coming from a single parent home, having an economically disadvantaged background, having limited English proficiency, ethnic minority status, having disciplinary problems and irregular attendance at school, the low educational and occupational achievement of parents, the amount of learning material in the home, inadequate school funding, poor teacher quality, undemanding coursework, and limited access to quality early childhood education, (Alva, 1995; National Center for Education Statistics, 2003; Reyes & Valencia, 1995). Traditionally, researchers, educators, and policy makers have focused on the barriers which impede the academic success of ethnically diverse and at-risk students (Waxman, Haung, & Padrón, 1997). However, more recently researchers and educators have begun to focus on resilient students (Alva 1995; Arellano & Padilla, 1996; Ceballo, 2004; Horn & Chen, 1998; Plunkett & Bamaca-Gómez, 2003; Reyes & Valencia, 1995; Wayman, 2002).

Traditionally, resiliency has been defined as a child's ability to achieve successful developmental outcomes and to become productive adults despite facing adversity (Masten & Coatsworth, 1998; Werner, Biermen & Smith, 1982). More recently, researchers have applied the concept of resiliency to academic settings (Plunkett & Bamaca-Gómez, 2003). Academically resilient students have high levels of achievement motivation and become successful despite having experienced stressful events that put them at risk for school failure and dropping out (Alva, 1995). Resiliency is multifaceted and incorporates both environmental and personal resources (Gordon, 1996). One area of

research in the resiliency literature proposes that a student's academic success depends in part on the "goodness of fit" between contextual events (the family and school environments) and their adaptive resources, such as personal resources and external resources (Alva & Padilla, 1995). Personal resources are the attitudes that adolescents have, and external resources are the social support networks that adolescents rely on such as family, friends, mentors, and institutional agents who can provide social and emotional support, information, and feedback (Alva, 1995).

Several protective factors have been identified that help Latina/o students adapt and succeed, including: parental involvement and social support, peer engagement and social support, student engagement, attitudes towards school, and a source of external support such as a teacher, an institution, or a caring agency (Alva 1995; Arellano & Padilla, 1996; Compas 1987; Davalos, Chavez & Guardiola, 1999, Garmazy, 1991; Gordon, 1996; Horn & Chen, 1998; Plunkett & Bamaca-Gómez, 2003; Reyes & Valencia, 1995; Wayman, 2002). Past research has shown that personal and environmental resources are associated with lower dropout rates, higher GPAs, return to school after dropping out, high school degree attainment, and academic success in college (Alva 1995; Arellano & Padilla, 1996; Ceballo, 2004; Garmazy, 1991; Gordon, 1996; Horn & Chen, 1998; Plunkett & Bamaca-Gómez, 2003; Reyes & Valencia, 1995; Wayman, 2002). Research shows that these protective factors help to foster the academic success of Latina/o and Non-Hispanic White youth. However, as one matures, the developmental and educational tasks become more complex and may require a different set of protective factors (Gordon, 1996). Few studies have been conducted to evaluate whether these same protective factors contribute to the post-secondary choices

of Mexican American and Non-Hispanic White youth. Therefore, the purpose of this study is to evaluate whether the environmental and personal resources which foster the academic success of Latina/o and Non-Hispanic White high school students also foster their decision to attend a post-secondary school.

Parental Engagement

Parents are the most important influence on a student's long-term educational plan (Steinberg, Dornbusch, & Brown, 1992). Parental support, reactions, and attitudes can foster or hinder adolescents' school outcomes (Ryan, 2000). For example, Horn and Chen (1998) found that moderate-to-high-risk students whose parents had high academic expectations for their children and who frequently discussed academics with their children were more likely to enroll in post-secondary education and to maintain enrollment for all four years than their at-risk peers who did not have academically engaged and supportive parents. Fulgini (1997) found that high achieving immigrant students of various ethnic backgrounds stated that their parents placed a high value on education and expected their children to attain post-secondary degrees. Steinberg et al. (1989) studied the impact of parenting style on the academic achievement of Non-Hispanic White adolescents. Results revealed that authoritative (e.g., parental acceptance, psychological autonomy, and behavioral control) parenting was related to high academic achievement, a healthy sense of autonomy, and a healthy psychological orientation towards work. Similarly, Masten et al. (1999) conducted a study on the developmental resilience and competence (e.g., academic achievement, conduct, and peer social competence) in a sample of predominately Non-Hispanic White students. They found that healthy parent/child relationships (e.g., a combination of warmth,

expectations, and structure) were associated with resilient outcomes across all three domains of competence, even when children and adolescents experienced severe psychosocial stressors. Schoon et al. (2004) conducted a study on socioeconomic adversity and educational resilience in a large sample of socially advantaged and disadvantaged adolescents in Great Britain. Results indicated that positive expectations for the future from parents were associated with educational resilience and positive secondary school adjustment. Kenny et al. (2002) investigated the relationships between parental attachment, academic achievement, and psychological stress in a sample, of Non-Hispanic White, African-American, Asian, and Latina/o students. The highest achieving and most psychologically adjusted seniors reported high levels of family support, low levels of family conflict, and significant support for educational attainment.

Parents of Non-Hispanic White middle-class adolescents tend to promote school success and a strong work ethic (Steinberg et al., 1992). Non-Hispanic White youth who have authoritative parents are more likely to associate with academically engaged peers and engage in work habits that foster their academic success (et al., 1993). Like Non-Hispanic Whites, the parents of Latina/o adolescents exert a powerful influence on their children's academic achievement, but their influence on the choice of peer group is less potent. Despite parental support of education, Latina/os tend to under-perform academically compared to their Non-Hispanic White peers. Latina/o parents tend to be authoritarian rather than authoritative. Authoritarian parents emphasize obedience and conformity, which may hinder the academic success of Latina/os because the school systems in the U.S. emphasize autonomy and self-direction (Steinberg et al., 1992).

Despite cultural differences in parenting practices, research demonstrates that resilient Mexican American students report that parents are the most influential motivating factor for school success, even if their parents do not have the resources to provide direct academic support (Alva, 1995; Arellano & Padilla, 1996; Ceballo 2004; Plunkett & Bamaca-Gomez, 2003; Ceja, 2004). For example, Rodriguez (2002) conducted a study on the perceptions of family on the academic achievement of first, second and third generation Mexican American high school students and found that family involvement and family monitoring was a significant predictor of grades for all three groups. Gonzalez and Padilla (1997) also found that family support was a significant predictor of academic resilience in Mexican American high school students.

Plunkett and Bámaca-Gómez (2003) found that adolescents with high academic motivation reported that their parents were supportive, monitoring, and able to help them with schoolwork. The parent's educational level and the primary language spoken in the home were also positively correlated with educational aspirations. Ceballo (2004) conducted a qualitative study on first generation Latina/o students attending Yale University and reported that all of the students said that their parents had an unwavering commitment to education, consistently supported their academic aspirations, saw education as the means to escape poverty, and supported their students' autonomy. Research has also demonstrated that successful Latina/o students perceive pursuing a higher education as a means to honor their parent's hard work and support (Zalaquett, 2005).

Parents can also hinder academic success. Past research shows that even when controlling for ethnicity, family background, and other psycho-social correlates,

adolescents who lack social and emotional support from their parents are more likely to have lower school engagement, attachment, and achievement. However, Non-Hispanic White adolescents tend to have more access to factors that contribute to school success such as psycho-social resources and status. Therefore, Non-Hispanic Whites tend to be less vulnerable to the risk factors that lower the academic success of more disadvantaged groups (Crosnoe & Elder, 2004).

Peer Engagement and Social Support

Peers wield a powerful influence over a student's academic choices and daily school behaviors. Peers can both empower and deter the academic success of at-risk youth (Steinberg, Brown & Dornbusch, 1996). Across ethnic groups, students whose peers and parents are supportive of their educational achievement are more successful than students who only receive support from one source (Fulgini, 1997; Steinberg et al., 1992). Fulgini (1997) in his study of the academic achievements of adolescents of immigrant families from Latina/o, East Asian, Filipina/o, and European backgrounds found that a strong emphasis on education shared by students, their parents, and peers led to academic success and post-secondary education. Furthermore, the highest achieving students had a supportive network of friends that assisted each other with homework, studied together, and consistently encouraged each other to do well. In addition, peers can also impact the long-term educational goals of at-risk youth. For example, Horn and Chen (1998) in their study of at-risk students who attended post-secondary education found that at-risk students whose friends had plans to attend college were more likely to attend a four-year college than at-risk students whose friends did not have college plans. They also found that at-risk students who had academically engaged friends were more

likely to attend a four-year college. Similarly, Walters and Bowen (1997) found that in a sample of African-American and Non-Hispanic White adolescents, peer acceptance was related to positive school attitudes and behavior.

Academically engaged and supportive peers make up an important component of the protective factors matrix and foster the academic resiliency of Mexican American students. For example, Gonzalez and Padilla (1997) found that peer support was a consistent predictor of GPA and academic resilience. They also found that peer support significantly increased the value that academically successful students placed on education (Gonzalez & Padilla, 1997). Similarly, Alva (1991) demonstrated that peer commitment to education discriminated between academically resilient students and non-resilient students. Wayman (2002) examined how personal and environmental resources impacted the diploma and GED attainment of Mexican American and Non-Hispanic White dropouts and found that peer educational support was a significant predictor of degree attainment.

Peers can also provide emotional support, which can foster a sense of belonging in a school setting. Research has shown that a supportive school environment is an important factor in the academic success of Mexican American youth (Arellano & Padilla, 1996; Gonzalez & Padilla, 1997; Wayman, 2002). Rodriquez and her colleagues (2003) found that peer support was more effective than family support in fostering the psychological well-being of Latina/o college students. Gonzalez and her colleagues (2003) used qualitative research methods to examine how relationships with family, peers, and school personnel impacted the post-secondary opportunities of Latina students. They found that Latina students who were involved in peer networks that were

academically engaged and involved in an honors program fostered their desire to attend an elite university. Gonzalez et al. (2003) found that peers not only offered encouragement for the pursuit of a college degree, but they also shared important information about the college admission process.

Personal Resources

The personal attributes that at-risk youth hold have long been considered one of the key foundations for resiliency. For example, Werner and his (1982) colleagues conducted a longitudinal study in Kauai on children born into poverty. The children in this study suffered from prenatal complications, biological stressors, and familial instability. However, within this cohort there was a group of resilient children who adapted and were successful adults in spite of the circumstances. Resilient children demonstrated personal attributes that fostered their resiliency; they were sociable, responsible, and autonomous (Werner, Biermen & Smith, 1982). Similar personal attributes have been associated with the academic resiliency of Latina/o students and other at risk groups. For example, resilient students believed more in their cognitive abilities, placed less emphasis on belongingness, and placed more value on their goals in life than non-resilient students (Gordon, 1996). Gonzalez and Padilla (1997) also found that academically resilient students valued school more than non-resilient students. Waxman and his colleagues (1997) found that resilient students had significantly higher perceptions of involvement, satisfaction, academic self-concept, and achievement motivation than non-resilient students.

Finn and Rock (1997) conducted a study on a large sample of Latina/o and African-American students from low-income homes and found that resilient students

were more academically engaged (i.e., came to class on time, prepared for class, put forth their best effort on class work, and were not disruptive in class than non-resilient students. They also found that resilient students had higher levels of self-esteem and a greater sense of self-control than the non-resilient students and non-completers. Academic engagement also decreases an adolescent's likelihood of associating with delinquent peers and fosters academic competence (Newmann et al., 1992; Crosnoe, et al., 2002)

Personal attributes have also been found to be associated with the academic resiliency of Latina/o college students. Arellano and Padilla (1996) demonstrated this in a qualitative study designed to examine the academic resiliency of undergraduate Latina/o students. Resilient students had several personal attributes that contributed to their success such as optimism, a positive sense of self-efficacy, and orientation towards achievement. Similarly, Zalaquett (2003) in his qualitative study on successful Latina/o college students found that academically successful Latina/o students valued school and believed it was important to study hard and earn high grades. He also found that academically successful students had a strong sense of responsibility towards others and gained a sense of achievement from their educational accomplishments.

Dropouts

Several factors have been found to be associated with school dropout rates. For example, Wehlage and Rutter (1986) investigated the differences between high school graduates and dropouts in their perceptions of the school environment. They found that those who dropped out stated that they experienced a negative school environment and a lack of fairness, effective discipline, and teacher support compared to their in-school

peers. O'Neill Dillon and colleagues (2003) found that dropouts had less educated parents, and lower levels of parental involvement and acceptance compared to their in-school peers. School alienation and lack of support from teachers is also significantly correlated with dropping out of school (Fine, 1991; Jordan et al., 1996). For example, Kaplan et al. (1997) conducted a study on the relationship between academic failure and dropping out of school. Dropouts had low motivation, associated with deviant peers, and felt alienated from school life. Similarly, Worell and Hale (2001) found that dropouts rated perceived school climate lower than graduates.

Lee and Burkham (2003) studied how school organization and structure influences students decisions to stay in school or drop out. They found that students were less likely to drop out when student/teacher relationships were positive. School support and feelings feeling of school belongingness are especially important for Mexican American students who often face ethnic bias and prejudice (Alva & Padilla, 1995). Wayman (2002) conducted a study on the perceptions of teacher ethnic bias in Mexican American and Non-Hispanic White students. Results indicated that Mexican American students were more likely to perceive ethnic bias than Non-Hispanic Whites, and dropouts perceived higher ethnic bias from their teachers than in-school students. Martinez et al. (2004) conducted a study on the factors that led to the academic success of Latina/os and Non-Hispanic white youth. Results revealed that Latina/o students experience higher rates of institutional barriers (e.g., discrimination, low access to staff resources) compared to their Non-Hispanic White peers. In this study, Latina/o students and their parents reported that they were more likely to drop out of school than their Non-Hispanic White peers.

Davalos et al. (1999) investigated the relationship between extracurricular activity, perception of school, and ethnic identification in school retention rates in a sample of Mexican American and Non-Hispanic White students. Results demonstrated that Mexican American and Non-Hispanic White students who participated in extracurricular activities and who had positive perceptions of school were more likely to be enrolled in school. Results also suggested that Mexican American students who had higher Non-Hispanic White ethnic identification were more likely to be enrolled in school and had more positive perceptions of school than their Mexican American peers who had low levels of Non-Hispanic White ethnic identification.

Researchers have also studied the factors that lead to the degree attainment of dropouts. Research shows that dropouts who were older when they dropped out, who had high achievement test scores and higher SES were more likely to attain a high school degree (Wayman, 2001). O'Neill Dillon and colleagues (2003) found that dropouts who had more coping techniques were more likely to return to school. Furthermore, higher levels of family and extra-familial support led to more positive school outcomes for dropouts.

Wayman (2002) conducted a study to investigate how academic resiliency factors were related to degree attainment in a sample of Mexican American and Non-Hispanic White dropouts. Results indicated that perception of school success and peer educational support was predictive of degree attainment. He also found that personal factors such as self-esteem, intent to graduate, and self-identification as a student were predictive of the type of degree held. There was no significant interaction between ethnicity and the predictor variables, suggesting that similar resiliency factors led to degree attainment

across ethnicities. However, Mexican American dropouts were half as likely to attain a secondary degree compared to Non-Hispanic White dropouts.

Summary

The academic resiliency literature has identified several factors which are associated with the academic success of Latina/o and Non-Hispanic White students. These factors include: (a) familial factors such as parental support and involvement in school, (b) peer factors such as peer academic engagement and social support, (c) personal factors such as academic engagement and (d) acculturation, and school factors such as positive relationships with teachers and a supportive school environment. These studies have clearly shown that parents, peers, school environment, and personal attributes are all related to the academic resiliency of Mexican American youth and other at-risk groups. However, few studies have investigated whether these same factors are associated with the post-secondary educational choices of Mexican American and Non-Hispanic White youth. In addition, most studies focused on the highest achieving students (students with A's or B's) and the lowest achieving students (students who were failing). Conversely, many students fall somewhere in between these two extremes and thus the available literature gives only a limited picture of the actual student population. Furthermore, relatively few studies have focused on resiliency and post-secondary choices of dropouts and Non-Hispanic White youth. Therefore, the purpose of this study is to examine how Mexican American and Non-Hispanic White at-risk students, dropouts, and in-school students' personal resources and external resources (i.e., parents, peers, and teachers) are related to their post-secondary choices. The students in this study

were from rural and urban settings and various academic levels. Specifically this study will investigate the following research hypotheses:

1. Positive parental social support will increase the odds of Mexican American and Non-Hispanic White dropouts, control, and at-risk students attending a post-secondary school (i.e., college, junior college, university, business college, or trade school).
2. Parental involvement in school activities will increase the odds of Mexican-American and Non-Hispanic White dropouts, control, and at-risk students attending a post-secondary school.
3. Positive peer social support will increase the odds of Mexican American and Non-Hispanic White dropouts, control, and at-risk students attending a post-secondary school.
4. Peer school engagement will increase the odds of Mexican American and Non-Hispanic White dropouts, control, and at-risk students attending a post-secondary school.
5. Student school engagement will increase the odds of Mexican American and Non-Hispanic White dropouts, control, and at-risk students attending a post-secondary school.

METHODS

Participants

This study is a secondary analysis of existing data. The data used in this study were collected longitudinally and were designed to study substance abuse and other psycho-social correlates of high school dropouts between Mexican American and Non-Hispanic White youth. The first wave of data was collected over a seven-year period of time. In the sixth year of the first wave psycho-social variables were included in the survey. These variables included family, peer, and school factors. Because these are the variables of interest in the current study, our sample only included the participants surveyed in years six and seven. Four years after the initial assessment, follow-up of participants over the age of 18 began.

The sample used in this study included 125 students not at risk for dropping out (control), 96 students at risk for dropping out, and 118 dropouts (detailed description in Table 1). Dropouts were identified as 7th through 12th graders who had not attended school for more than 30 days, who had not transferred to another school, and had not sought readmission. At-risk students were still in school and were matched with the dropouts on age, sex, ethnicity, and GPA. Control students were randomly selected from each individual school, but were matched for gender and grade in school. Participants were 139 male and 200 female students. The participants were drawn from three communities in the southwestern part of the U.S. The populations of the communities

were 30,000, 90,000, and 350,000. Of the participants 45% were Non-Hispanic White, and 55% were Mexican American.

Table 1

Post High School Attendance by Academic Group, Gender, and Ethnicity

		<i>Dropout</i>		<i>At risk</i>		<i>Control</i>		
		<i>M.A.</i>	<i>N-HW</i>	<i>M.A.</i>	<i>N-HW</i>	<i>M.A.</i>	<i>N-HW</i>	<i>Total</i>
<i>Male</i>	<i>Count</i>	27	27	16	18	24	27	139
	<i>Attended</i>	8 (30%)	16(59%)	10(63%)	10(56%)	15(63%)	25(93%)	84
	<i>Did Not Attend</i>	19(70%)	11(41%)	6(37%)	8(44%)	9(37%)	2(7%)	55
<i>Female</i>	<i>Count</i>	40	24	38	24	41	33	200
	<i>Attended</i>	12(30%)	11(46%)	23(61%)	15(61%)	33(80%)	24(73%)	118
	<i>Did Not Attend</i>	28(70%)	13(54%)	15(39%)	9(39%)	8(20%)	9(27%)	82
<i>Total</i>		67	51	54	42	65	60	339

Note: MA = Mexican American and N-HW = Non-Hispanic White

Instruments

Similar scales have been used in past studies based on this data set. Therefore, current and past reliability will be reported when similar scales were used. Other studies which used the data set utilized different subsets of the data and some scales items varied. Therefore, there are some significant differences in the Cronbach's coefficient alpha reliabilities that are reported below from past studies.

Peer Social Support. Peer social support was assessed using six items measuring the student's relationship with friends (current $\alpha = .89$). Sample items are "Do your friends care about you?" and "Can you count on your friends when things go wrong?"

The responses are on a four-point Likert scale (1 = not at all, 2 = not much, 3 = some, 4 = a lot).

Peer School Engagement. Peer school engagement was assessed using six items current $\alpha = .87$). Sample items are, “Do your friends like school?” and “Do your friends think school is fun?”

Parental Support. Parental support was assessed using five items (prior $\alpha = .79$, current $\alpha = .87$). Sample items are “Do you get emotional help and support from your parents?” and “Are your parents willing to help you make decisions?”

Parental Involvement. Parental involvement was assessed using three items prior $\alpha = .69$ current $\alpha = .67$). Sample items are “Do your parents know what is going on at high school?” and “Do your parents go to school meetings?”.

Student School Engagement. School engagement was assessed using four items prior $\alpha = .82$, current $\alpha = .85$) including, “Do you like high school?” and “Do you think school is fun?”

Post-Secondary Education. Attendance of a post-secondary school was based on self-report measures which were taken from the survey. The survey included several dichotomous questions about the types of post-secondary schools attended ranging from trade school to a four-year university. Because the variables did not have equal representation across groups, they were combined to create one post-secondary variable (i.e., whether or not an individual was attending any kind of post-secondary institution).

Procedures

A school district employee contacted potential participants. The participants and their parents were contacted by phone, mail, or face-to-face contact. Participants and their

parents had to provide informed consent in order to participate. Following the receipt of informed consent, the participants were administered several surveys. Surveys dealt with drug use, delinquent behavior, cultural identity, and psycho-social factors related to dropping out. The surveys were administered individually, and participants chose the location. All identifying information was kept by the school district, but the survey itself was never in the possession of school personnel. Immediately after finishing the survey, the participant was accompanied to a mailbox to mail the survey directly to the research team. These procedures ensured confidentiality; at no time was an unsealed completed survey out of the participant's sight. The in-school participants received \$10 and the dropouts received \$25 for participating.

Four years after the initial assessment, follow-up of participants over the age of 18 began. Follow-up contact was initiated using the contact information that was initially provided. If the staff were unable to locate the participant, the staff would follow up with three people (e.g., family or friends) whom the participant had provided informed consent to contact in order to find their residence for follow-up. If the people provided did not know that whereabouts of the participants, the staff utilized public records such as phonebooks and motor vehicle records to contact the participant. Once the participant was contacted and consented to participate, the administration procedure was similar to the first-wave data collection.

RESULTS

The outcome of interest (attending post-secondary education) is a binary measure. The appropriate statistical method for a binary outcome is logistic regression. Logistic regression functions similarly to linear regression, but it is used when the independent variable is dichotomous. Logistic regression has fewer assumptions compared to other statistical techniques, and the predictor variables do not have to be normally distributed, linearly related, or have equal variance within each group (Tabachnick & Fidell, 2001). Using logistic regression the log-odds of attending a post-secondary school were regressed on peer social support, peer school engagement, parental support, parental involvement, and student school engagement. In this way, the odds of attending post-secondary school as a function of the predictors of interest and relevant control variables were assessed.

First joint effects were examined because the research questions explored how ethnicity and the resiliency factors were associated with attending a post-secondary school among the three academic groups. In the event of a statistically significant interaction, simple effects were pursued to clarify the differences between ethnic groups within each academic group. If joint effects were not significant, then main effects for the academic group were pursued. After analyzing joint and main effects on each resiliency variable, the combined effects of the five resiliency variables were analyzed for each academic group and each ethnicity by academic group in order to study the multivariate relationships of the resiliency factors.

Relationships between Psychosocial Measures

Correlation coefficients (Table 2) show that all measures used in this study were generally correlated, in the small to moderate range. Peer academic engagement and student academic engagement revealed a large positive correlation. There was a moderate correlation between parental support and parental involvement, and student's academic engagement. There was also a moderate correlation between peer academic engagement and peer social support, parent support, and parent involvement.

Table 2: Correlation Among the Five Psychosocial Scales

Measure	2	3	4	5
1. Peer Support	.34	.24	.12	.17
2. Peer Engagement		.32	.39	.62
3. Parent Support			.45	.33
4. Parental Involvement				.46
5. Student Engagement				---

Note. $r > .14, p < .05$; $r > .27, p < .001$

Parental Involvement and Post-Secondary Attendance

For the dropout group the relationship between post-secondary school attendance and parent involvement in school was significant, but differed according to ethnicity (Table 3). For Mexican American dropouts, every unit increase in parental involvement decreased the odds by 2.33 that they reported post-secondary involvement (Table 4). Main effects for parental involvement for Non-Hispanic White dropouts were not significant (Table 3). Joint and main effects for at-risk and control groups were not significant (Table 3).

Parent Social Support and Post-Secondary Attendance

There were no statistically significant differences in the effect of parent social support on attending post-secondary school between Non-Hispanic White and Mexican Americans for dropout, at-risk, and control groups (i.e., no interactions, Table 5). Analysis of the main effects for parent social support were significant for the dropout group but not for control and at-risk groups (Table 5). For dropouts, every unit increase in parental social support decreased the odds by 2.00 that they attended a post-secondary school (Table 5). There was an ethnicity main effect for dropouts but not for the at-risk and control groups (Table 5). After adjusting for the differences in parent support, the odds of attending a post-secondary school were 2.85 times greater for Non-Hispanic White dropouts than for Mexican American dropouts (Table 5).

Peer Engagement and Post-Secondary Attendance

There were no statistically significant differences in the effect of peer academic engagement on attending post-secondary school between Non-Hispanic White and Mexican Americans for dropout, at-risk, and control groups (i.e., no interactions, Table 6). For at-risk and control groups, attending a post-secondary school is influenced by peer academic engagement (Table 6). For at-risk students, every unit increase in peer academic engagement multiplied the odds by 3.33 that they attended a post-secondary educational venue (Table 6). For the control group, every unit increase in peer academic engagement multiplied the odds by 2.71 that they attended a post-secondary school (Table 6). There was an ethnicity main effect for the dropout group (Table 6). For dropouts, after adjusting for differences in peer academic engagement, the odds of

attending a post-secondary school were 2.71 times greater for Non-Hispanic White dropouts than for Mexican American dropouts (Table 6).

Peer Social Support and Post-Secondary Attendance

Analyses of joint and main effects indicated that there were no significant differences in the effect of peer social support on attending post-secondary school between Non-Hispanic White and Mexican Americans for dropout, at-risk, and control groups (Table 7). However, there was an ethnicity main effect for the dropout group as reported in earlier analyses (Table 7). Main effects for at-risk and control groups were not significant (Table 7).

Student Academic Engagement and Post-Secondary Attendance

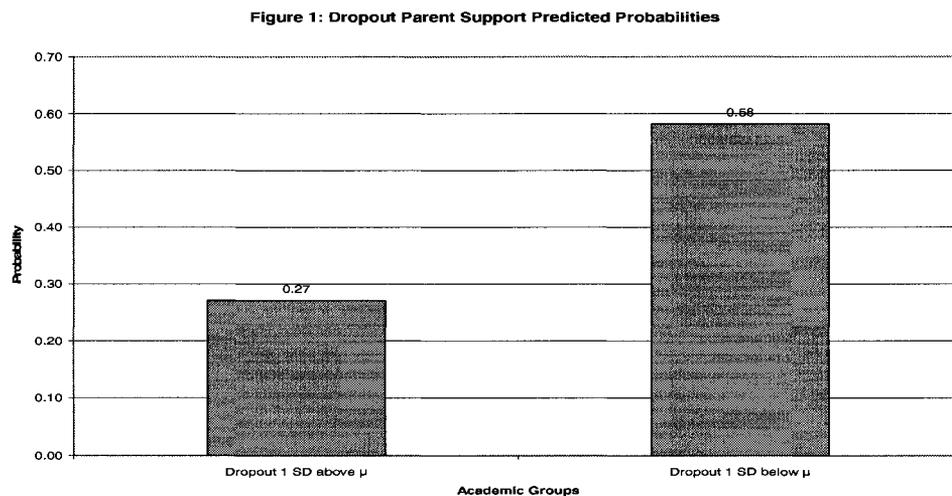
For the dropout group the relationship between post-secondary school attendance and student academic engagement was significant, but differed according to ethnicity (Table 8). For Mexican American dropouts, the main effect of academic engagement on attending a post-secondary school was not significant (Table 9). For Non-Hispanic White dropouts, every unit increase in student engagement increased the odds by 2.81 that they attended a post-secondary school (Table 9). Main effects and interactions for the at-risk and control groups were not significant (Table 8).

Dropout Omnibus Model

After analyzing the initial models, the combined effects of the five resiliency variables were analyzed using an omnibus model for their overall effect on attending a post-secondary school for each academic group and each ethnicity by academic group. An omnibus or overall test evaluates the null hypothesis that all independent variable

means are equal. If one has a significant value the null hypothesis is rejected (i.e., the independent variable means are not equal).

Only one effect was statistically significant for the dropouts; the effect of parent social support on attending post-secondary school was significant after adjusting for all other variables in the model (Table 10). That is, holding all other variables at the mean the predicted probability of a dropout attending college is 27% at one standard deviation above the mean for parent social support and 58% at one standard deviation below the mean for parent social support (Table 11 & Figure 1).



Mexican American Dropout Omnibus Model

None of the effects for Mexican American dropouts were significant (Table 12).

Non-Hispanic White Dropout Omnibus Model

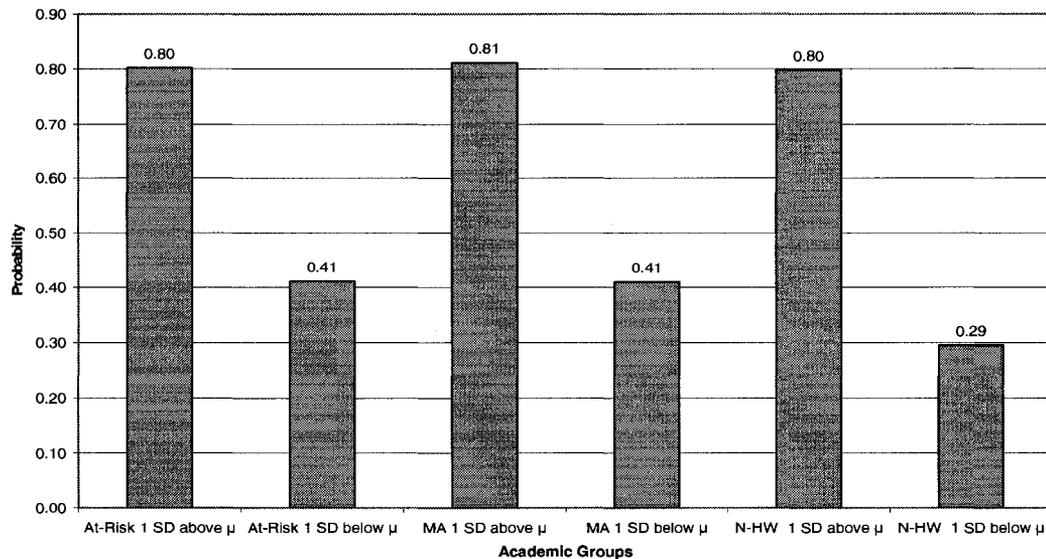
None of the effects for Non-Hispanic White dropouts were significant (Table 14).

At-risk Omnibus Model

Analysis of the combined main effects for the at-risk group indicated that the effect of peer academic engagement on attending post-secondary school was significant after adjusting for all other variables in the model (Table 16). No other effects were

statistically significant. Holding all other variables at the mean the probability of an at-risk student attending a post-secondary school is 80% at one standard deviation above the mean for peer academic engagement and 41% at one standard deviation below the mean for peer academic engagement (Table 17 & Figure 2).

Figure 2: At-Risk Peer Academic Engagement Predicted Probabilities



Mexican American At-risk Omnibus Model

None of the effects for the Mexican American at-risk group were significant at the traditional alpha of .05 (Table 18). However, the effect of peer academic engagement on attending post-secondary school after adjusting for all other variables in the model neared significance ($p = .06$) for the Mexican American at-risk group (Table 18). Holding all other resiliency variables constant the probability of a Mexican American at-risk student attending a post-secondary school is 81% at one standard deviation above the mean for peer academic engagement and 41% at one standard deviation below the mean for peer academic engagement (Table 19 & Figure 2).

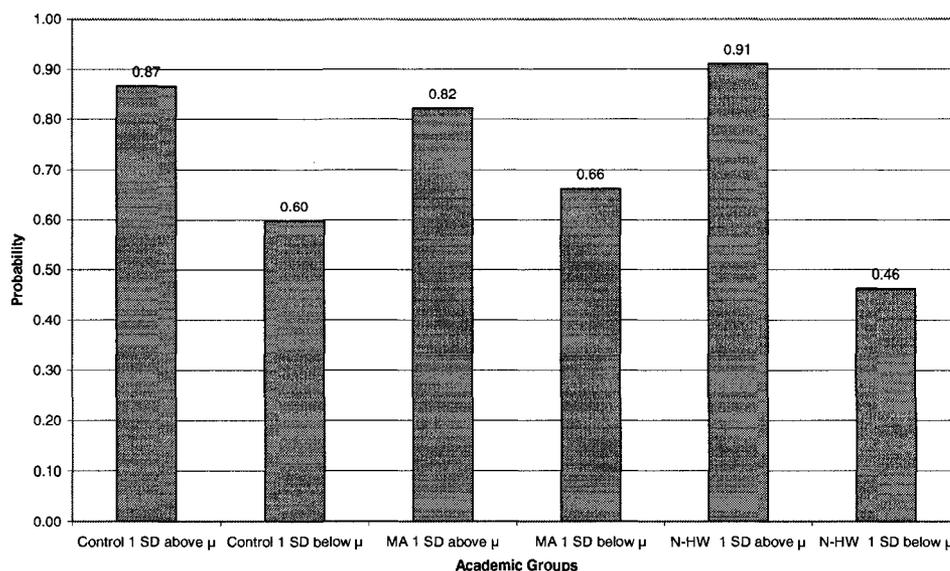
Non-Hispanic White At-risk Omnibus Model

None of the effects for the Non-Hispanic White at-risk group were significant at the traditional alpha of .05 (Table 20). However, the effect of peer academic engagement on attending post-secondary school neared significance ($p = .06$) for the Non-Hispanic White at-risk (Table 20). Holding all other psychosocial variables at the mean the probability of a Mexican American at-risk student attending a post-secondary school is 80% at one standard deviation above the mean for peer academic engagement and 29% at one standard deviation below the mean for peer academic engagement (Table 21 & Figure 3).

Control Omnibus Model

A significant effect for peer academic engagement on attending post-secondary school was noted after adjusting for all other variables in the model (Table 22). Holding all other resiliency variables at the mean the probability of a control student attending a post-secondary school is 87% at one standard deviation above the mean for peer academic engagement and 60% at one standard deviation below the mean for peer academic engagement (Table 23 & Figure 3).

Figure 3: Control Peer Academic Engagement Predicted Probabilities



Mexican American Control Omnibus Model

The combined main effects for the Mexican American control group were not significant (Table 24).

Non-Hispanic White Control Omnibus Model

The effect of peer engagement was significant after adjusting for all other variables in the model (Table 26). No other effects were significant. Holding all other academic resiliency variables at the mean the probability of a control student attending a post-secondary school is 91% at one standard deviation above the mean for peer academic engagement and 46% at one standard deviation below the mean for peer academic engagement (Table 25 & Figure 3).

Table 3: Parent Involvement and Post-Secondary Attendance

	β	se(β)	χ^2	df	p	95% Confidence Interval EXP(B)		
						Odds Ratio	Lower Bound	Upper Bound
Parent Involvement								
Dropout								
Model 1								
Parent Involvement	-0.26	0.24	1.19	1	0.28	0.77	0.48	1.23
Non-Hispanic White	1.12	0.41	7.46	1	0.01	3.02	1.37	6.67
Intercept	-0.94	0.28	11.24	1	0.00	0.39		
Model 2								
Parent Involvement	-0.85	0.39	4.76	1	0.03	0.43	0.20	0.92
Non-Hispanic White	1.33	0.44	9.04	1	0.00	3.79	1.59	9.04
Non-Hispanic White x Parent Involvement	1.10	0.52	4.73	1	0.03	3.13	1.12	8.74
Intercept	-1.16	0.33	12.01	1	0.00	0.31		
At-risk								
Model 1								
Parent Involvement	0.16	0.31	0.27	1	0.61	1.17	0.64	2.15
Non-Hispanic White	-0.23	0.44	0.26	1	0.61	0.80	0.34	1.89
Intercept	0.57	0.30	3.47	1	0.06	1.77		
Model 2								
Parent Involvement	-0.12	0.40	0.10	1	0.75	0.88	0.40	1.94
Non-Hispanic White	-0.13	0.45	0.08	1	0.78	0.88	0.37	2.13
Non-Hispanic White x Parent Involvement	0.68	0.63	1.16	1	0.28	1.98	0.57	6.83
Intercept	0.48	0.31	2.40	1	0.12	1.62		
Control								
Model 1								
Parent Involvement	0.17	0.29	0.34	1	0.56	1.19	0.67	2.11
Non-Hispanic White	0.37	0.48	0.62	1	0.43	1.45	0.57	3.69
Intercept	1.00	0.31	10.15	1	0.00	2.72		
Model 2								
Parent Involvement	-0.09	0.39	0.06	1	0.81	0.91	0.42	1.95
Non-Hispanic White	0.24	0.49	0.25	1	0.62	1.27	0.49	3.31
Non-Hispanic White x Parent Involvement	0.62	0.60	1.07	1	0.30	1.87	0.57	6.08
Intercept	1.04	0.03	10.54	1	0.00	2.83		

Table 4: Mexican American and Non-Hispanic White Dropouts and Parent Involvement

	β	se(β)	χ^2	df	p	Odds Ratio	95% Confidence	
							Lower Bound	Upper Bound
Mexican American								
Parent Involvement	-0.86	0.39	4.76	1	0.03	0.43	0.20	0.92
Intercept	-1.16	0.33	12.01	1	0.00	0.32		
Non-Hispanic White								
Parent Involvement	0.28	0.35	0.67	1	0.41	1.33	0.67	2.62
Intercept	0.17	0.29	0.37	1	0.54	1.19		

Note: When the odds ratio is less than 1, it must be converted to a number greater than 1 in order for it to be interpretable. This number is calculated by dividing the odds ratio into 1. For example, $1/0.43 = 2.33$. When there is a significant negative relationship, this formula will be used to calculate the odds ratio.

Table 5: Parent Social Support and Post-Secondary Attendance

	β	se(β)	χ^2	df	<i>p</i>	Odds Ratio	95% Confidence Interval EXP(B)	
							Lower Bound	Upper Bound
Dropout								
Model 1								
Parent Support	-0.69	0.30	5.24	1.00	0.02	0.50	0.28	0.91
Non-Hispanic White	1.05	0.40	6.83	1.00	0.01	2.85	1.30	6.23
Intercept	-0.97	0.28	11.79	1.00	0.00	0.38		
Model 2								
Parent Support	-0.83	0.39	4.43	1.00	0.04	0.44	0.20	0.95
Non-Hispanic White	1.08	0.41	7.10	1.00	0.01	2.96	1.33	6.57
Non-Hispanic White x Parent Support	0.35	0.61	0.32	1.00	0.57	1.41	0.43	4.66
Intercept	-1.00	0.29	11.73	1.00	0.00	0.37		
At-risk								
Model 1								
Parent Support	0.05	0.32	0.02	1.00	0.88	1.05	0.56	1.98
Non-Hispanic White	-0.07	0.42	0.03	1.00	0.87	0.94	0.41	2.13
Intercept	0.45	0.28	2.64	1.00	0.11	1.57		
Model 2								
Parent Support	0.10	0.43	0.06	1.00	0.81	1.11	0.48	2.56
Non-Hispanic White	-0.07	0.42	0.03	1.00	0.87	0.93	0.41	2.13
Non-Hispanic White x Parent Support	-0.12	0.66	0.04	1.00	0.85	0.88	0.24	3.19
Intercept	0.46	0.28	2.65	1.00	0.10	1.57		
Control								
Model 1								
Parent Support	0.51	0.37	1.86	1.00	0.17	1.66	0.80	3.46
Non-Hispanic White	0.48	0.44	1.19	1.00	0.27	1.62	0.68	3.84
Intercept	0.99	0.29	12.11	1.00	0.00	2.70		
Model 2								
Parent Support	0.71	0.48	2.16	1.00	0.14	2.02	0.79	5.19
Non-Hispanic White	0.50	0.44	1.26	1.00	0.26	1.64	0.69	3.90
Non-Hispanic White x Parent Support	-0.50	0.77	0.43	1.00	0.51	0.60	0.13	2.76
Intercept	0.99	0.29	11.74	1.00	0.00	2.68		

Note: When the odds ratio is less than 1, it must be converted to a number greater than 1 in order for it to be interpretable. This number is calculated by dividing the odds ratio into 1. For example, $1/0.50 = 2.00$. When there is a significant negative relationship, this formula will be used to calculate the odds ratio.

Table 6: Peer Engagement and Post-Secondary Attendance

	β	se(β)	χ^2	df	p	95% Confidence Interval		
						Odds Ratio	Lower Bound	Upper Bound
Dropout								
Model 1								
Peer Engagement	0.45	0.36	1.61	1	0.21	1.57	0.78	3.15
Non-Hispanic White	1.00	0.41	5.95	1	0.02	2.71	1.21	6.05
Intercept	-0.80	0.30	7.19	1	0.01	0.45		
Model 2								
Peer Engagement	-0.30	0.54	0.32	1	0.57	0.74	0.26	2.11
Non-Hispanic White	1.32	0.46	8.18	1	0.00	3.75	1.52	9.29
Non-Hispanic White x Peer Engagement	1.40	0.75	3.46	1	0.06	4.03	0.92	17.60
Intercept	-1.02	0.34	9.14	1	0.00	0.36		
At-risk								
Model 1								
Peer Engagement	1.20	0.51	5.53	1	0.02	3.33	1.22	9.09
Non-Hispanic White	-0.23	0.46	0.25	1	0.62	0.79	0.32	1.97
Intercept	0.62	0.31	4.14	1	0.04	1.87		
Model 2								
Peer Engagement	0.79	0.60	1.44	1	0.23	2.05	0.64	6.62
Non-Hispanic White	-0.23	0.47	0.23	1	0.63	0.80	0.32	2.01
Non-Hispanic White x Peer Engagement	1.69	1.22	1.94	1	0.16	5.44	0.50	59.12
Intercept	0.55	0.30	3.41	1	0.06	1.74		
Control								
Model 1								
Peer Engagement	1.00	0.43	5.45	1	0.02	2.71	1.17	6.25
Non-Hispanic White	0.11	0.47	0.05	1	0.82	1.11	0.45	2.77
Intercept	1.08	0.30	13.14	1	0.00	2.95		
Model 2								
Peer Engagement	0.66	0.51	1.71	1	0.19	1.95	0.72	5.28
Non-Hispanic White	-0.01	0.47	0.00	1	0.99	0.99	0.40	2.49
Non-Hispanic White x Peer Engagement	1.05	0.95	1.20	1	0.27	2.84	0.44	18.43
Intercept	1.07	0.29	13.41	1	0.00	2.92		

Table 7: Peer Social Support and Post-Secondary Attendance

	β	se(β)	χ^2	df	<i>p</i>	95% Confidence Interval		
						Odds Ratio	Lower Bound	Upper Bound
Dropout								
Model 1								
Peer Social Support	-0.01	0.36	0.00	1	0.97	0.99	0.49	1.98
Non-Hispanic White	1.05	0.41	6.62	1	0.01	2.87	1.29	6.39
Intercept	-0.93	0.29	10.26	1	0.00	0.40		
Model 2								
Peer Social Support	-0.19	0.46	0.18	1	0.67	0.82	0.34	2.02
Non-Hispanic White	1.07	0.41	6.74	1	0.01	2.92	1.30	6.55
Non-Hispanic White x Peer Social Support	0.45	0.72	0.39	1	0.53	1.56	0.38	6.40
Intercept	-0.96	0.30	10.42	1	0.00	0.38		
At-risk								
Model 1								
Peer Social Support	0.24	0.41	0.35	1	0.55	1.27	0.58	2.82
Non-Hispanic White	-0.08	0.44	0.03	1	0.86	0.93	0.39	2.20
Intercept	0.53	0.29	3.33	1	0.07	1.70		
Model 2								
Peer Social Support	0.37	0.49	0.57	1	0.45	1.45	0.55	3.82
Non-Hispanic White	-0.07	0.44	0.02	1	0.88	0.94	0.39	2.23
Non-Hispanic White x Peer Social Support	-0.41	0.87	0.22	1	0.64	0.66	0.12	3.67
Intercept	0.54	0.29	3.38	1	0.07	1.71		
Control								
Model 1								
Peer Social Support	0.21	0.40	0.29	1	0.59	1.24	0.57	2.71
Non-Hispanic White	0.34	0.44	0.57	1	0.45	1.40	0.59	3.34
Intercept	1.10	0.29	14.50	1	0.00	3.01		
Model 2								
Peer Social Support	0.46	0.48	0.91	1	0.34	1.59	0.61	4.10
Non-Hispanic White	0.37	0.45	0.66	1	0.42	1.45	0.59	3.52
Non-Hispanic White x Peer Social Support	-0.75	0.87	0.75	1	0.39	0.47	0.09	2.59
Intercept	1.11	0.29	14.49	1	0.00	3.05		

Table 8: Student Academic Engagement and Post-Secondary Attendance

	β	se(β)	χ^2	df	p	95% Confidence Interval		
						Odds Ratio	Lower Bound	Upper Bound
Dropout								
Model 1								
Student Engagement	0.43	0.26	2.77	1	0.09	1.54	0.93	2.57
Non-Hispanic White	1.10	0.41	7.37	1	0.01	3.01	1.36	6.67
Intercept	-0.81	0.28	8.51	1	0.00	0.45		
Model 2								
Student Engagement	-0.02	0.37	0.16	1	0.69	0.86	0.42	1.78
Non-Hispanic White	1.40	0.45	9.83	1	0.00	4.05	1.69	9.69
Non-Hispanic White x Student Engagement	1.18	0.55	4.57	1	0.03	3.26	1.10	9.65
Intercept	-0.92	0.29	10.14	1	0.00	0.40		
At-risk								
Model 1								
Student Engagement	0.12	0.34	0.13	1	0.72	1.13	0.58	2.19
Non-Hispanic White	-0.22	0.44	0.24	1	0.63	0.81	0.34	1.92
Intercept	0.55	0.30	3.35	1	0.07	1.73		
Model 2								
Student Engagement	-0.03	0.45	0.40	1	0.53	0.75	0.31	1.83
Non-Hispanic White	-0.19	0.45	0.17	1	0.67	0.83	0.35	1.98
Non-Hispanic White x Student Engagement	0.96	0.70	1.85	1	0.17	2.60	0.66	10.32
Intercept	0.47	0.30	2.39	1	0.12	1.59		
Control								
Model 1								
Student Engagement	0.57	0.36	2.55	1	0.11	1.77	0.88	3.55
Non-Hispanic White	0.34	0.48	0.50	1	0.48	1.40	0.55	3.57
Intercept	0.92	0.32	8.16	1	0.00	2.50		
Model 2								
Student Engagement	0.61	0.44	1.92	1	0.17	1.84	0.78	4.35
Non-Hispanic White	0.36	0.51	0.51	1	0.48	1.44	0.53	3.89
Non-Hispanic White x Student Engagement	-0.18	0.75	0.02	1	0.88	0.89	0.20	3.87
Intercept	0.91	0.32	7.97	1	0.02	2.48		

Table 9: Mexican American and Non-Hispanic White Dropout and Student Engagement

	β	se(β)	χ^2	df	p	EXP(B)		
						Odds Ratio	Lower Bound	Upper Bound
Mexican American								
Student Engagement	-0.15	0.37	0.16	1	0.68	0.86	0.42	1.78
Intercept	-0.92	0.29	10.14	1	0.00	0.40		
Non-Hispanic White								
Student Engagement	1.03	0.41	6.30	1	0.01	2.81	1.25	6.30
Intercept	0.48	0.34	1.98	1	0.16	1.61		

Table 10: Dropout Omnibus Model

	β	se(β)	χ^2	df	p	95% Confidence Interval		
						Odds Ratio	Lower Bound	Upper Bound
Parent Involvement	0.11	0.32	0.11	1	0.74	1.11	0.60	2.07
Parent Support	-0.99	0.44	5.20	1	0.02	(2.70)0.37	0.16	0.87
Peer Engagement	0.58	0.47	1.53	1	0.22	1.79	0.71	4.53
Peer Social Support	0.24	0.41	0.35	1	0.55	1.27	0.57	2.84
Student Engagement	0.28	0.33	0.75	1	0.39	1.33	0.70	2.51
Intercept	-0.33	0.23	2.18	1	0.14	0.72		

Table 11: Dropout Predicted Probabilities

	Predicted Prob 1 SD above μ	Predicted Prob 1 SD below μ
Parent Involvement	0.44	0.40
Parent Support	0.27	0.58
Peer Engagement	0.50	0.34
Peer Social Support	0.46	0.37
Student Engagement	0.46	0.38

Table 12: Mexican American Dropout Omnibus Model

	β	se(β)	χ^2	df	p	95% Confidence Interval		
						Odds Ratio	Lower Bound	Upper Bound
Parent Involvement	-0.32	0.50	0.41	1	0.52	0.73	0.27	1.95
Parent Support	-0.71	0.57	1.57	1	0.21	0.49	0.16	1.49
Peer Engagement	-0.26	0.71	0.13	1	0.72	0.77	0.19	3.11
Peer Social Support	-0.01	0.55	0.00	1	0.99	1.00	0.34	2.93
Student Engagement	-0.03	0.49	0.01	1	0.96	0.97	0.38	2.53
Intercept	-1.30	0.40	10.62	1	0.00	0.27		

Table 13: Mexican American Dropout Predicted Probabilities

	Predicted Prob 1 SD above μ	Predicted Prob 1 SD below μ
Parent Involvement	0.17	0.26
Parent Support	0.15	0.30
Peer Engagement	0.19	0.24
Peer Social Support	0.21	0.22
Student Engagement	0.21	0.22

Table 14: Non-Hispanic White Dropout Omnibus Model

	β	se(β)	χ^2	df	p	95% Confidence Interval		
						Odds Ratio	Lower Bound	Upper Bound
Parent Involvement	0.16	0.50	0.10	1	0.75	1.17	0.44	3.12
Parent Support	-1.53	0.86	3.15	1	0.08	0.22	0.04	1.17
Peer Engagement	1.04	0.73	2.02	1	0.15	2.84	0.67	11.93
Peer Social Support	0.61	0.84	0.52	1	0.47	1.83	0.35	9.50
Student Engagement	0.80	0.52	2.34	1	0.13	2.23	0.80	6.20
Intercept	0.41	0.37	1.16	1	0.28	1.50		

Table 15: Non-Hispanic White Dropout Predicted Probabilities

	Predicted Prob 1 SD above μ	Predicted Prob 1 SD below μ
Parent Involvement	0.63	0.57
Parent Support	0.36	0.80
Peer Engagement	0.79	0.38
Peer Social Support	0.67	0.52
Student Engagement	0.71	0.48

Table 16: At-Risk Omnibus Model

	β	se(β)	χ^2	df	p	95% Confidence Interval		
						Odds Ratio	Lower Bound	Upper Bound
Parent Involvement	-0.31	0.39	0.64	1	0.42	0.74	0.35	1.56
Parent Support	-0.03	0.39	0.01	1	0.94	0.97	0.45	2.10
Peer Engagement	1.92	0.76	6.34	1	0.01	6.83	1.53	30.49
Peer Social Support	-0.06	0.45	0.02	1	0.89	0.94	0.39	2.28
Student Engagement	-0.48	0.49	0.94	1	0.33	0.62	0.24	1.63
Intercept	0.52	0.24	4.69	1	0.03	1.68		

Table 17: At-risk Predicted Probabilities

	Predicted Prob 1 SD above μ	Predicted Prob 1 SD below μ
Parent Involvement	0.57	0.68
Parent Support	0.62	0.63
Peer Engagement	0.80	0.41
Peer Social Support	0.62	0.64
Student Engagement	0.56	0.69

Table 18: Mexican American At-risk Omnibus Model

	β	se(β)	χ^2	df	p	95% Confidence Interval		
						Odds Ratio	Lower Bound	Upper Bound
Parent Involvement	-0.41	0.52	0.63	1	0.43	0.66	0.24	1.84
Parent Support	0.33	0.64	0.27	1	0.60	1.40	0.40	4.89
Peer Engagement	1.86	0.99	3.55	1	0.06	6.40	0.93	44.23
Peer Social Support	0.22	0.56	0.15	1	0.69	1.25	0.41	3.76
Student Engagement	-1.16	0.76	2.32	1	0.13	0.31	0.07	1.40
Intercept	0.55	0.35	2.42	1	0.12	1.73		

Table 19: Mexican American At-risk Predicted Probabilities

	Predicted Prob 1 SD above μ	Predicted Prob 1 SD below μ
Parent Involvement	0.56	0.70
Parent Support	0.68	0.58
Peer Engagement	0.81	0.41
Peer Social Support	0.66	0.60
Student Engagement	0.65	0.62

Table 20: Non-Hispanic White At-risk Omnibus Model

	β	se(β)	χ^2	df	p	95% Confidence Interval		
						Odds Ratio	Lower Bound	Upper Bound
Parent Involvement	-0.29	0.63	0.21	1	0.65	0.75	0.22	2.59
Parent Support	0.19	0.62	0.09	1	0.76	1.21	0.36	4.05
Peer Engagement	2.86	1.53	3.50	1	0.06	17.44	0.87	348.07
Peer Social Support	-0.56	0.89	0.40	1	0.53	0.57	0.10	3.24
Student Engagement	0.11	0.77	0.02	1	0.89	1.11	0.24	5.07
Intercept	0.25	0.39	0.43	1	0.51	1.29		

Table 21: Non-Hispanic White At-risk Predicted Probabilities

	Predicted Prob 1 SD above μ	Predicted Prob 1 SD below μ
Parent Involvement	0.51	0.61
Parent Support	0.59	0.53
Peer Engagement	0.80	0.29
Peer Social Support	0.47	0.65
Student Engagement	0.57	0.55

Table 22: Control Omnibus Model

	β	se(β)	χ^2	df	p	95% Confidence Interval		
						Odds Ratio	Lower Bound	Upper Bound
Parent Involvement	-0.22	0.38	0.32	1	0.57	0.80	0.38	1.71
Parent Support	0.21	0.53	0.15	1	0.70	1.23	0.44	3.46
Peer Engagement	1.32	0.58	5.13	1	0.02	3.75	1.19	11.74
Peer Social Support	-0.57	0.54	1.14	1	0.29	0.57	0.20	1.61
Student Engagement	0.00	0.53	0.00	1	1.90	1.00	0.35	2.83
Intercept	1.13	0.27	17.92	1	0.00	3.11		

Table 23: Control Predicted Probabilities

	Predicted Prob 1 SD above μ	Predicted Prob 1 SD below μ
Parent Involvement	0.72	0.79
Parent Support	0.78	0.73
Peer Engagement	0.87	0.60
Peer Social Support	0.68	0.82
Student Engagement	0.76	0.76

Table 24: Mexican American Control Omnibus Model

	β	se(β)	χ^2	df	p	95% Confidence Interval		
						Odds Ratio	Lower Bound	Upper Bound
Parent Involvement	-0.76	0.56	1.80	1	0.18	0.47	0.16	1.41
Parent Support	0.65	0.69	0.90	1	0.34	1.92	0.50	7.41
Peer Engagement	0.74	0.73	1.03	1	0.31	2.10	0.50	8.77
Peer Social Support	-0.24	0.66	0.13	1	0.72	0.79	0.16	1.41
Student Engagement	0.33	0.69	0.24	1	0.63	1.40	0.37	5.31
Intercept	1.10	0.36	9.22	1	0.00	2.99		

Table 25: Mexican American Control Predicted Probabilities

	Predicted Prob 1 SD above μ	Predicted Prob 1 SD below μ
Parent Involvement	0.66	0.82
Parent Support	0.84	0.64
Peer Engagement	0.82	0.66
Peer Social Support	0.72	0.78
Student Engagement	0.79	0.70

Table 26: Non-Hispanic White Control Omnibus Model

	β	se(β)	χ^2	df	<i>p</i>	95% Confidence Interval		
						Odds Ratio	Lower Bound	Upper Bound
Parent Involvement	0.30	0.63	0.22	1	0.64	1.35		
Parent Support	-0.21	0.90	0.05	1	0.82	0.82	0.14	4.76
Peer Engagement	2.45	1.12	4.75	1	0.03	11.56	1.28	104.50
Peer Social Support	-0.82	0.95	0.74	1	0.39	0.44	0.07	2.85
Student Engagement	-0.71	0.99	0.51	1	0.47	0.49	0.07	3.44
Intercept	1.08	0.43	6.20	1	0.01	2.95	0.39	4.65

DISCUSSION

Few research studies have evaluated what factors contribute to the post-secondary educational attendance of dropouts and other academically at-risk groups. Research on dropouts, at-risk, and in-school students typically tends to focus on the factors that inhibit their academic success. Concentrating on risk factors overshadows what might be gained by studying students who are academically successful despite the obstacles they may face (Arellano & Padilla, 1996). The academic resiliency literature has shown that a student's academic success depends in part on the "goodness of fit" between contextual events (the family and school environments) and their adaptive resources such as personal attitudes and external support systems (Alva & Padilla, 1995).

Few studies have investigated whether the academic resiliency factors that are related to attaining a high school degree are associated with the college or other post-secondary educational attendance of dropouts and other at-risk students. The purpose of this study was to evaluate whether the environmental and personal resources which foster the academic success of Mexican American and Non-Hispanic White dropouts and at-risk students were associated with their decision to attend a post-secondary school. The variables of interest included were parental social support, parental involvement in school activities, peer social support, peer school engagement, and student school engagement.

Peer engagement appears to be the most salient factor in predicting post-secondary attendance for at-risk and control students. Results suggest that at-risk students who are imbedded in an academically engaged peer network are more likely to attend

kind of post-secondary education than students who are not embedded in an academically engaged peer network. These findings are similar to past research which found that at-risk students who had academically engaged and supportive peers were more likely to attend a four-year college and have positive attitudes towards school than students who were not involved in a supportive, academically engaged peer group (Horn & Chen, 1998; Walters & Bowen, 1997). Steinberg et al. (1992) found for Non-Hispanic Whites peers exert a strong influence on daily behaviors in school such as the amount of time spent on homework, whether students enjoy coming to school and how they behave in the classroom. Additionally, even when accounting for covariance with other variables, peer academic engagement was the most salient factor in predicting post-secondary educational involvement for control students (i.e., the most academically engaged group).

Surprisingly, in this study the relationship between peer academic engagement and attending a post-secondary school was not significant for the dropout group. Dropouts by definition are the least academically resilient group (i.e., they had the lowest academic achievement) and were the least likely to participate in post-secondary education of the three academic groups assessed in this study. Previous research has shown that dropouts tend to be embedded in lower achieving peer groups (Kaplan, Peck, & Kaplan, 1997). Furthermore, past research with this sample indicated that the dropout's peers held more negative attitudes towards school than the peers of the more academically resilient peer groups (Trujillo, 2005).

Research suggests that one of the best strategies for promoting the college attendance of dropouts and other at-risk students is encouraging them to become involved in academically resilient peer groups before they dropout of school. Earlier intervention

is the key to later educational success. Therefore, educators, parents, and policy makers should encourage at-risk students to connect with peers who have positive attitudes towards school and support their educational success and degree attainment. One of the best ways to encourage at-risk students to associate with resilient students is to create in-school interventions that encourage academically resilient students and at-risk students to work together. For example, Arellano and Padilla (1996) found that Latino students who were involved in academic support programs tended to associate with higher achieving peers. Research has also shown that at-risk students who become part of a higher achieving peer group are more engaged in school than students that are not part of a high achieving peer group.

Other research studies propose that a sense of belonging in school and social support are important for the academic success of Mexican American and other at-risk youth. (Arellano & Padilla, 1996; Gonzalez & Padilla, 1997; Wayman, 2002). For example, peer support has been shown to be more effective than family support in supporting the psychological well-being of Latina/o college students (Rodriguez et al., 2003). Walters and Bowen (1997) found that peer acceptance was related to positive school attitudes and school engagement of academically at-risk African Americans and Non-Hispanic Whites. Unlike past studies, peer social support was not significantly related to the post-secondary choices of dropout, control, and at-risk groups. These findings suggest that peer emotional support alone is not enough to encourage the academic success of at-risk students. Peers must also be academically engaged and support school success.

In this study parental involvement in school was a significant predictor of post-secondary school attendance for dropouts but the effects differed according to ethnicity. Parental involvement in school significantly decreased the odds that Mexican American dropouts attended a post-secondary school, while it had no effect on the post-secondary school attendance of Non-Hispanic White dropouts. This finding may best be explained by the social capital literature which proposes that in order for one to adapt and succeed one must be embedded in a positive support network in which knowledge, high expectations, obligations, trust, and societal norms/values are passed on to promote success. In order to successfully encourage academic success parents must rely on their own social capital such as high academic standards, knowledge, positive attitudes towards school, and promotion of academic engagement in order to help their children adapt and succeed academically (Pong, Lingxin & Gardener, 2005).

Non-Hispanic Whites have privileges available which place them at an advantage compared to people of color. This privilege has been described as “white privilege.” According to theory white privileges are the social, economic, and educational advantages that Non-Hispanic White students receive which are attributed to skin-color-privilege rather than class, religion, ethnic status, or geographical location (McIntosh, 1989). These privileges include: access to fair housing, medical care, legal support, and higher education. The educational system in the United States incorporates these values and privileges into the history of Non-Hispanic Whites and often ignores or under-appreciates the contributions of people of color. Additionally, Non-Hispanic Whites are taught that their culture, values, and privilege are unbiased and ideal and that others should strive to be like them in order to succeed. Furthermore, those who hold white

privilege assume that they can succeed educationally and make the social system work to their advantage (McIntosh, 1989). Therefore, simply by being raised in the “majority” culture Non-Hispanic White parents are more likely to have been exposed to the knowledge and resources necessary for promoting educational success than Mexican American parents. Non-Hispanic White adolescents tend to have more access to factors that contribute to school success such as psycho-social resources and status. Therefore, Non-Hispanic Whites tend to be less vulnerable to the risk factors that lower the academic success of more disadvantaged groups (Crosnoe & Elder, 2004).

On the other hand, Mexican American dropouts often come from families where the parents may not have graduated from high school, have lower socio-economic status, may not be native English speakers, or may be recent immigrants. Therefore, although parents of Mexican American dropouts may be actively involved in their education, they may lack the knowledge and resources needed to help their children adapt and succeed educationally. The parents of Non-Hispanic White dropouts may also have lower educational achievement and face other barriers such as lower socioeconomic status. However, they have not faced the barriers that their Mexican American counterparts may have such as prejudice and discrimination. For example, Mexican Americans come from a caste-like minority. A caste-like minority is an ethnically diverse group that was historically oppressed and denied both educational and occupational equality (Ogubu, 1987).

Parental involvements in school as well as parent social support were not related to the post-secondary choices of at-risk and control groups. Results suggest that parents must not only be emotionally supportive, but they should also be able to pass on the

knowledge and resources necessary for school success such as commitment to education, positive expectations for the future, a healthy sense of autonomy, goal-oriented structure and knowledge about the skills necessary to attend college. These findings further advocate that academically engaged peers are one of the most influential motivating factors for supporting the post-secondary choices of at-risk in school students and are analogous to past research which shows that by the time children reach adolescence the strongest influence on their learning environment is their peer membership (Steinberg et al., 1996).

Another noteworthy finding in regard to parent social support is that this support is negatively associated with the likelihood of dropouts attending a post-secondary school. As suggested above, the parents of dropouts are more likely to face psychosocial barriers such as lower educational attainment and dropouts tend to have lower levels of parental acceptance and parental involvement in school (O'Neill, Dillon et al., 2003). Finally, parents of non-academically resilient students tend to be less authoritative (e.g., accepting, promoting autonomy, and asserting behavioral control of their children). Therefore, dropout's parents may be less prepared to promote the academic success of their children.

Past studies have found a relationship between student academic engagement and the academic success of Mexican American and Non-Hispanic White at-risk students (Arellano & Padilla, 1996; Crosnoe et al., 2002; Newmann et al., 1992; Werner et al., 1982; Zalaquett, 2003). Similar to past studies there was a significant relationship between student academic engagement and post-secondary school attendance for the for Non-Hispanic White dropouts. Every unit increase in student academic engagement

nearly tripled the odds of Non-Hispanic White dropouts attending a post-secondary school. However, unlike past studies the relationship between student academic engagement and attending a post-secondary school was not significant for Mexican American dropouts. When considering this result one must first take into account that Non-Hispanic White students in this sample were nearly three times more likely to attend a post-secondary school than Mexican American dropouts, and Non-Hispanic White adolescents tend to have more access to factors that contribute to school success such as psycho-social resources and status. Non-Hispanic Whites tend to be less vulnerable to the risk factors that lower the academic success of more disadvantaged groups (Crosnoe & Elder, 2004).

These results suggest that other psychosocial factors may be associated with the post-secondary choices of Mexican American dropouts. For instance, Mexican American dropouts are more likely to face barriers which may impede their academic success such as ethnic bias, prejudice, and lower access to educational resources (Alva & Padilla, 1995; Lee & Burkham, 2003; Davalos et al., 1999; Wayman 2002). Another important factor which has been previously found to be associated with the academic resilience of Mexican American dropouts is ethnic identification. Davalos et al. (1999) found that Mexican American dropouts with higher Non-Hispanic White ethnic identification were more likely to return to school than Mexican American dropouts with lower levels of Non-Hispanic White ethnic identification. Many of the cultural values in the Non-Hispanic White majority culture are important for academic success such as autonomy and achievement motivation. It may be that cultural identification coupled with student

academic engagement is associated with the post-secondary choices of Mexican American dropouts.

Another theory which has been used to explain the ethnic disparities in the educational attainment of Mexican Americans and other students of color is the theory of "oppositional culture" which proposes that an oppositional culture exists among youth of color that discourages greater educational achievement because it is a form of "acting white" or assimilation (Ogbu & Fordham, 1986). For example, Fryer and Torelli (2005) found that Latino students with a GPA of 1 through 2.5 were more popular with other Latino students than Latino students with higher GPA's. After Latino students received a GPA above 2.5 their popularity significantly decreased. For instance, a Latino student with a GPA of 4.0 was the least popular of all Latino students and had 3 fewer friends than his or her Non-Hispanic White Counterpart. Consequently, Mexican Americans and their peers may devalue education, self-sabotage, or discourage others from higher educational achievement as way to resist assimilation to the white majority culture.

Finally, there was no relationship between student academic engagement and attending a post-secondary school for the at-risk and control groups. This is unanticipated considering that dropouts and control had higher rates of post-secondary attendance than dropouts. In addition, previous studies on this sample revealed that dropouts (the least resilient group) reported more negative attitudes towards school than control and at-risk groups.

To summarize, this study demonstrates that dropouts and other at-risk students are embedded in a complex psycho-social network that can foster or hinder their post-secondary educational attendance. Peers seem to be the most salient factor in the post-

secondary choices of dropouts and control students. At-risk and control students who had academically engaged were more likely to attend post-secondary schools than students whose peers were not academically engaged or supportive. However, other psycho-social factors such as parents can influence the post-secondary choices of dropouts and in-school students. It seems that dropouts and at-risk students need more than parental social support to promote positive educational choices. They need parents who are emotionally supportive, involved in their education, and who have the knowledge and resources necessary to help their children navigate the educational system.

When interventions are developed to promote the post-secondary attendance of dropouts and other at-risk groups, researchers, educators, and policy makers should create programs which help students become involved in supportive and academically engaged peer networks. Educators and schools should provide education and guidance to parents who lack the knowledge, information, and resources needed to help their children attain a higher educational degree, so that they can help their children navigate their educational paths. Furthermore, it seems that at-risk students who are still attending school may need added support beyond parents and peers such as an academic support programs with extra supervision, attention, and support from teachers and adults who can encourage the knowledge and skills necessary to attend college and other post-secondary educational opportunities. Finally, other factors may foster or hinder the post-secondary school attendance of Mexican American dropouts and at-risk students that are beyond the scope of this study such as ethnic identification, acculturation, prejudice, access to educational resources, parental resources, and teacher support.

Limitations and Implications for Future Research

These results reveal that peers and parents are important factors in a student's academic success. They also added to the resiliency literature by exploring the unique factors that affect dropouts and Non-Hispanic White students. However, there are some limitations that should be acknowledged. First, because this was a longitudinal study, the researchers were unable to locate all of the participants for follow-up so only part of the original sample responded at time two. Second, the researchers used self-report data that are only subjective reflections of the student's perceptions of himself or herself. In the future researchers should use other sources such as parent, peer, and teacher surveys or interviews. Third, academic groups were not equally represented in each group because the participants were taken from a longitudinal study and the researchers could not control the number of respondents who participated at time two. In the future researchers should use a sample that has equal representation for males and females in each ethnicity and academic group. Fourth, researchers should investigate other factors that may contribute to the post-secondary educational attendance of Mexican American dropouts and at-risk students such as teacher support, involvement in an academic support program, ethnic identification, acculturation, prejudice, access to educational resources, and parental resource. In conclusion, these findings reveal that peers, parents, and personal resources make up an important part of the complex psychosocial network that supports the post-secondary educational attendance of dropouts and other at-risk youth. Parents and peers can foster or hinder the educational attainment of dropouts and at-risk youth. If parents and peers have the knowledge, information, behaviors, and attitudes necessary to promote educational attainment then they can assist at-risk students in

navigating their pathway to success. Educators and policy makers need to create support programs that educate students, parents, and teachers about how to support and utilize the factors that contribute to the educational attainment of at-risk youth. As Alva (1991) proposed, researchers, educators, and policy makers must no longer focus on the factors that lead to school failure; they must embrace and foster a student's strengths and their external support systems.

REFERENCES

- Alva, S.A. (1991). Academic Invulnerability among Mexican-American students: The importance of protective resources and appraisals. *Hispanic Journal of The Behavioral Sciences*, 13, 1, 18-34.
- Alva, S.A. (1995). *Academic Invulnerability Among Mexican American Students: The Importance of Protective Resources and Appraisals*. In A. Padilla (Ed.), *Hispanic Issues in Theory and Research*, (pp. 288-302), London, England: Sage Publications.
- Arellano, A.R., & Padilla (1996). Academic invulnerability among a select group of Latino university students. *Hispanic Journal of Behavioral Sciences*, 18, 485-507.
- Ceballo, R. (2004). From barrios to Yale: The role of parenting strategies in Latino Families. *Hispanic Journal of the Behavioral Sciences*, 26, 2, 171-186.
- Ceja, M. (2004). Chicana college aspirations and the role of parents: Developing Educational Resiliency. *Journal of Hispanic Higher Education*, 3, 4, 338-362.
- Compas, B.E. (1987). Coping with stress during childhood and adolescence. *Psychological Bulletin*, 101, 393-403.
- Crosnoe, R., Erikson, K., & Dornbusch, S. (2002). Protective functions of family relationships and school factors on the deviant behavior of adolescent boys and girls: reducing the impact of risky friendships. *Youth in Society*.

- Crosnoe, R. & Elder, G.H. (2004). Family dynamics, supportive relationships, and educational resilience during adolescence. *Journal of Family Issues*, 5, 571-602.
- Davalos, D.B., Chavez, E.L., & Guardiola, R.J. (1999). The effects of extracurricular activity, ethnic identification, and perception of school on student dropout rates. *Hispanic Journal of Behavioral Sciences*, 21, 1, 67-77.
- Fine, M. (1991). Framing dropouts: notes on the politics of an urban public high school. New York: State University of New York Press.
- Finn, J.D. & Rock, D.A. (1997). Academic success among students at risk for school failure. *Journal of Applied Psychology*, 82, 2, 221-234.
- Fryer, R.G., & Torelli, P. (2005). An empirical analysis of 'acting white.' National Bureau of Economic Research. Retrieved May 15, 2008 Web site: <http://www.nber.org/papers/w11334>
- Fulgini, A.J. (1997). The Academic Achievement of Adolescents from Immigrant Families: The roles of family background, attitudes, and behavior. *Child Development*, 68, 2, 351-363.
- Garmazy, N. (1991). Resiliency and vulnerability to adverse developmental outcomes associated with poverty. *American Behavioral Scientist*, 34, 416-430.
- Gordon, K.A. (1996). Resilient Hispanic youths' self-concept and motivational patterns. *Hispanic Journal of Behavioral Sciences*, 18,1, 63-73.
- Gonzalez, K.P., Stone, C., and Jovel, J.E. (2003). Examining the role of social capital in access to college for Latinas: Toward a college opportunity frame work. *Journal of Hispanic Higher Education*, 2, 1,146-170.

- Gonzalez, R. & Padilla, A.M. (1997). The academic resilience of Mexican-American high school students. *Hispanic Journal of Behavioral Sciences*, 19, 301-317.
- Gregory, S.T. (2003). Planning for the increasing number of Latino students. *Planning for Higher Education*, 31, 13-9.
- Horn, L.J. & Chen, H.M., X (1998). Toward resiliency: At risk students who make it in college (OERI Publication No. PLL-98-8056). Washington, DC:U.S. Government Printing Office. (ERIC Document Reproduction Service No. ED 275 800).
- Jordan, W.J., Lara, J., McPartland, J.M. (1996). Exploring the causes of early dropout among race-ethnic and gender groups. *Youth and Society*, 28, 1, 62-94.
- Kaplan, D., Peck, B.M., Kaplan, H.B (1997). Decomposing the academic Failure-dropout relationship: A longitudinal analysis. *The Journal of Educational Research*, 90 331-342.
- Kenny, M.E., Gallagher, L.A., Alvarez-Salvat, R., & Silsby, J. (2002). Sources of support and psychological distress among academically successful inner-city youth. *Adolescence* 37, 145, 161-182.
- Lee, V.E, Burkham, D.T (2003). Dropping out of high school: The roles of school organization and structure. *American Educational Research Journal*, 40, 2, 353-393.
- Martinez, C.R., DeGarmo, D.S., Hedi, M.J. (2004). Promoting Academic Success Among Latino Youth. *Hispanic Journal of the Behavioral Sciences*, 26, 2, 128-151.

- 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.
- Masten, A.S., Hubbard, J.J., Gest, S.D., Tellegen, A., Garmazey, N., & Ramirez, M. (1999). Competence in the context of adversity: pathways to resilience and maladaptation from childhood to late adolescence. *Development and psychopathology*, 11, 143-169.
- McIntosh, P (1989). White privilege and male privilege: A personal account of coming to see correspondences through work in women's studies. Working Paper No. 189. Wellesley College, Massachusetts Center for Research on Women retrieved May 15, 2008 from http://eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/23/1e/8c.pdf
- National Center for Education Statistics 2003, Status and Trends in the education of Hispanics. *Dropout Rates*. Retrieved April 4, 2004, from <http://nces.ed.gov/pubs2003/hispanics/section3.asp>.
- National Center for Education Statistics 2003, Status and Trends in the education of Hispanics. *High School Completion*. Retrieved April 4, 2004, from <http://nces.ed.gov/pubs2003/hispanics/section4.asp>.
- Newmann, F., Wehlage, G., & Lamborn, S. (1992). The significance and sources of student engagement. In F. Newmann, *Student Engagement and Achievement in American Secondary Schools*, (pp. 11-39). New York: Teachers College Press.

- Ogbu, J., & Fordham, S., (1986). Black students' school success: Coping with the burden of 'acting white.' *The Urban Review*, 18, 3,176-206.
- Ogbu, J. (1987). Variability in minority school performance: A problem in search of an Explanation. *Anthropology and Education Quarterly*, 18, 214-334.
- O'Neill Dillon, C., Leim, J, & Gore, S. (2003). Navigating disrupted transitions: Getting back on track after dropping out of high school. *American Journal of Orthopsychiatry*, 73, 4, 429-440.
- Pew Hispanic Trust (2005). A statistical portrait of Hispanics at mid-decade. Retrieved October 7, 2006, from <http://pewhispanic.org/reports/middecade/>.
- Plunkett, S.W., & Bámaca-Gómez. M.Y. (2003). The Relationship between parenting acculturation, and adolescent academics in Mexican-Origin immigrant Families in Los Angeles. *Hispanic Journal of the Behavioral Sciences*, 25, 222-239.
- Pong, S.L., Lingxin, H., & Gardener, E. (2005). The roles of parenting styles and social Capital in the school performance of immigrant Asian and Hispanic adolescents. *Social Sciences Quarterly*, 86, (928-948).
- Reyes, P., & Valencia, R.R. (1995). Educational policy and the growing Latino population: Problems and prospects. In A. Padilla, *Hispanic Psychology Critical Issues in Theory and Research*, (pp. 303-325). London, England: Sage Publications.
- Rodriguez, J.L (2002). Family environment and achievement among three generations of Mexican American high school students. *Applied Developmental Science*, 6,2, 88-94.

- Rodriguez, N., Mira, C.B, Myers, H.F., Morris, J.K, & Cardoza, D. (2003). *Cultural Diversity and Ethnic Minority Psychology*, 9, 3, 236-250.
- Ryan, A.M (2000). Peer groups as a context for the socialization of adolescents' Motivation, engagement, and achievement in school. *Educational Psychologist*, 35, 2, 101-111.
- Schoon, I., Parsons, S., & Sacker, A. (2004). Socioeconomic adversity, educational resilience , and subsequent levels of adult adaptation. *Journal of Adolescent Research*, 19, 4, 383-404.
- Steinberg, L., Elmen, J.D., & Mounts, N.S. (1989). Authoritative parenting, psycho-social maturity, and academic success among adolescents. *Child Development*, 60, 1424-1436.
- Steinberg, L., Dornbusch, S.M., & Brown, B.B. (1992). Ethnic differences in adolescent achievement: An ecological perspective. *American Psychologist*, 47, 723-729..
- Tabachnick, B.G., & Fidell, L.S. (2001). Logistic Regression. In Tabachink, B.G & Fidell, L.S. (Ed. 4) *Using Multivariate Statistics* (pp. 517-581). Needham Heights, Massachusetts: Allyn and Bacon.
- Trujillo, M.E. (2005). *Academic resiliency in Mexican American and Non-Hispanic White Females*. Unpublished master's thesis, Colorado State University, Colorado.
- Urban Institute Education Policy Center (2001). Who graduates? Who doesn't? A Statistical Portrait of Public High School Graduation, Class of 2001. Retrieved

- December 15, 2006, from <http://www.urban.org/publications/410934.html>.
- U.S. Census Bureau. (2005b). Hispanic population passes 40 million, Census Bureau Reports. Retrieved July 7, 2006, from <http://www.census.gov/PressRelease/www/releases/archives/population/005164.html>
- Waxman, H.C., Huang, S.L., & Padrón, Y.N. (1997). Motivation and learning environment differences between resilient and nonresilient Latino middle school students
- Wayman, J.C. (2001). Factors influencing GED and diploma attainment in high school dropouts. *Education Policy Analysis Archives*, 9, 4 [On-line]. Available: <http://olam.ed.asu.edu/epaa/v9n4>
- Wayman, J.C. (2002). The utility of educational resilience for studying degree attainment in school dropouts. *Journal of Educational Research*, 95, 167-178.
- Wayman, J.C. (2002). Student perceptions of teacher ethnic bias: A comparison of Mexican American and Non-Latino White dropouts and students. *High School Journal*, 85,3.
- Walters, K. and Bowen, G.L. (1997). Peer group acceptance and academic performance among adolescents participating in a dropout prevention program. *Child and Adolescent Social Work Journal*, 14,6, 413-425.
- Wehlage, G.G., Rutter, R.A. (1986). Dropping out: How much do schools contribute to the problem? *Teachers College Record*, 87, 3, 374-392.
- Werner, E.E., Biermen, J.M., & Smith, R.S. (1982). *Vulnerable but invincible: A study of resilient children*. New York: Mcgraw-Hill.

Worrell, F.C. & Hale, R.L (2001). The relationship of hope in the future and perceived school climate to school completion. *School Psychology Quarterly*, 16, 4, 370-388.

Zalaquett, C.P. (2005). Study of successful Latina/o students. *Journal of Hispanic Higher Education*, 5, 1, 35-47.