PEER VICTIMIZATION, SUPPORT FROM CLOSE FRIENDS, AND LATINO ADOLESCENTS’ MENTAL HEALTH

A thesis submitted in partial fulfillment of the requirements
For the degree of Master of Arts in Psychology,
General Experimental

by

Paige L. Seegan

May 2012
The thesis of Paige L. Seegan is approved:

Andrew Ainsworth, Ph.D. Date

Gabriela Chavira, Ph.D. Date

Scott W. Plunkett, Ph.D., Chair Date

California State University, Northridge
DEDICATION

This thesis is dedicated to my family and friends who always acted as a constant source of encouragement and support. Without their reinforcement and validation, this thesis would not exist.
ACKNOWLEDGMENT

It is with immense gratitude that I acknowledge the assistance of my committee members who supported my efforts in writing this thesis.

To my chair, Dr. Scott Plunkett, this thesis would not have been possible without your continuous support and guidance. You played an instrumental role in the development of my thesis ideas and I sincerely thank you for allowing me to go beyond the scope of your research and explore variables that I am truly passionate about researching. Thank you also for your patience in correcting numerous drafts and for your unwavering encouragement.

To Dr. Gabriela Chavira, thank you for the time and effort you have put into reading and editing my thesis drafts. I truly appreciate your editorial contributions as well as the personal support you have provided me throughout this process.

To Dr. Andrew Ainsworth, I have been amazingly fortunate to have you as a statistics professor and committee member. Your teaching provided me with the necessary tools to demonstrate my knowledge of structural equation modeling. My courses with you have helped shape my thesis ideas and I genuinely thank you for holding your graduate students to a high research standard. I also wish to thank you for the time and effort you have put into editing my thesis drafts.

To Marcee Seegan, without your support this thesis would not exist. I cannot thank you enough for allowing my team and I access to your charter high schools for the purpose of data collection.

To Dr. Plunkett’s Lab, I am indebted to the many lab members who contributed tremendous amounts of time to make this thesis possible. I would especially like to thank
Federico Leguizamo, Alejandro Gálvez Pol, Jacobo Picardo, Dani Yomtov, and Kayleigh Welsh for their help collecting, coding, verifying, and entering data.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature Page</td>
<td>ii</td>
</tr>
<tr>
<td>Dedication</td>
<td>iii</td>
</tr>
<tr>
<td>Acknowledgment</td>
<td>iv</td>
</tr>
<tr>
<td>List of Tables</td>
<td>vi</td>
</tr>
<tr>
<td>List of Figures</td>
<td>vii</td>
</tr>
<tr>
<td>Abstract</td>
<td>viii</td>
</tr>
</tbody>
</table>

## CHAPTER I – INTRODUCTION
- Statement of the Problem 2
- Definitions 2
- Hypotheses 3
- Assumptions 4

## CHAPTER II – REVIEW OF LITERATURE
- Adolescent Mental Health 5
- Peers and Adolescent Mental Health 8

## CHAPTER III – METHODOLOGY
- Procedure 19
- Sample Description 21
- Measures 21

## CHAPTER IV – RESULTS
- Zero-Order Correlations 24
- Path Analysis Using Structural Equation Modeling 26

## CHAPTER V – DISCUSSION
- Summary of Findings 31
- Discussion 31
- Limitations and Research Implications 33
- Implications 35
- Conclusion 36

## REFERENCES
37
LIST OF TABLES

Table 1 – Bivariate Correlations for Overall Sample 24
Table 2 – Bivariate Correlations for Male subsample 25
Table 3 – Bivariate Correlations for Female subsample 26
Table 4 – Multi-group Fit Indices 29

LIST OF FIGURES

Figure 1 – Multi-Group Path Analysis for Generalized Anxiety 30
Figure 2 – Multi-Group Path Analysis for Depression 30
ABSTRACT

PEER VICTIMIZATION, SUPPORT FROM CLOSE FRIENDS, AND LATINO ADOLESCENTS’ MENTAL HEALTH

By

Paige L. Seegan

Master of Arts in Psychology,

General Experimental

Data were collected from a sample of 360 Latino high school students in their 9th and 10th grade classrooms from three high schools in Southern California. The purpose of the study was to examine: (a) the relationship between peer victimization and Latino adolescents’ mental health (i.e., anxiety and depression), (b) whether having support from a close friend moderates the relationship between peer victimization and mental health, and (c) whether close friend support moderates the relationship between peer victimization and mental health similarly for boys and girls. Consistent with previous literature, significant direct paths were found relating peer victimization to elevated generalized anxiety and depressive symptoms in both Latino boys and girls. Close friend support was not significantly related to mental health (i.e., anxiety, depression) and did not moderate the relationship between peer victimization and mental health. Lack of moderation was also seen when looking at gender, thus suggesting that victimized boys and girls are equally unprotected by close friend support.
CHAPTER I
INTRODUCTION

Statement of the Problem

During the course of adolescence, individuals enter a period of vulnerability that can put them at risk for negative mental health outcomes (Petersen, Leffert, Graham, Alwin, & Ding, 1997). Adolescents can often find it difficult to cope with the educational, emotional, and pubertal changes that occur during adolescence and are therefore more likely to adopt health-compromising behaviors (e.g., internalizing problems and externalizing problems; Card & Hodges, 2008). Latino adolescents may be especially vulnerable since they are more likely to live in disadvantaged neighborhoods and experience violence, which makes them more susceptible for negative mental health outcomes (Suárez-Orozco, Suárez-Orozco, & Todorova, 2008). Also, Latino boys are at high risk of experiencing violence and victimization; only African American boys are at higher risk (National Adolescent Health Information Center [NAHIC], 2007).

Adolescents who are victimized by their peers are put at an even higher risk of poor psychological development (Knopf, Park, & Paul Mulye, 2008; La Greca & Harrison, 2005). Research suggests that positive peer relationships during adolescence can reduce poor mental health outcomes (Rigby, 2000); however, little is known about the potential buffering effects that close friendships may have on adolescents’ mental health. And even less is known about this relationship in Latino families given that friendship research involving Latino adolescents is very scarce. Thus, it is important to expand research to examine how close friend support can possibly buffer the impact of peer victimization on Latino adolescents’ mental health.
Two indicators of mental health are depression and anxiety. Latino adolescents, especially Latinas, have the highest rates of depressive symptoms of all ethnic groups (Eaton et al., 2006; Substance Abuse and Mental Health Services Administration [SAMHSA], 2008). Depression and anxiety are often comorbid (Fava et al., 2000), thus it is expected that Latinos will be at-risk of anxiety as well as depression.

**Purpose**

The purpose of the present study was to examine: (a) the relationship between peer victimization and mental health (i.e., anxiety and depression) of Latino adolescents, (b) whether having support from a close friend moderates the relationship between peer victimization and Latino adolescents’ mental health, and (c) whether close friend support moderates the relationship between peer victimization and Latino adolescents’ mental health similarly for boys and girls. Besides adding to the scholarship on Latino youth, the results can potentially be used by school counselors, educators, practitioners, and parents interested in promoting positive mental health in Latino youth.

**Definitions**

1. Adolescence generally refers to the stage of development that begins with the onset of puberty and ends at maturity (*The American Heritage College Dictionary*, 3rd ed., 1997)

2. Latinos are a diverse mix of race, ethnicities, and cultures. The label of Hispanic or Latino refers to a rather large group of persons, over 22 million in population, with some shared characteristics (Marin & Marin, 1991). These mutual characteristics are based on a long history, over 500 years in length. These mutual characteristics consist of common language, colonizing history with Spain, and the views and
morals held by the Catholic Church (Marin & Marin, 1991). With over 20 Spanish-speaking, Latin American nations of origin, the resulting blend of cultures and ideologies brought about by migration, are the different and unique subgroups that make up the Latino population.

3. Anxiety, according to the Diagnostic and Statistical Manual of Mental Disorders (4th ed., text rev; DSM-IV-TR; American Psychiatric Association, 2000) can be defined as excessive worrying about a number of events or activities, subjective distress due to constant worrying, and/or difficulty controlling the worry.

4. Depression for the purpose of the present study is defined as sadness or depressed mood that continues for more than two weeks that interferes with daily functioning (DSM-IV-TR, 2000).

5. Peer is defined as a person belonging to the same societal group especially based on age, grade, or status (“http://www.merriam-webster.com/dictionary/peer,” 2011).

6. Peer victimization includes both overt (i.e., physical, verbal) and relational aggressive victimization by similar-age peers (Champion & Clay, 2007).

7. Close friend support refers to a support received from best friends. A close friendship is one that has of an overall positive quality and is stable over time (Bukowski, Hoza, & Boivin, 1994).

**Hypotheses**

Based on the review of literature in Chapter 2, the following research hypotheses were developed.

1. Peer victimization will be significantly and positively related to adolescents’ anxiety and depression.
2. Close friend support will be significantly and negatively related to adolescents’ anxiety and depression.

3. Close friend support will moderate the relationship between peer victimization and adolescents’ mental health (i.e., anxiety and depression).

4. Gender is a significant moderator of the relationships between peer victimization, close friend support, and mental health.

**Assumptions**

- Participants received no outside pressure from teachers or researchers to complete the self-report survey.
- The Latino participants were able to read and understand the English surveys given their current status as a student in a Los Angeles public high school.
- Participants answered the questions on the survey honestly.
- No errors occurred during data collection or entry given that the principal investigator had training and experience in both processes and that the research assistants were trained and supervised. Also, all coding and data entry were verified for accuracy.
- No errors occurred during data analyses since the principal investigator worked under the close supervision of a statistical consultant.
- It is assumed that the results are generalizable to other Latino youth in Southern California.
CHAPTER II
REVIEW OF LITERATURE

Adolescent Mental Health

The positive or negative mental health individuals experience during adolescence can have both immediate effects on adolescent well-being as well as long term effects on mental health during adulthood. For example, poor mental health during adolescence can increase the risk of later depressive disorders, anxiety disorders, and issues with substance abuse in adulthood (Trzesniewski et al., 2006). In addition to being at risk for developing poor mental health problems in adulthood, these adolescents are also at risk for developing increased physical health problems and criminal convictions as well as fewer economic prospects in adulthood. Although various indicators of mental health exist, two common and particularly harmful indicators are anxiety and depression, thus they will be the focus of this thesis.

Adolescent Anxiety

One indicator of poor mental health is general anxiety. According to the DSM-IV-TR (2000), generalized anxiety can be explained as excessive worrying about a number of events or activities, subjective distress due to constant worrying, and/or difficulty controlling the worry. In 1999, a report by the Surgeon General indicated that 13% of children ages 9-17 were diagnosed with having an anxiety disorder (U.S. Department of Health and Human Services, 1999). The National Institute of Mental Health reports a lifetime prevalence of anxiety disorder in which 31.9% of 13-18 year olds met DSM-IV-TR (2000) criteria for an anxiety disorder (Merikangas et al., 2010). Even more specifically, 2.2% of 13-18 year olds met DSM-IV-TR (2000) criteria for Generalized
Anxiety Disorder. Previous research shows that individuals who have anxiety disorders during adolescence are at an increased risk of developing later problems with substance abuse, suicidal behavior, academic achievement, and unplanned pregnancy (Woodward & Fergusson, 2001).

**Adolescent Depression**

Another indicator of poor mental health in adolescent youth is depression. Depression for the purpose of the present study is defined as sadness or depressed mood that continues for more than two weeks that interferes with daily functioning (DSM-IV-TR, 2000). According to research from a national comorbidity survey, a lifetime prevalence of mood disorders was 14.3% for adolescents 13 to 18 year of age (Merikangas et al., 2010). Depression can significantly impair the mental as well as physical well-being of individuals during adolescence. In a longitudinal study, researchers interviewed adolescents at the age of 15 and again at 20 years of age (Keenan-Miller, Constance, & Brennan, 2007). The results indicated that early adolescent depression was associated with increased medical visits and impairment in work functioning as a result of poor physical health. Also, research suggests that Latino adolescents are at a significantly higher risk of developing depressive symptoms when compared to other ethnic groups (Eaton et al., 2006; SAMHSA, 2008; Siegel, Aneshensel, Taub, Cantwell, & Driscoll, 1998).

**Gender Differences in Adolescent Mental Health**

Due to the cognitive, emotional, and physical changes that accompany adolescence, pubertal timing has been a factor of interest when studying adolescent mental health of boys and girls. According to Cyranowski, Frank, Young, and Shear
(2000), prepubescent boys and girls experience depression at similar rates. Starting at age 11, notable shifts in rates of depression between girls and boys start to appear and by age 15; that is, girls are twice as likely to report having experienced at least one major depression episode. Another study found significantly higher reports of depression and perceived stress in female adolescents compared to male adolescents who experience more substance abuse (Galaif, Sussman, Chou, & Wills, 2003).

Due to high comorbidity of depression and anxiety disorders, being at risk for developing depression also puts girls at a higher risk than boys to develop some type of anxiety disorder during adolescence (Lewinsohn, Rohde, & Seeley, 1995; Nolen-Hoeksema & Girgus, 1994). Sex differences in internalizing psychopathology can be explained in part by the interaction between cognitive vulnerabilities and stressors that act as risk mechanisms (Hankin, 2009). For example, when sex differences in internalizing symptoms were examined in a sample of multi-ethnic 6th-10th graders, girls who endorsed cognitive vulnerabilities such as a negative cognitive style and increased use of rumination also reported higher levels of depressive symptoms than boys (Hankin, 2009).

**Latino Adolescents’ Mental Health**

Since 2000, the population of Latinos in the U.S. has increased by 43%, which in 2010 made up 16% of the total U.S. population (U.S. Census, 2010). In 2010, approximately 35% of the Latino population was comprised of individuals under the age of 18 with roughly 17% ranging from 10-19 years of age. Given the large percentage of Latino youth residing in the U.S. and the mental health problems that arise during adolescent years, more research is necessary to investigate factors specifically impacting
Latino adolescent mental health. Previous research suggests that Latino adolescents are at a significantly higher risk of developing depressive symptoms when compared to other ethnic groups (Eaton et al., 2006; SAMHSA, 2008; Siegel et al., 1998). Even after controlling for social class (e.g., income, parents’ education level), Latino adolescents reported higher amounts of depression than African American, Asian American, and White adolescents (Siegel et al., 1998). Previous mental health research focusing on ethnic minorities indicated that Latino adolescents were more likely to be diagnosed as having some form of adjustment, anxiety, and/or psychotic disorder than non-Hispanic white peers (Yeh et al., 2002).

The large prevalence of depression among Latino youth has opened the doors for increased rates of suicide (Flores & Zambrana, 2001). According to 2010 U.S. Census data, 58.5% of Latinos in the U.S. report being of Mexican origin, therefore, research conducted in the U.S. should still note the abundance of research suggesting high prevalence of suicide ideation across Mexican American youth (Roberts & Chen, 1995; Tortolero & Roberts, 2001; U.S. Census, 2010). In research that has explored racial/ethnic differences in adolescent internalizing symptoms, findings suggested that Latina girls reported significantly higher rates of depressive symptoms than Latino boys and both boys and girls of different ethnic backgrounds (McLaughlin, Hilt, & Nolen-Hoeksema, 2007). In addition to increased rates of depression, elevated levels of global and physical anxiety symptoms were also reported by Latino adolescents, especially in female Latina youth, when compared to White, African American, Asian/Pacific Islander, Native American, Middle Eastern, and multiracial adolescents (McLaughlin et al., 2007).
Peers and Adolescent Mental Health

As adolescents continue to develop, they transition out of relying on family as a primary support group, and peer relationships become increasingly important (Furman & Buhrmester, 1992; Larson & Richards, 1991). In a review of literature, Prinstein, Rancourt, Guerry, and Browne (2009) noted the consistency of results indicating that children were more likely to demonstrate externalizing symptoms later in life if they were disliked by their childhood peers. The review also explores peer relationships related to internalizing disorders. The review of research supported the notion that peer rejection during adolescent transitional years is associated with increased reports of loneliness. Although loneliness is not directly related to depression or anxiety, feelings of loneliness can put an adolescent at risk for developing a depressogenic attributional style, which can lead to the development of mood disorders and potential suicidality (DSM-IV-TR, 2000). Loneliness can also place adolescents at risk for becoming socially withdrawn, which can then put them at risk for developing low self-worth and anxiety (Prinstein et al., 2009).

In recent years, this increase in time spent with peers during adolescence has led researchers to become progressively more interested in how peer relationships, specifically friendships, influence adolescent psychological adjustment. Research has shown that adolescent friendships relate to adolescent mental health in both positive and negative ways. According to Berndt and Murphy (2002), the behaviors as well as the thoughts and feelings of peers are the driving forces of how peers influence one another. Research looking at adolescents with deviant versus non-deviant friends found that adolescents with deviant friends reported more norm-breaking behavior as well as higher levels of depression than did youth with non-deviant friends. The results were the same
when looking at youth with deviant friends as well as youth with no friends. Adolescents with no friends and adolescents with deviant friends reported similar levels of delinquency, and both reported experiencing higher levels of depression than youth with non-deviant friends (Brendgen, Vitaro, & Bukowski, 2000). Therefore, research suggests that friends are important factors in adolescent adjustment, but how they influence youth depends on the type of friendship.

In a sample of fifth-grade students, high friendship quality predicted significantly lower reports of internalizing problems for both boys and girls as well as moderated the effects of low maternal support on girls’ internalizing problems (Rubin et al., 2004). Research exploring the importance of close friendships in affecting adolescent mental health found that fewer positive and more negative qualities in adolescent friendships added to the prediction of social anxiety, while higher levels of negative qualities significantly added to the prediction of depressive symptoms (La Greca & Harrison, 2005).

**Peer Victimization**

Many children and adolescents will experience some form of peer victimization during their adolescent development. A national study exploring the rates of peer victimization across adolescence found that approximately 28% of youth (ranging in age from 12-18 years) reported being bullied at school (National Center for Education Statistics [NCES], 2009). According to Card and Hodges (2008) peer victimization can lead to social and emotional maladjustment, diminishing self-concept, and increasing internalizing and externalizing problems. A meta-analytic review of victimization literature strongly suggests that youth who are victimized by peers, experience higher
reports of depression, loneliness, and anxiety and lower reports of general self-esteem and social self-concept than non-victimized youth (Hawker & Boulton, 2000).

Peer victimization is often assessed by (1) using a single measure representing a combination of self-reported overt (e.g., physical and or verbal) and relationally aggressive victimization by similar-age peers (Champion & Clay, 2007) or (2) as separate measures looking specifically at overt peer victimization or relational peer victimization. Overt victimization is often characterized as peers trying to harm others through the use of physical means (e.g., hitting, kicking) or threats to physical well-being (e.g., verbal threats). Relational victimization refers to aggressive behaviors by peers that aim to harm others through deliberate manipulation of the relationship or friendship (e.g., gossiping, rejection, social exclusion) (Crick & Grotpeter, 1995; Prinstein, Boergers, & Vernberg, 2001).

A review of literature highlighting peer victimization / bullying during childhood and adolescence indicates that individuals who are victimized by their peers report increased levels of social isolation, depression, anxiety, and self-harm behaviors (Arseneault, Bowes, & Shakoor, 2010). Hawker and Boulton (2000) conducted a meta-analysis of victimization-adjustment literature and found that in cross-sectional peer victimization studies, adolescents who were victims of peer victimization reported lower self-esteem than non-victimized youth. Decreased self-esteem due to victimization often accompanies decreased social self-concept and global self-worth (Hawker & Boulton, 2000; Prinstein et al., 2001). The lack of positive regard for oneself puts an individual at a higher risk for developing negative coping strategies, eventually resulting in internalizing and externalizing behaviors. Severe mental health outcomes due to
childhood peer victimization include increased rates of suicidal ideations and psychotic symptoms (e.g., delusions, auditory and visual hallucinations) (Arseneault et al., 2010).

Aversive peer experiences such as relational and overt forms of peer victimization have been substantially and significantly related to adolescent depressive and social anxiety symptoms (La Greca & Harrison, 2005). By middle adolescence, boys and girls report high levels of relational victimization as opposed to more overt victimization. Experiencing relational forms of peer victimization during adolescence has shown to be significantly related to increased levels of loneliness and depression and decreased global self-worth in both boys and girls (Prinstein et al., 2001). Overt victimization has been specifically associated with increased levels of depression in boys more so than girls (Prinstein et al., 2001). When controlling for negative aspects of adolescents’ close friendships, relational victimization still significantly predicts increases in adolescents’ reports of social anxiety, whereas overt victimization predicts increases in both reports of depression and social anxiety (La Greca & Harrison, 2005). Research using a younger sample consisting of 4th and 5th graders used hierarchical regression analyses to identify the unique contribution of relational victimization in predicting social-psychological adjustment (Crick & Bigbee, 1998). Results showed that when controlling for overt aggression, overt victimization, and relational aggression, relational victimization uniquely predicted significantly more self-restraint problems in girls and significantly more loneliness, social avoidance, and emotional distress in boys. Gender differences are often found in peer victimization research in which adolescent girls experience higher rates of mental and physical health problems than boys (Biebl, DiLalla, Davis, Lynch, & Shinn, 2011; Crick & Bigbee, 1998; La Greca & Harrison, 2005). Elevated internalizing
problems in peer victimized females are found across different ethnic samples, including predominantly Latino adolescent samples (McLaughlin et al., 2007).

Although the current study does not include peer nominations of students with reputations as victims, it is important to note that research suggests that adolescents who are viewed as victims by their peers endorse negative self-views which contributes to lowered self-esteem and higher reports of being socially isolated, anxious, and depressed (Graham, Bellmore, & Mize, 2006). In general, while victims are characterized as having higher rates of general and social anxiety accompanied by lowered global and social self-esteem, they are more so described by feelings of loneliness and depression (Hawker & Boulton, 2000). A great deal of literature examining the effects of peer victimization on adolescent psychosocial development investigates levels of victims’ social anxiety. In reviewing previous research, victimization was less strongly related to social anxiety than to generalized anxiety (Hawker & Boulton, 2000). Therefore, the present study added to peer victimization literature by investigating how peer victimization predicts generalized anxiety in an adolescent population.

Studies questioning the directionality of the relationship between negative peer experiences and adolescent mental health problems have turned to longitudinal research to see whether a reciprocally causal relationship exists. Vernberg, Abwender, Ewell, and Beery (1992) found that peer rejection experiences significantly predicted increased levels of social anxiety; however, increased levels of social anxiety did not put those anxious adolescents at risk for experiencing future peer rejection events. Longitudinal studies tracking the prevalence of victimization and symptoms of anxiety and depression found a unidirectional relationship in which a history of peer victimization significantly
predicted higher rates of internalizing symptoms (Bond, Carlin, Thomas, Rubin, & Patton, 2001; Hodges & Peery, 1999). Therefore, the current study looked at how peer victimization predicts internalizing symptoms (i.e., generalized anxiety and depression).

Research exploring the effects of peer victimization on adolescents across multiple ethnicities, specifically Latinos, is sparse. Of the literature that does look at differences in the prevalence of peer victimization in Latino samples, the findings are inconsistent. For example, Juvonen, Graham, and Schuster (2003) found Latinos to be the least victimized group in their multiethnic sample of southern Californian 6th graders; however, Nansel et al. (2001) found Latinos to be more victimized than African American adolescents, but not White adolescents in a national sample of 6th to 10th graders. Despite the inconsistencies in prevalence of peer victimization across Latino youth, it is still apparent that when Latino adolescents are victimized they are put at risk for developing negative internalizing and externalizing symptoms and behaviors (La Greca & Harrison, 2005; Nishina et al., 2005). Given Latino adolescents’ elevated risk of developing depressive or anxious symptoms, further research examining the effects of peer victimization on Latino youth is warranted.

Close Friend Support

There is a wealth of previous research devoted to examining the role of social support during adolescent adjustment. Social support can include support from many different outlets; however, some of the most common forms of support used in research include support from both parents and peers. Social support has been associated with promoting the use of more adaptive coping strategies, and it has also been directly associated with psychological adjustment (Crean, 2004). Individuals entering into
adolescence begin to transition away from the support they receive from their parents and start to rely more on support from peer relationships (Furman & Buhrmester, 1992; Larson & Richards, 1991; Helsen, Vollebergh, & Meeus, 2000). Since the current study’s focus is on adolescents, it is important to look at the forms of social support that are likely to be most influential during this developmental period. Thus, literature focusing on support from friends will be discussed. Furthermore, much of the literature examining close friendships focuses on negative behaviors (e.g., delinquency, substance use) or how close friendships impact academic variables. The present study will focus on how social support from an adolescent’s close friend(s) acts as a potential protective factor against continued victimization by peers.

Friendships during adolescent years have been found to support healthy psychological adjustment, buffer individuals from stress, and increase problem solving capabilities (Hartup 1996). According to Hartup (1989, 1992), friendships serve as the central relationships for individuals during early adolescence. Friendships are able to provide adolescents with a context for learning social skills as well as provide an individual with a source of knowledge about one’s self and others. Friendships better equip individuals to handle everyday problem solving and allow for a greater understanding of relationships with significant others (Hartup, 1992).

According to several researchers, the influence of a friendship depends on the closeness and stability of the friendship (Hardy, Bukowski, & Sippola, 2002). There exists a general belief that friendships of longer duration have a greater level of intimacy and trust; where the more stable the friendship is, the higher it is rated in terms of quality (Furman, 1996). The increase in overall time spent with friends may increase friendship
quality by increasing the intimacy and support within the friendship, ultimately
reinforcing friendship stability (Chan & Poulin, 2007). Consequently, friendships with
higher ratings of closeness and overall quality are the most likely to remain stable over
time (Bukowski et al., 1994). When friendships gain stability, each person within the
friendship often feels at ease disclosing personal thoughts and emotions. An increase in
self-disclosure within a friendship promotes healthy relationship development throughout
early adolescence (Buhrmester, 1990). This notion suggests that close, stable friendships
can be especially influential during adolescent development.

The effects of friendship quality on adolescent mental health are shown in studies
finding increased levels of social anxiety when friendship quality, specifically level of
friendship intimacy, is low (Vernberg et al., 1992). When friendships are high in positive
quality, adolescents are likely to show lower levels of loneliness (Parker & Asher, 1993)
and higher levels of self-esteem (Berndt & Keefe, 1995). In children, friendships of
higher quality (e.g., companionship, validation and caring, help and guidance) were
found to have higher levels of self-esteem and perceptions of social competence, but
lower levels of internalizing problems (Rubin et al., 2004).

When close friendship support is placed in the context of peer victimization, the
positive impact of having such support becomes apparent. Studies have shown that
having a best friend helps decrease the likelihood of being victimized by peers, regardless
of whether or not they have behavioral problems (Storch, Brassard & Masia-Warner,
2003; Hodges, Boivin, Vitaro, & Bukowski, 1999). Boulton, Trueman, Chau, Whitehead,
and Amatya (1999) found that early adolescents from the U.K. who lacked a reciprocated
best friend showed significantly higher peer reports of victimization. Adolescents with a
reciprocated best friend showed a decrease in peer reports of victimization. Also, lower incidences of friendship conflict and betrayal also predicted lower reports of peer victimization. These findings suggest that having a reciprocated best friend is important, and that the quality of that friendship can also be influential in decreasing peer victimization experiences. The protective nature of friendship quality against peer victimization is best seen when the quality of the friendship is high in companionship, help, closeness, security, and low conflict (Bollmer, Milich, Harris, & Maras, 2005). Research has shown that when early adolescents have such high quality friendships, they are less likely to be targets of peer victimization (Bollmer et al., 2005).

In addition to looking at friend support measures as predictors, these variables have also been shown to act as moderators between peer victimization and associated negative mental health problems. When exploring friendship as a moderator, research has found that prosocial support from peers significantly moderated the relationship between overt and relational peer victimization and loneliness (Hodges et al., 1999; Storch et al., 2003). In an extensive literature review, multiple studies found close friendship support to moderate the relationship between peer victimization and internalizing problems (e.g., depression and social anxiety) (Epkins & Heckler, 2011). When support from close friends does act as a moderator, gender differences have also been represented. Schmidt and Bagwell (2007) looked at the protective role of friendships in overtly and relationally victimized boys and girls. They found that when close friend support moderated the relationship between relational and overt peer victimization and internalizing problems, it did so only for girls.

One issue in past peer relations research is that it has most often collected data
from urban school contexts in which multi-ethnic samples are used. Graham, Taylor, and Ho (2009) found that in 20 years of peer relations research (1986-2006), only 7% of the research addressed variables of race and ethnicity. Of the studies that do look at ethnicity within the realm of peer victimization, similar results to those found in predominately White samples have been found in Latino youth. For example, a study with a sample of 5th and 6th grade, predominately Latino children showed that prosocial peer support (e.g., “helps others,” “cheers others up,” and “does nice things for others”) moderated the relationship between relational victimization and loneliness, in that low peer support was significantly associated with higher rates of loneliness (Storch, Nock, Masia-Warner, & Barlas, 2003).

Cultural differences as well as differences in upbringing can alter how diverse adolescents cope with daily stressors. Given the links between friendship closeness and friendship stability and how those friendship factors influence adolescent adjustment, it is important to expand this research to examine how close friendships specifically impact the mental health of adolescents, especially within underrepresented populations (e.g., Latinos).
CHAPTER III

METHODOLOGY

Procedures

Data were collected from 360 Latino high school students in their ninth and tenth grade classrooms from three high schools across Los Angeles, California. The principal investigator worked with school officials to solicit permission from the school administration to collect data. Signed authorization from school officials was obtained. A summary of data collection procedures was sent to principals of the participating schools, and the principal investigator met with school counselors and teachers to explain the data collection procedures. Students had the opportunity to participate in the data collection once teacher authorization was confirmed. Prior to any collection of data, consent and assent forms approved by CSUN’s Standing Advisory Committee for the Protection of Human Subjects (SACPHS) were distributed to a parent/legal guardian of the students and to the students themselves. Parental consent forms were distributed to the students during their advisory class approximately two weeks before data collection. Consent forms were available in Spanish and English. Signed parental consent was required before students could participate in the study.

Prior to going to the schools to collect data, undergraduate and graduate student research assistants were trained by the project investigator. All research assistants were required to attend the data collection training before being allowed to assist in the collection process. The student researcher assistants returned to each advisory class one week before data collection to collect completed parental consent forms as well as distribute extra consent forms to students. On the day of data collection, any remaining
parental consent forms were collected, and researchers at the school site distributed the adolescent assent forms and self-report surveys only to the students who had completed parental consent forms on file. After signing the assent form, the participants were instructed to tear the assent form off and pass it to the researchers. Participants were then asked to complete a self-report, paper-pencil survey. The students who do not return signed parental consent forms or who did not wish to participate were provided an alternative educational activity which consisted of a college themed crossword puzzle. Participating students were also provided the alternative educational activity once data collection was completed. After the completed surveys were collected, a brief explanation of the research project was given to the participants. The participants were also invited to ask questions about the research project.

Data collection took place only one time during each advisory class period for ninth and tenth grade classrooms. Surveys took approximately 35-45 minutes to complete. Data were collected, coded, entered, and verified for accuracy by trained undergraduate and graduate researcher assistants. Prior to assisting with the project, all researcher assistants were required to complete the online certification for protection of human subjects given by the National Institutes of Health (phrp.nihtraining.com).

To ensure participant confidentiality the completed self-report surveys were secured in a file cabinet in a locked research lab. No identifying information (except the 3-digit identification number) was located on the self-report surveys or in the data file. All consent and assent forms were kept in a locked file cabinet in a faculty member’s office.
Sample

Data were collected from 360 Latino adolescents (42.8% boys, 57.2% girls) with ages ranging from 14-19 years ($M = 14.7, SD = .74$). Participants were surveyed in 9th and 10th grade classrooms from three high schools in low-income areas across Los Angeles, CA. The participating high schools are classified as college-ready public high schools, which are part of an independent non-profit charter management organization. Generational status was collected from each student in which 18.3% were 1st generation (foreign born youth and parents), 73.6% were 2nd generation (native born youth with at least one foreign born parent), 3.1% were 3rd generation (native born youth and native born parents), and 5% missing. The majority of participants were born in the United States (80.6%) with the remaining participants born in 7 other countries (i.e., Mexico, Belize, El Salvador, Guatemala, Peru, Puerto Rico, and Spain). Mothers of participants were primarily born in Mexico (52.5%), El Salvador (20.8%), Guatemala (9.2%), and the United States (7.5%) with the remaining 5.3% of mothers born in 7 other countries (less than 2% each). Similarly, fathers of participants were primarily born in Mexico (54.2%), El Salvador (17.8%), Guatemala (6.9%), and the United States (5.3%) with the remaining 6.9% of fathers born in 9 other countries (less than 2% each). Most of the participants (67%) resided in two-parent intact families, with the remaining coming from single mother families (15.5%), stepfather families (9.6%), and other family forms (7.8%).

Measurement

Standard fact sheet items were used to measure variables such as gender, age, and ethnicity. The remaining variables were measured using reliable and valid measures from previous studies as well as newly created measures (as outlined below).
Peer Victimization

A 9-item modified version of the Bullying Scale was used to measure peer victimization (Champion & Clay, 2007). Modification of the scale included the addition of an item representing how often an adolescent had been the victim of gossip. Each item followed after the stem phrase “During the last 6 months another kid…”. Sample items included: “called me mean names to hurt my feelings” and “hit or kicked to hurt me.” Response choices consisted of the following: 0 = never, 1 = once or twice, 2 = sometimes, 3 = once a week, 4 = more than once per week. Responses were averaged across items with higher scores indicating more frequent victimization. A previous Cronbach's alpha of .87 was found using a predominately white sample of 506 middle school students (Champion & Clay, 2007). A Cronbach’s alpha of .89 was found using data from the current sample.

Close Friend Support

A 10-item scale was created to measure adolescent close friend support. The response choices follow: 1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree. The scale included a prompt, “I have close friends who…,” which was then followed by 10 items: “I like to ‘hang out’ with,” “Care about me,” “I can get advice from,” “Make me feel important,” “Are always there for me,” “Really listen to what I say,” “Can cheer me up when I am down,” “Really know me,” “I can count on for help,” and “Support me.” The scores for each item were averaged to create a scale score. A Cronbach's alpha of .95 and a simple factor structure were found using the current study’s data.
**Generalized Anxiety**

The 7-item Generalized Anxiety Disorder (GAD-7) was used to assess adolescents’ generalized anxiety (Spitzer, Kroenke, Williams, & Löwe, 2006). A sample item follows: “Worrying too much about different things.” The response choices follow: 1 = not at all, 2 = several days, 3 = more than half the days, and 4 = nearly every day. The scores for each item were averaged to create a scale score. A previous Cronbach’s alpha of .92 was found using a sample of predominately white non-Hispanic, female adults ranging in age from 18-95 years (Spitzer et al., 2006). A Cronbach’s alpha of .92 and a simple factor structure were found using the current study’s data.

**Depression**

Adolescent depression was assessed using a 10-item short-version (Kohout, Berkman, Evans, & Cornoni-Huntley, 1993) of the Center for Epidemiologic Study's Inventory for depressed mood (CES-D; Radloff, 1977). Adolescents were asked to report how often they have felt a certain way during the past seven days (e.g., “I felt that people disliked me”, “I felt sad”). Response choices follow: 0 = rarely or none of the time (less than 1 day), 1 = some of the time (1-2 days), 2 = occasionally (3-4 days), and 3 = mostly or almost all the time (5-7 days). A Cronbach’s alpha of .91 was found for the long version of the CES-D in previous research using Latino adolescents (Umaña-Taylor & Updegraff, 2007) and a Cronbach’s alpha of .93 in research using Mexican-origin adolescents (Roberts & Chen, 1995). Simple factor structure and strong reliability of the short version CES-D has been shown in research with Mexican American migrant and immigrant adults (Grzywacz, Hovey, Seligman, Arcury, & Quandt, 2006). A Cronbach’s alpha of .84 was found using data from the current sample.
CHAPTER IV

RESULTS

The means and standard deviations for all variables using the entire sample of Latino adolescents are reported in Table 1. Descriptive analyses were conducted using SPSS 18.0 for Windows. Multiple group path analysis using structural equation modeling was conducted using EQS version 6.1 for Windows.

Zero-Order Correlations

Zero-order correlations (i.e., Pearson correlations) were conducted to examine the strength and direction of the bivariate relationships between each independent and dependent variable. Also, separate correlations were conducted for Latino boys and girls. The means, standard deviations, and correlations for the overall sample and separated by gender are presented in Table 1 (total sample), Table 2 (boy sample), and Table 3 (girl sample).

Zero-Order Correlations for the Total Sample

The correlations indicated that peer victimization was significantly and positively correlated with Latino adolescents’ generalized anxiety and depression (see Table 1).

Table 1
Summary of Zero-Order Correlational Analyses on Latino Adolescents’ Reports of Peer Victimization, Close Friendship Support, Gender, Anxiety, and Depression (N = 360)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Peer Victimization</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Close Friend Support</td>
<td>-.08</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Gender (boys = 0, girls = 1)</td>
<td>.01</td>
<td>.16**</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Generalized Anxiety</td>
<td>.38**</td>
<td>.02</td>
<td>.12*</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>5. Depression</td>
<td>.51**</td>
<td>-.09</td>
<td>.17**</td>
<td>.68**</td>
<td>1.00</td>
</tr>
<tr>
<td>M</td>
<td>1.39</td>
<td>3.48</td>
<td>.57</td>
<td>.78</td>
<td>.78</td>
</tr>
<tr>
<td>SD</td>
<td>.63</td>
<td>.55</td>
<td>.50</td>
<td>.79</td>
<td>.60</td>
</tr>
</tbody>
</table>

*p < .05; **p < .01
No significant correlation was found between peer victimization and close friendship support or gender. Close friendship support and adolescents’ generalized anxiety and depression were also not significantly related. Gender was significantly related to close friend support, generalized anxiety, and depression with girls reporting higher levels of close friendship support, generalized anxiety, and depression than boys.

**Zero-Order Correlations for the Latino Boy Data**

As hypothesized, peer victimization was significantly and positively correlated with adolescents’ generalized anxiety and depression (see Table 2). This finding indicates that Latino boys who are victimized by their peers report significantly higher levels of generalized anxiety and depression than adolescents who are not victimized. A significant negative correlation was found between peer victimization and close friendship support, suggesting that as close friendship support increases, rates of peer victimization decrease. No significant correlations were found relating close friendship support to Latino adolescent boys’ generalized anxiety and depression.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Peer Victimization</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Close Friend Support</td>
<td>-.21*</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Generalized Anxiety</td>
<td>.41**</td>
<td>-.11</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>4. Depression</td>
<td>.51**</td>
<td>-.15</td>
<td>.67**</td>
<td>1.00</td>
</tr>
<tr>
<td>( M )</td>
<td>1.39</td>
<td>3.38</td>
<td>.68</td>
<td>.66</td>
</tr>
<tr>
<td>( SD )</td>
<td>.67</td>
<td>.58</td>
<td>.73</td>
<td>.56</td>
</tr>
</tbody>
</table>

*p < .05; **p < .01

**Zero-Order Correlations for the Latino Girl Data**

As hypothesized, peer victimization was significantly and positively correlated with girls’ generalized anxiety and depression (see Table 3). This finding indicates that
Latina adolescents who are victimized by their peers report significantly higher levels of generalized anxiety and depression than adolescents who are not victimized. No significant correlation was found between peer victimization and close friendship support or between close friendship support and girls’ generalized anxiety and depression.

Table 3
Summary of Zero-Order Correlational Analysis on Latino Female Adolescents’ Reports of Peer Victimization, Close Friendship Support, Anxiety, and Depression (N = 206)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Peer Victimization</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Close Friend Support</td>
<td>.03</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Generalized Anxiety</td>
<td>.37**</td>
<td>.07</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>4. Depression</td>
<td>.52**</td>
<td>-.01</td>
<td>.68**</td>
<td>1.00</td>
</tr>
<tr>
<td><em>M</em></td>
<td>1.40</td>
<td>3.55</td>
<td>.86</td>
<td>.87</td>
</tr>
<tr>
<td><em>SD</em></td>
<td>.59</td>
<td>.52</td>
<td>.83</td>
<td>.62</td>
</tr>
</tbody>
</table>

*p < .05; **p < .01

Path Analysis Using Structural Equation Modeling

A multiple group path analysis was conducted using structural equation modeling (SEM) to determine (1) the relationship between the predictor variable (i.e., peer victimization) and two different outcome variables (i.e., anxiety and depression) and (2) the potential moderation effects using three-way interactions including the predictor and two separate moderators (i.e., gender and close friendship support). Separate models for each gender were constructed to represent the relationship between peer victimization and adolescent generalized anxiety and depression separately with close friend support acting as a moderating variable.

Data screening was conducted to examine normality of distributions, potential multivariate outliers, and missing data. Skewness of the predictors, moderators, and outcome variables were in the expected directions, therefore no data were removed from the data set. Multivariate outliers were not removed to ensure an honest sample was used.
in interpretation of the results. Little’s MCAR test verified that missing values across the predictor, moderator, and outcome variables were missing at random, thus the estimation maximization method in SPSS 18.0 was used to impute missing values.

To examine the moderating effect of close friendship support, the sample was divided into boys and girls and within each subsample, two separate models were created to test the relationship between peer victimization and each outcome variable (i.e., generalized anxiety and depression). The predictor and moderator variables were centered to adjust for differences in mean distributions. The $\chi^2$ probability statistic, the Comparative Fit Index (CFI; Bentler 1988), and the Root Mean Square Error of Approximation (RMSEA; Browne & Cudeck, 1993) were used to assess model fit. Good model fit was indicated by $\chi^2$ probability statistic less than .05, CFI values greater than .95, and RMSEA values less than .10 (Browne & Cudeck, 1993; Hu & Bentler, 1999).

**Multi-group Moderated Moderation Analyses**

Separate direct paths predicting generalized anxiety and depression from peer victimization were found to be significant for boys ($\beta = .382, p < .05$; depression: $\beta = .427, p < .05$) and girls (anxiety: $\beta = .383, p < .05$; depression: $\beta = .562, p < .05$). Contrary to the original hypotheses, close friend support and the interaction between peer victimization and close friend support were not found to be significant for the boy and girl samples. Although close friend support did not significantly moderate the relationship between peer victimization and adolescent anxiety and depression, multiple group analysis using SEM was conducted to test whether the final model held equally well for boys and girls. Separate covariance matrices were modeled simultaneously for both boys ($N = 154$) and girls ($N = 206$) for anxiety and then again separately for
depression. During each multiple group analysis, parameter estimates, error variances and covariances were constrained to be equal across boys and girls. The Lagrange Multiplier (LM) test for releasing constraints was added into the analysis to assess how releasing constrained paths may improve model fit.

Final fit indices for the first multiple group model assessing the direct effect of peer victimization and the 3-way interaction (i.e., gender X close friend support X peer victimization) on adolescent generalized anxiety suggested that the final model fit the data similarly for both male and female adolescents, $\chi^2(6) = 10.14$, $p > .05$, CFI = .962, RMSEA = .062 (See Table 4, Figure 1). In order to increase goodness of fit, all covariances as well as the variance for the interaction term were unconstrained, allowing those paths to vary across gender. Additional evidence highlighting the lack of moderated moderation was seen in the unstandardized regression equations in which the unstandardized regression coefficients for close friend support and the interaction between peer victimization and close friend support were exactly the same for both boys and girls.

Final fit indices for the second multiple group model assessing the direct effect of peer victimization and the 3-way interaction (i.e., gender X close friend support X peer victimization) on adolescent depression also suggested that the final model fit the data similarly for boys and girls, $\chi^2(5) = 8.917$, $p > .05$, CFI = .976, RMSEA = .066 (See Table 4, Figure 2). Using the LM test for releasing constraints, all covariances, the variance for the interaction term, and the path from peer victimization to depression were unconstrained to improve overall model fit (See Figure 2). As previously seen in the model predicting generalized anxiety, the same unstandardized regression coefficients for
close friend support and the interaction between peer victimization and close friend support were found in both boys and girls. As previously mentioned, the significant direct path from peer victimization to depression was unconstrained, therefore the results suggest that across peer victimization, females reported significantly higher levels of depression than males.

Table 4

*Fit Indices and $\chi^2$ Difference Tests for Constraints in the Multi-group Model*

<table>
<thead>
<tr>
<th>Constraints between Boys and Girls</th>
<th>$\chi^2$</th>
<th>$p$ probability</th>
<th>df</th>
<th>$\chi^2$ difference</th>
<th>CFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Study 1: Generalized Anxiety</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 1</td>
<td>176.44</td>
<td>&lt; .001</td>
<td>10</td>
<td></td>
<td>.000</td>
<td>.305</td>
</tr>
<tr>
<td>Model 2 Correlation between PV and PV*CFS</td>
<td>159.11</td>
<td>&lt; .001</td>
<td>9</td>
<td>17.33</td>
<td>.000</td>
<td>.305</td>
</tr>
<tr>
<td>Model 3 Correlation between CFS and PV*CFS</td>
<td>158.19</td>
<td>&lt; .001</td>
<td>8</td>
<td>.92</td>
<td>.000</td>
<td>.324</td>
</tr>
<tr>
<td>Model 4 Correlation between PV and CFS</td>
<td>154.09</td>
<td>&lt; .001</td>
<td>7</td>
<td>4.10</td>
<td>.000</td>
<td>.343</td>
</tr>
<tr>
<td>Model 5 PV*CFS Variance</td>
<td>10.14</td>
<td>&gt; .05</td>
<td>6</td>
<td>143.95</td>
<td>.962</td>
<td>.062</td>
</tr>
<tr>
<td><strong>Study 2: Depression</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model 1</td>
<td>178.22</td>
<td>&lt; .001</td>
<td>10</td>
<td></td>
<td>.000</td>
<td>.307</td>
</tr>
<tr>
<td>Model 2 Correlation between PV and PV*CFS</td>
<td>160.90</td>
<td>&lt; .001</td>
<td>9</td>
<td>17.32</td>
<td>.086</td>
<td>.307</td>
</tr>
<tr>
<td>Model 3 Correlation between CFS and PV*CFS</td>
<td>159.97</td>
<td>&lt; .001</td>
<td>8</td>
<td>.93</td>
<td>.086</td>
<td>.326</td>
</tr>
<tr>
<td>Model 4 Correlation between PV and CFS</td>
<td>155.88</td>
<td>&lt; .001</td>
<td>7</td>
<td>4.09</td>
<td>.104</td>
<td>.345</td>
</tr>
<tr>
<td>Model 5 PV*CFS Variance</td>
<td>11.92</td>
<td>&gt; .05</td>
<td>6</td>
<td>143.96</td>
<td>.964</td>
<td>.074</td>
</tr>
<tr>
<td>Model 6 Path from PV to Depression</td>
<td>8.92</td>
<td>&gt; .05</td>
<td>5</td>
<td>3.00</td>
<td>.976</td>
<td>.066</td>
</tr>
</tbody>
</table>
Figure 1. Multi-group path analysis for generalized anxiety, ( ) = female

Figure 2. Multi-group path analysis for depression, ( ) = female
CHAPTER V
DISCUSSION

Summary of Findings

The main goals of this study were (1) to examine how peer victimization relates to Latino adolescents’ generalized anxiety and depression, (2) to see whether close friend support helps protect Latino youth against the harmful side effects of being victimized by peers, and (3) to see if close friend support protects victimized boys and girls in similar ways. The current study found that peer victimization significantly predicted increased levels of generalized anxiety and depressive symptoms in both male and female Latino adolescents. No main effect for close friend support was found, indicating that close friend support alone did not relate to differences in generalized anxiety or depression for Latino boys and girls. Close friend support did not moderate the relationship between peer victimization and anxiety or depressive symptoms, thus having support from a close friend did not protect adolescents from experiencing heightened levels of anxiety and depressive symptoms. Gender as a second moderator did not display any significance, therefore boys and girls who were victimized by peers were equally unprotected by close friend support.

Discussion

Consistent with previous research (Arseneault et al., 2010; Hawker & Boulton, 2000; La Greca & Harrison, 2005; Nishina et al., 2005), significant direct paths were found between peer victimization and both anxiety and depression in Latino adolescent boys and girls. Thus, girls and boys who are peer victimized are at a higher risk for experiencing generalized anxiety and depression during adolescence. Increased
internalizing symptoms could be because being victimized by one’s peers makes it more
difficult to “fit in” with peers, thus causing the victimized adolescent to have low feelings
of self-worth and increased feelings of loneliness (Hawker & Boulton, 2000). Lowered
self-concept and self-esteem as a result of peer victimization give way to problems in
other aspects of life such as academic and physical health problems, which could also
contribute to the onset of internalizing problems (Storch & Ledley, 2005).

Also consistent with past research, Latina girls reported higher rates of anxiety
and depression than Latino boys (McLaughlin et al., 2007). A possible explanation is that
Latina girls experience more cognitive vulnerabilities, thus placing them at a higher risk
for developing internalizing symptoms when having to deal with stressful life events
(e.g., peer victimization) (Hankin, 2009).

Close friend support was chosen as a potential moderator given the previous
literature documenting the protective nature of prosocial friendships in decreasing
internalizing and externalizing problems due to peer victimization (Hodges et al., 1999;
Storch et al., 2003). In this study, Latino adolescents reported fairly high close friend
support (see mean scores in Tables 1-3). Yet, the current study did not find close friend
support to be significantly related to anxiety or depression. Also, close friend support did
not function as a moderating variable, suggesting that even when a victimized Latino
adolescent has support from close friends, he/she is still at-risk for experiencing negative
mental health outcomes. The lack of protection provided by close friend support was the
same for boys and girls. One explanation is that support from close friends may not be a
protective factor for Latino adolescents’ mental health. It is possible that the mental
health of Latino youth may be impacted more by support from their parents and overall
family than close friends. Latinos often place a cultural emphasis a strong sense of family orientation and closeness among nuclear and extended family members (i.e., familism; Lugo Steidel & Contreras, 2003; Triandis, 1995; Tseng, 2004). In support of this contention, studies have found that support from family members, especially parents, lead to more positive health outcomes even in high-risk situations (Cauce, Cruz, Corona, & Conger, 2011; Conners-Burrow, Johnson, Whiteside-Mansell, McKelvey, & Gargus, 2009). Understanding the importance placed on families in Latino youth cultures, future research exploring the relationship between peer victimization and mental health outcomes in Latino youth should take into consideration family support in addition to support provided by peers during adolescence. It is also possible that close friends can enhance positive mental health through other ways beyond emotionally supportive gestures (as measured in the current study). For example, close friends may encourage positive mental health by modeling and encouraging prosocial activities. Thus, future studies should examine other ways in which close friends may relate to Latino adolescents’ mental health.

**Limitations and Research Implications**

This thesis will add to the understanding of Latino adolescent mental health in the context of peer victimization, however, certain limitations to the study exist. It should be noted that the data were collected using self-report surveys, thus the results could be influenced by participants’ dishonesty and/or giving socially desirable responses. The use of a cross-sectional, correlational design does limit the ability to suggest causal relationships between peer victimization, close friend support, and Latino adolescents’ generalized anxiety and depression. Due to the cross-sectional nature of this study’s
design, adolescents’ perceptions of the independent and dependent variables were assessed at only one time point. The lack of additional time points brings into question the reciprocity of relationships between the independent and dependent variables.

Limitations specific to the sample of participants used in the current study should be taken into account. The three high schools in which data were collected were primarily comprised of Latino youth. Broadly speaking, adolescents of Latino origin are often counted as the minority; however, the Latino participants represented the majority at each of the high schools. This could have contributed to the lack of peer victimization experienced by participants. The current study used one general label “Latino” instead of exploring intra-group differences across the variety of different Latino groups. By ignoring differences across country of origin of Latino youth, inconsistencies in mental health outcomes can arise (Canino & Roberts, 2001). The sample was also limited to individuals from charter high schools in Los Angeles, which can limit school type and geographic generalizability. Also, the current sample consisted of predominantly 2\textsuperscript{nd} generation Latino youth, which did not allow for comparisons across generations. It is possible that earlier or later generations experience differences in peer victimization, close friend support, and/or mental health.

A potential issue regarding the study’s measures is that the close friend support measure did not include items to assess reciprocal peer nominations of close friendships. Collecting information indicating the reciprocal nature of the friendship would be beneficial in looking exclusively into how each friend supports one another. The addition of peer nominations could also include items indicating if each adolescent victimizes other students as to allow researchers to investigate the nature of friendships where peer
victimization is present within the friendship. The close friend support measure included the prompt stating, “I have close friends who…,” which does not allow the participant to indicate the number of friends he/she was thinking of when completing the measure. This prompt also fails to show whether the friends are from school or home. Future close friend support measures might include items indicating number and type of friendship.

Although ample time was given to complete the survey, researchers questioned whether or not the students had enough time to complete the questionnaire. Given that the students may have felt rushed, future surveys should include fewer items or measures. As with any path analysis, it is assumed that the variables are free from error, but this is very unlikely. Future studies should explore the use of a combination of latent and manifest variables when using structural equation modeling.

**Implications**

Even with the aforementioned limitations, the results of this study are useful in suggesting how to approach interventions for victimized Latino adolescents. The recent findings show that peer victimization is strongly related to negative mental health outcomes, therefore teachers, counselors, and practitioners should take peer victimization seriously and focus their efforts on creating environments that discourage bullying and other forms of peer victimization. Also, educators and practitioners can help inform adolescents to learn effective and positive ways to cope with peer victimization.

Educators and practitioners should be informed that peer victimization may be especially problematic for Latina adolescent girls’ depressive symptoms. Also, boys who report more support from close friends are less likely to experience victimization by peers. Thus, approaches to alleviate peer victimization and to help those who have
experienced victimization by peers may need to be tailored differently for Latino boys and girls.

**Conclusions**

The purpose of the present study was to examine: (a) the relationship between peer victimization and mental health (i.e., anxiety and depression) among Latino adolescents, (b) whether having support from a close friend moderates the relationship between peer victimization and Latino adolescents’ mental health, and (c) whether close friend support moderates that relationship similarly for boys and girls. Consistent with previous literature, significant direct paths were found relating peer victimization to elevated generalized anxiety and depression in Latino boys and girls (La Greca & Harrison, 2005; Nishina et al., 2005). Close friend support was not significantly related to depression and anxiety, nor was it a moderator between peer victimization and mental health. The lack of moderation was also seen when looking at gender, thus suggesting that victimized boys and girls are equally unprotected by close friend support. Due to the inconsistencies in regards to benefits of close friend support and the lack of victimization research on predominantly minority samples, future research is warranted to investigate the benefits of having supportive close friends when dealing with aversive life events across underrepresented adolescent populations.
REFERENCES


gender difference in lifetime rates of major depression: A theoretical model.

*Archives of General Psychiatry*, 57(1), 21-27.


