ORIGINAL ARTICLE

The Relationship of Acculturation and Social Integration to Assaults on Intimate Partners Among Mexican American and Non-Mexican White Students

Ignacio Luis Ramirez

Abstract This study examined the role that Mexican ethnicity, acculturation into Anglo American society, and social integration play in intimate partner violence among a sample of 348 college students. The results indicated that Mexican American ethnicity and acculturation into Anglo American society by Mexican American college students had no relation to intimate partner violence. However, integration into society was associated with a decreased probability of severely assaulting a partner among both Mexican Americans and Non-Mexican Whites. The results support a control theory perspective (social integration) on intimate partner violence.

Keywords Ethnicity · Intimate partner violence · Mexican American · Social integration · Acculturation

Introduction

Research addressing ethnic differences in intimate partner violence has produced mixed results for Mexican Americans. The studies reviewed can be classified into three groups: (1) Mexican Americans have lower levels of intimate partner violence when compared to African Americans and Non-Mexican whites (Benson et al. 2000; Fagan et al. 1983; Sorenson et al. 1996); (2) Mexican Americans are more violent than Non-Mexican Whites (Sorenson and Telles 1991; Straus and Smith 1990); and (3) No differences in intimate partner violence between Mexican Americans and Non-Mexican Whites (Kaufman

I. L. Ramirez (✉)
Department of Sociology, Texas Tech University,
Lubbock, TX 79409-1012, USA
e-mail: L.ramirez@ttu.edu

Kantor et al. 1994; White and Koss 1991). This study investigated two possible explanations that could account for these discrepancies: the degree of acculturation and the extent of social integration of Mexican Americans and Non-Mexican Whites. This article will use the term "Mexican American" unless the literature specifically states the term "Hispanic."

Acculturation

Acculturation is the transformation process that occurs when culturally distinct groups or individuals of a society come into contact with another culture (Berry and Kim 1988). One's cultural identity could change when contact is made with another culture. The primary mechanisms for change include the gradual acceptance of language, cultural beliefs, values, and behaviors of the dominant society.

Acculturation of Mexicans and Intimate Partner Violence

Previous research assessing the possible association between acculturation and intimate partner violence has produced conflicting results.

Jasinski found that being a third generation Mexican, Puerto Rican, or Cuban male was more associated with wife assault as compared to first generation immigrants (Jasinski 1998). Sorenson and Telles found that acculturation by males into American society increased the probability of violent behavior towards one's spouse for Mexicans (Sorenson and Telles 1988).

Kantor et al. found that when acculturation is measured by language preference no relationship was found between acculturation and wife assault for Mexicans, Puerto Ricans, and Cubans (Kaufman Kantor et al. 1994). But when

acculturation was measured by place of birth, a positive relationship was found between acculturation and wife assault. Champion also found that acculturation as measured by language preference was related to abuse. Among Mexican American women, abused women had a lower level of acculturation than non-abused women, in other words, the less English spoken, the higher the likelihood of abuse (Champion 1996).

Social Bond (Control Theory)

Control theory focuses on people's bond to other individuals and society. Control theory assumes that people are inherently antisocial and it is people's bonds that keep them from becoming deviant (Hirschi 1969). Hirschi contends that internalization of accepted norms, awareness, and sensitivity to the needs of others promotes conformity in society. Thus an individual who is not aware of or sensitive to the expectations of others and feels no obligation (bonds) to abide by the norms of society will be more at risk of criminal behavior including assaulting an intimate partner (Hirschi 1969).

Hirschi posited four dimensions of a social bond: attachment, commitment, involvement, and belief. Attachment indicates one's strength or ties to society. This is the emotional element of social bonds. Emotional attachments control behavior out of fear of losing love and affection from significant others. Commitment indicates the degree that a person is tied to conventional normative ways of behaving. A person with a high degree of commitment recognizes that he/she has a lot to lose if caught acting criminally. Involvement indicates the amount of time a person spends engaged in the pursuit of a socially approved goal. An involved person with a job or family has little time to commit deviant acts. Belief indicates the existence of a common value system within the society and emphasizes the interrelation of normative expectations that a society promotes (Hirschi 1969).

Lackey and Williams tested the extent to which Hirschi's social bonding theory explained intimate partner violence. They found that men who reported growing up in a violent family, their attachment to their partner, friends, and family increased the probability of no violence later in life against their intimate partner. Lackey and Williams suggest that strong social bonds for adult men who grew up in violent families are a good indication of no intimate partner violence. Thus, individuals who lack social bonds to society are not likely to follow society's norms, including intra-familial norms of not abusing a partner (Lackey and Williams 1995).

This study investigated the possible association between acculturation and intimate partner violence for Mexican American respondents. This study also investigated the possible association between social bonds and intimate partner violence between two ethnic groups. Additionally, a comparative study of intimate partner violence among ethnic groups could provide further clarification to a body of literature and research that has produced mixed results.

Hypotheses

Ethnicity and Acculturation

1. The rate of intimate partner violence is lower for Mexican Americans than Non-Mexicans Whites.
2. The higher the acculturation into American Society, the higher the probability of assaulting a partner for Mexican Americans.

Social Integration

3. Mexican Americans are more socially integrated than Non-Mexican Whites.
4. The more socially integrated an individual is, the lower the probability of physically assaulting a partner.
5. Social integration is more associated with a decreased risk of intimate partner violence for Mexican Americans than Non-Mexican Whites.

Materials and Methods

Sample

The hypotheses were tested using data from a sample of 348 students from two southwestern universities. Respondents filled out the questionnaire in a classroom setting during the fall 1999, spring 2000, and 2000 summer semesters. Sample criteria included respondents who were either Mexican American or Non-Mexican White and had been in a heterosexual romantic dating or marital relationship for a month or longer during the previous 12 months.

A sample of college students is appropriate for this study for the following reasons: (1) The National Crime Victimization Survey found that the rates of non-lethal intimate partner violence was greatest for the 20–24 year age group, followed by the 16–19 age group, and then the 25–34 age group (Renison and Welchans 2000). The majority of college students fall into the high-risk age categories. Sugarman and Hotaling identified 11 studies that provided rates for physical assault of dating partners and concluded the rates of assaulting a partner range from 20 to 59% (Sugarman and Hotaling 1991). (2) College students make up about a third of the 18–22 year old population and are in

a formative period of their lives in relation to the habits that they develop with an intimate partner. These habits could surface in other intimate relations (O'Leary et al. 1994).

Measures

Ethnicity Only respondents who are Mexican American or Non-Mexican White were analyzed in this study.

Partner Assault The measure of partner assault is from the revised Conflict Tactics Scales (CTS2) (Straus et al. 1996). The original CTS has been used in more than 100 studies over the past 25 years (Archer 1999; Straus 1990).

The CTS2 classifies assaults into "minor" and "severe." The CTS2 uses the following items to measure minor assault: Threw something at partner, Twisted arm or hair, pushed or shoved, grabbed, slapped. The CTS2 uses the following items to measure severe assault: Used knife or gun on partner, punched or hit, choked, slammed against wall, beat up, burned or scalded, kicked. Respondents were asked how many times they had committed any of the physical assault behaviors items in the past year. The coefficient of reliability for the Physical Assault scale that was used in previous studies is 0.86 and for this study was 0.72 for the Minor Assault scale and 0.76 for the Severe Assault scale (Straus et al. 1996).

The minor and severe assault measures were combined to create mutually exclusive violence types with the following categories: 0=No assault, 1=Minor assault only, and 2=Severe assault only.

Acculturation Scale Although acculturation has many dimensions, language proficiency and preference have been shown to account for the largest segment of variance (Cuellar et al. 1980; Olmedo and Padilla 1978; Rogler et al. 1991).

This study measured acculturation using six questions that assessed place of birth, country of residence, citizenship, and language spoken in different social settings (at home, with friends, and at work). The response categories were: Spanish all the time, Spanish most of the time, Spanish and English equally, English most of the time, English all of the time. Only the Mexican American respondents were analyzed in reference to acculturation.

The scale is designed with higher scores indicating higher levels of acculturation into American society. The scale scores were transformed into quintiles, thus the range of the acculturation scale is from 1 to 5. The acculturation variable was transformed into quintiles to simplify preliminary analysis such as cross-tabulation, and to reduce skewness. Similar results were found in the preliminary analysis using acculturation as a continuous scale and as a quintile. The alpha coefficient of reliability for the acculturation scale is 81.

Social Bond The Social Integration scale of the Personal and Relationship Profile (PRP) was used to measure the social bond aspect of control theory (Straus et al. 1999; Straus and Mouradian 1999). The primary conceptual framework of the Social Integration Scale is Hirschi's control theory (Hirschi 1969). As was mentioned earlier, the more bonded individuals are with society the less likely they are to engage in deviant or criminal behavior. The PRP is a 22-scale instrument designed to identify etiological factors for intimate partner violence between partners in a dating, cohabiting, or marital relationship.

The Social Integration Scale was composed of ten indicators. Respondents were asked to select one of the following; 1=Strongly Disagree, 2=Disagree, 3=Agree, 4=Strongly Agree (Ross and Straus 1995). The range for the social integration scale was from 10 to 40. A high score indicates high integration to society. The alpha coefficient of reliability for this sample was 0.62 (Cronbach 1970). Each component of Hirschi's Control Theory was covered with the following questions: Commitment; I give up easily on difficult projects (Reverse coded). I have goals in life that I try to reach. Non-Criminal Peers; I spend time with friends who have been in trouble with the law (Reverse coded). I have friends who have committed crimes (Reverse coded). Involvement I rarely have anything to do with religious activities (Reverse coded). I attend church, synagogue, or mosque once a month or more. Belief; It's all right to break the law as long as you don't get hurt (Reverse coded). To get ahead, I have done some things which are not right (Reverse coded). Network Availability I have family members who would help me out if I had a problem. I share my thoughts with a family member.

Socioeconomic Status The socioeconomic status scale was created by summing the scores for the education of the respondent's parents (response range of 1–7) and family income (response range of 1–9). The range of the scale was 3–23. The alpha coefficient of reliability for the socioeconomic status scale was 72. The sample as a whole had a median and mean score of 11.

Social Desirability Scale Research that uses self-report data needs to take into account the minimization of socially undesirable behavior by respondents. This study used the Social Desirability scale of the PRP. This is a 13-item scale that has been adapted from the Crowe Marlowe social desirability scale by (Reynolds 1982). The scale measures the degree to which a respondent will tend to avoid admitting undesirable behavior, such as partner assault and other forms of crime. The scale is intended to measure things that are slightly undesirable but true of everyone. The higher the social desirability score the less likely the respondent is to disclose undesirable information. The

range of the social desirability scale was from 13 to 52, with a median of 34, and a mean 34.5. The alpha coefficient of reliability for the social desirability scale was 63. Other independent variables are listed in Table 1.

Statistical Methods

Preliminary analysis was conducted using *t*-test and chi square to assess basic differences between ethnic groups. The analysis then introduced control variables as the level of analysis became more complex. Each hypothesis will be restated where it is tested. Multinomial logistic regression

was used to analyze the relationship between acculturation, social integration, and intimate partner violence along with other relevant background variables. Multinomial logistic regression is an appropriate tool when the dependent variable consists of nominal categories (Hamilton 1998). In this study the categories are: "0=no violence, 1=minor violence only, and 2=severe violence only." The columns labeled RRR in Tables 4 and 6 shows the relative risk ratios, which resemble the odds ratios given by logistic regression (Hamilton 1998). This statistical tool can be used to estimate the relation of assaulting a partner. Given a respondent's acculturation into American society, criminal history, or social integration into society, the relative risk of assaulting a partner may be obtained. Backwards elimina-

Table 1 Ethnic differences in respondents' characteristics

Characteristics	Total (N=348)	Mexican (n=213)	Non-Mexican (n=135)		χ^2prob (N=428)
Respondents Gender					
Male	38%	36%	40%		0.470
Female	62	64	60		
Year in University					
Freshman	10%	13%	5%		0.030*
Sophomore	18	15	21		
Junior	28	26	33		
Senior	45	47	41		
Age in Years (Median)[a]	23	23	21	(T-Test)	0.013**
Relationship Type					
Dating	67%	65%	70%		0.344
Engaged	11	13	8		
Married	22	22	22		
Cohabiting	32%	32%	32%		0.989
Relationship Status					
Current	68%	70%	64%		0.284
Previous	32	30	36		
Sexually Active	80%	80%	79%		0.691
Relationship Length[b]					
1–12 Months	38%	35%	42%	(T-Test)	0.691
13–24 Months	15	14	16		
25 or More Months	47	51	42		
Family Income					
Median Group	40–49,999	30–39,999	70–79,999	(T-Test)	0.000***
Father's education					
High school/less	44%	55%	25%	(T-Test)	0.000***
Some college	26	27	22		
College degree	15	7	27		
Graduate school	16	10	26		
Mother's education					
High school/less	51%	66%	27%	(T-Test)	0.000***
Some college	23	20	28		
College degree	12	8	19		
Graduate school	14	7	26		
Social Desirability (Mean)	34.5	35	33	(T-test)	0.006**

[a] The categories are 18, 19, 20, 21, 22–24, 25–29, 30–39, 40–49
[b] The categories are 1=about 1 month, 2=about 2 months, 3=3–5 months, 4=6–11 months, 5=about 1 year, 6=more than 1 year but less than 2 years, 7=about 2 years, 8=more than 2 years but less than 4, 9=4 years or more
*p>0.05; **p>0.01;***p>0.001

tion was used in all regression models to achieve a balance of simplicity and fit (parsimony).

Results

Ethnic Differences in Respondents' Characteristics

This section will start off by conducting basic comparisons by ethnicity and gender. Table 1 shows differences between the Mexican American and Non-Mexican White students in reference to demographic and independent variables.

Two thirds of Mexican and Non-Mexican respondents are female. The median age for the entire sample was 23 years old with the Mexican group being on average 2 years older than the Non-Mexican group. Looking at the three variables that were used to compute the socio-economic status, a *t*-test showed that there are statistically significant differences between Mexicans and the Non-Mexicans. There was a $40,000 difference in family income with the Non-Mexican White respondents having the higher median income. Non-Mexican White parents had achieved a higher level of education than Mexican Americans. Over one fourth of the Non-Mexican respondents' fathers had a college degree versus 7% for the Mexican group. Mother's education also showed a similar pattern with 19% of the of the Non-Mexican respondents mothers having a college degree versus 8% for the Mexican group. Therefore it was important to control for socio-economic status and age in the analysis. Finally, Mexicans had a significantly higher social desirability score (35) than Non-Mexican (33) respondents. The implications for this study are that Non-Mexican respondents are disclosing more of their undesirable behavior than Mexican respondents. The analysis includes respondents from single parent households.

Ethnic and Gender Differences in Assault

Ethnicity (Ho1: The rate of intimate partner violence is lower for Mexican Americans than Non-Mexican Whites). Figure 1 shows prevalence rates of type of intimate partner violence by ethnic group and gender. One fourth of the Mexican respondents reported minor assaults on their partners versus less than 20% of the Non-Mexican respondents. In reference to severely assaulting their partners, a little over one tenth of the both groups (Non-Mexican and Mexican) reported committing this type of violence on their partner, with the Mexican group reporting slightly higher prevalence rates. Therefore, percentages indicate Mexican Americans have a slightly higher rate for minor assault although a chi-square test shows no statistically significant association.

Gender Figure 1 also shows the type of violence by gender. Females were slightly less likely to use minor violence than males. One fourth (25%) of male respondents committed a minor assault on their partner versus a little more than one fifth (21%) of the female respondents. Females had a slightly higher rate of severe assaults on their partners than males (10.5 versus 12%). Overall, the chi square test of independence indicated that there were no significant gender differences in the type of violence on intimate partners.

Demographic Correlates of Acculturation and Social Integration

As previously stated, acculturation was analyzed for Mexican Americans only. This analysis was run in order to assess potential correlates of acculturation and social integration. The second column in Table 2 (labeled "Acculturation") gives the correlations of the demographic and control variables with acculturation score. In this study

Fig. 1 Distribution of intimate partner violence by gender and ethnicity
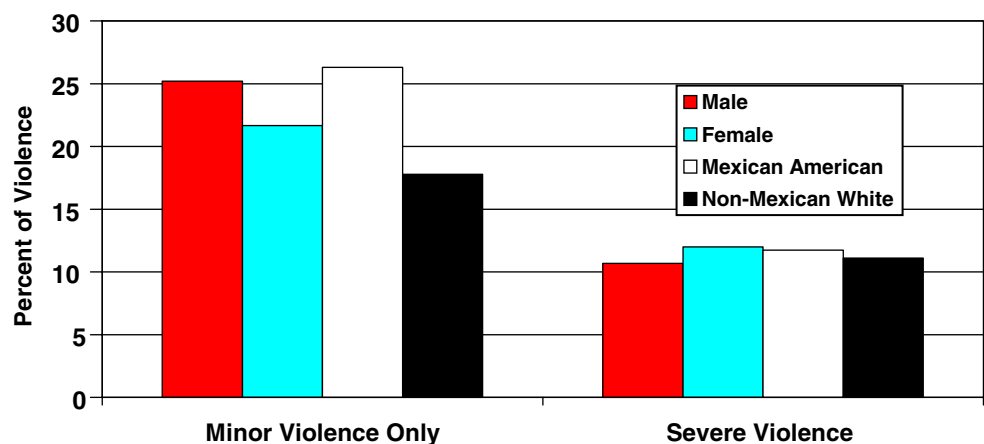
Table 2 Correlation of demographic variables with acculturation for Mexican Americans (N=213) And correlation of demographic variables with social integration scale (N=348) for Mexican Americans and Non-Mexican Whites

Demographic and Control Variables	Acculturation (Mexican Only N=213)	Social Integration (Mexican and White N=348)
Ethnicity 1=Mexican		08
Gender 1=Female	0.14**	0.26**
Age+	0.15*	0.04
Socioeconomic Status Range (3 to 23)	0.34**	−0.01
Year In University++	0.13	0.08
Relationship Current 1=Current; 2=Previous	−0.06	−0.13**
Cohabitation 1=Yes	0.12	0.13**
Married 0=Dating/Engaged; 1=Married	0.15*	0.14**
Relationship Length+++	0.07	0.16**
Sexually Active 1=Yes	0.13	−0.06
Social Desirability	−0.02	0.04**

*=Signif. LE .05 **=Signif. LE .01 (2-tailed) +1=18; 2=19; 3=20; 4=21; 5=22–24; 6=25–29; 7=30–39; 8=40–49; 9=50 or older. ++1=Freshman; 2=Sophomore; 3=Junior; 4=Senior. +++1=Less than 1 month; 2=about 1 month; 3=about 2 months; 4=3 to 5 months; 5=6 to 11 months; 6=about 1 year; 7=more than 1 year but less than 2 years; 8=about 2 years; 9=more than 2 years but less than 4 years; 10=4 years or more

females scored higher on the acculturation scale than males. Respondents of a higher socioeconomic status were more acculturated. Finally, married people were more acculturated than dating or engaged couples.

Acculturation and Violence among Mexican Americans

(Ho2: The higher the acculturation into American Society, the higher the probability of assaulting a partner for Mexican Americans). The chi-square test in Table 3 indicates that there

is no relationship between acculturation and type of violence for Mexican Americans. This hypothesis is examined further in the full regression model with control variables.

Table 4 gives the results of the multinomial logistic regression analysis. Only variables that were correlated with acculturation and theoretically important variables were included in the model for simplicity and parsimony. Acculturation was not associated with minor or severe assault on a partner for Mexican Americans after controlling for gender, age, socioeconomic status, marital status, and social desirability. Please note that the potential association in Table 4 as a whole is not significant. These variables (except for measurement error) are not associated with intimate partner violence.

Ethnic Differences in Social Integration

(Ho3: Mexican Americans are more socially integrated than Non-Mexican Whites). Table 5 shows that the mean social integration score for both ethnic groups was about the same for the overall social integration score and for all of the subscales except Network Availability. Mexican Americans scored lower on the Network Availability subscale than the Non-Mexican respondents. Non-Mexican respondents rely more on family members and share their thoughts more with family members than Mexican American respondents. Looking at gender and social integration score, females from both ethnic groups were more socially integrated than males. This was also the case in all of the subscales except the Commitment subscale.

Demographic Correlates of Social Integration

The second column in Table 2 labeled Social Integration gives correlations of the Social Integration score with demographic and control variables. Females were more socially integrated than males. Respondents in a previous relationship were less socially integrated than those in a current relationship. Looking further down the column we see that respondents who were cohabiting and married were also more socially integrated than respondents who are not cohabiting and were only dating or engaged. Finally, as the

Table 3 Acculturation score by type of violence for Mexican Americans

	Type of violence			
Acculturation score	No violence (%)	Minor violence (%)	Severe violence (%)	Total
1	54.17	29.17	16.67	100.00% n=48
2	70.21	23.40	6.38	100.00% n=47
3	62.26	26.42	11.32	100.00% n=53
4	62.86	28.57	8.57	100.00 n=35
5	58.62	24.14	17.24	100.00 n=29
Total	61.79	26.42	11.79	100.00 N=212

Pearson chi2(8)=4.6454 Pr=0.795

Table 4 Multinomial logistic regression of intimate partner violence on acculturation score, gender, age, socio-economic status, marital status, socioeconomic status, and social desirability for Mexican Americans

	RRR	Std. Err.	RRR	Std. Err.
	Minor Violence		Severe Violence	
Acculturation (Range 1–5)	0.9724	0.1302	1.1654	0.2298
Female=1	0.8898	0.3112	0.6276	0.3002
Age[a]	0.8986	0.0897	0.8729	0.1210
Socioeconomic Status Range (3–23)	1.0223	0.0420	0.9017	0.0580
Married=1	1 1.0063	0.4559	0.7218	0.4723
Social Desirability Range (13–52)	0.9443	0.0320	0.8847**	0.0435

Number of obs=212; LR chi2(12) =15.07; Prob > chi2=0.2376; Pseudo R2=0.0394

No Violence is the comparison group

[a] Age Categories used for regression 1=18;2=19;3=20;4=21;5=22–24; 6=25–29;7=30–39;8=40–49;9=50 or older

*$p>0.05$; **$p>0.01$;***$p>0.001$

length of the relationship increased, so did a respondent's social integration score.

Social Integration and Partner Assault

(Ho4: The more socially integrated an individual is, the lower the probability of physically assaulting a partner). (Ho5: Social integration is more associated with a decreased risk of intimate partner violence for Mexican Americans than Non-Mexican Whites). Table 6 gives the results of the multinomial logistic regression analysis. Only variables that were correlated with acculturation and theoretically important variables were included in the model for simplicity and parsimony. Social integration was not related to *minor* partner assault. Ethnicity, relationship length, and social desirability were related to minor partner assault. In other words, the odds of a minor assault rather than no assault increased 103% for Mexican Americans compared with non-Mexican students. To further investigate the role of ethnicity, an interaction term was tested in the model by multiplying ethnicity by Social Integration to assess if Social Integration and intimate partner violence differed by ethnic group. The interaction term was not significant.

Social Integration scores were associated with a reduced odds of *severe* violence (Table 6). As integration into society increased, the probability of a severe assault on a partner decreased, in other words, the odds of severe violence rather than no violence decreased by 14% with each 1-point increase in social integration score. When an interaction term was created, the analysis revealed no interaction between social integration and ethnicity and its possible relationship on intimate partner violence. There was no support that social integration is more associated with a decreased risk of intimate partner violence for Mexican Americans than Non-Mexican whites.

Predicted probabilities were calculated based on the results from Table 6 to graph how *severe* violence on a partner varied depending on score of social integration for each ethnic group. The trend in Fig. 2 is parallel for both Mexican American and Non-Mexican respondents. As social integration increases the probability of severely assaulting a partner decreases.

Summary

This study tested five hypotheses; the first hypothesis was that the rate of intimate partner violence is lower for Mexican Americans than Non-Mexican Whites. This hypothesis was not supported by the analysis.

The second hypothesis was the higher the acculturation into American Society, the higher the probability of assaulting a partner for Mexican Americans. This hypothesis was also not supported.

The third hypothesis was that Mexicans are more socially integrated than Non-Mexican Whites. The analysis did not support this hypothesis. In fact the mean scores

Table 5 Mean social integration score by ethnic group and gender controlling for social desirability set at mean (N=348)

	Mean			
Scale	Mexican American	Non-Mexican		F-test
Social Integration	30.5	30.3	Ethnicity	0.170
Male	29.7	28.9	Gender	27.6**
Female	31.2	31.7	Interaction	2.50
Subscales				
Non-criminal Peers	5.3	5.1	Ethnicity	1.56
Male	5.0	4.7	Gender	12.6**
Female	5.7	5.4	Interaction	0.035
Commitment	6.8	6.9	Ethnicity	0.68
Male	6.8	6.9	Gender	0.75
Female	6.7	6.8	Interaction	0.057
Involvement	5.2	4.9	Ethnicity	2.74
Male	5.1	4.3	Gender	11.8**
Female	5.3	5.5	Interaction	6.28*
Belief	6.5	6.5	Ethnicity	0.15
Male	6.2	6.2	Gender	18.9**
Female	6.8	6.8	Interaction	0.002
Network Availability	6.4	6.8	Ethnicity	8.47**
Male	6.4	6.6	Gender	4.45*
Female	6.4	7.0	Interaction	2.03

*$p \leq 0.05$,**$p \leq 0.01$

Table 6 Multinomial logistic regression of intimate partner violence on social integration, ethnicity (Mexican Americans and Non-Mexicans.), gender, previous relationship, cohabitation, marital status, relationship length, socioeconomic status, and social desirability

	RRR	Std. Err.	RRR	Std. Err.
	Minor Violence		Severe Violence	
Social Integration (Range 19–40)	0.9571	0.0374	0.8631**	0.0460
Mexican=1	2.0379*	0.6902	1.3011	0.5634
Female=1	0.8672	0.2557	1.2387	0.4904
Previous Relationship=2	1.3426	0.4082	0.9084	0.3840
Cohabitation (0=No; 1=Yes)	0.8623	0.3630	2.1962	1.0635
Married=1	0.7490	0.3639	0.5563	0.3148
Relationship Length[a]	1.1799**	0.0727	1.1531	0.0953
Socioeconomic Status Range (3–23)	1.0086	0.0307	0.9941	0.0403
Social Desirability Range (13–52)	0.9383*	0.0292	0.9655	0.0394

N=348; LR chi2(16)=34.94; Prob>chi2=0.0040; Pseudo R2=0.0581
No Violence is the comparison group
[a] Categories used for regression: 1=Less than 1 month; 2=about 1 month; 3=about 2 months; 4=3–5 months; 5=6–11 months; 6=about 1 year; 7=more than 1 year but less than 2 years; 8=about 2 years; 9=more than 2 years but less than 4 years; 10=4 years or more
*$p \leq 0.05$,**$p \leq 0.01$

show that Mexican Americans were about the same as Non-Mexican Whites.

The fourth hypothesis was that the more socially integrated an individual the lower the probability of physically assaulting a partner. The analysis found support for this hypothesis for severe violence, but not for minor violence.

The fifth hypothesis was that Social Integration was more associated with a decreased risk of intimate partner violence for Mexican Americans than Non-Mexican whites. No support was found for this hypothesis, even after further investigation for interaction effects.

Limitations

There are several reasons why results of this study should be treated with caution. First, using a student sample limits generalizability of the findings to other populations. In the future the author will conduct research that is more generalizable to other populations. Second, results refer to Mexican American students and are not generalizable to other Mexican American or Hispanic groups. Furthermore, acculturation was measured entirely by residence in the United States, citizenship of the United States, and English and Spanish language usage. This type of measure does not directly measure any of the norms and values of Mexican respondents. Hence it could be the case that in the general

population a high score on this specific acculturation scale could reflect only a change in language usage while still retaining Mexican values. This especially could be the case among the general population of Mexican Americans with a low education level whereas Mexican American students in this study by the very nature of their role as university students are acquiring Anglo-American values. For future research the author will develop a better measure of acculturation that can assess norms and values.

Finally, this study focused on perpetration of family violence. One of the limitations of this study is that it did not ask the question of who initiates the violence. In other words do men or women hit first, and does this vary by ethnic group? Currently the question of who initiates violence first and gender symmetry in reference to intimate partner violence is highly debated. This author will study this important issue in future research.

Discussion and Implications

Sources of Intimate Partner Violence There are many reasons why intimate partner violence occurs? Previous research on intimate partner violence has addressed different theoretical issues such as patriarchal theory, conflict theory, resource theory, or authoritarian personality theory. This study focused on two theoretical perspectives; one, a criminological approach utilizing social control theory by Travis Hirschi and two, an ethnic examination
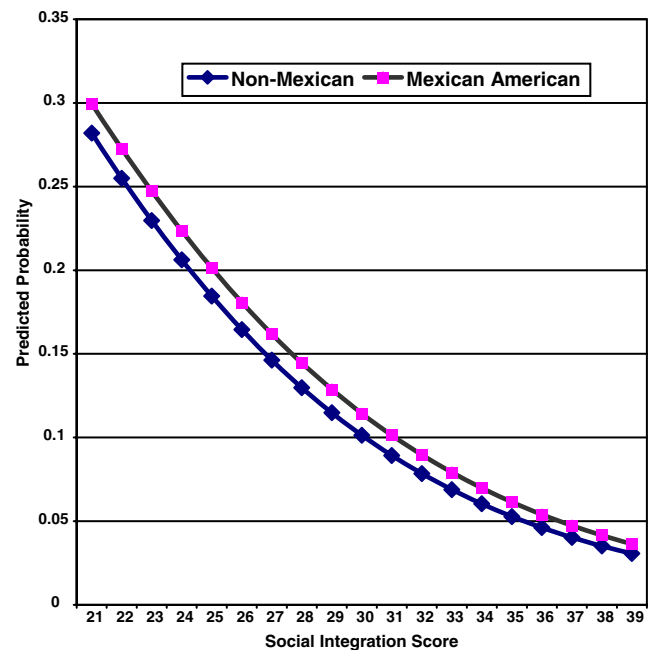

Fig. 2 Predicted probability of a severe assault on a partner for Mexican American and Non-Mexican Whites bases on social integration score from regression in Table 6, all other variables in model set at their means

of differences in the rate of intimate partner violence among Mexican Americans and non-Mexican White respondents.

Ethnic Differences in Partner Assault Intimate partner violence did not differ for Mexican Americans or for Non-Mexican Whites. While the rate of intimate partner violence for Mexican Americans appears higher than for the Non-Mexican respondents (26 versus 18%) for minor assault, and is approximately the same for severe violence a chi-square test indicates that there were no statistically significant differences between ethnic group and type of intimate partner violence.

Acculturation and Partner Assault Multinomial logistic regression when controlling for gender, age, socioeconomic status, marital status, and social desirability found that acculturation was not associated with the probability of partner assaults among Mexican Americans. These results contradict a study according to Sorenson and Telles, as acculturation increases so should intimate partner violence (Sorenson and Telles 1988). A possible explanation for this finding is the different populations being studied between Sorenson who analyzed the general population while this study analyzed a sample of college students. Perhaps the difference between this study and the Sorensen and Telles study occurs because, by virtue of being in a major English language university, there are no truly low acculturated respondents in this sample. Mexican Americans are being exposed to a more worldly experience than Mexican Americans who are not university students. Obtaining a higher education also increases one's personal tool kit and external resources when attempting to solve a problem. Additionally, the respondents are university students in an institution that teaches in English and also symbolizes the mainstream culture. All of the respondents have the most important indicators in the acculturation scale, fluent use of English language. This could restrict the range of acculturation score.

Ethnicity and Acculturation In reference to acculturation by Mexicans into American society, this study has contributed to the current debate about the effect of acculturation into Anglo society on intimate partner violence. As was mentioned in the review of literature, one study found that as acculturation into Anglo American society increases the likelihood of assaulting a partner also increases (Sorenson and Telles 1988). Kantor et al. found a relationship between acculturation and wife assault measuring acculturation with language preference and place of birth (Kaufman Kantor et al. 1994).

Contrary to the studies cited, this study found acculturation had no effect on the likelihood of assaulting a partner despite the fact that language and place of birth was also used to measure acculturation into Anglo American society. The high socioeconomic status level of respondents may also be confounding the acculturation measure. A high degree of acculturation (as measured by English language usage) into American society is required for respondents to achieve a higher standard of living.

Another explanation is that even though a Mexican respondent may have a low acculturation level into American society, that same individual may be highly socially integrated into a different ethnic network that provides support and resources that could prevent or discourage intimate partner violence. Here, availability is key, some Mexican American respondents may or may not have access to family or friends because they are in Mexico and not readily available.

Social Integration and Intimate Partner Violence In view of the fact that this study analyzed a sample of university students who can be presumed to have on average relatively high social integration, it is remarkable that social integration was related to a lower probability of severely assaulting a partner.

The findings in this study are consistent with the findings by Lackey and Williams who also tested Travis Hirschi's social bonding theory (Lackey and Williams 1995). Specifically respondents who scored higher on the social integration scale were less likely to assault their partner in a severe manner.

The findings in this study are also consistent with the findings by Sherman (Sherman 1992). Sherman states in his findings from the Minneapolis experiment that arrest increases domestic violence among those people who had nothing to lose, for example, they were unemployed. This is consistent with Hirschi's social bond theory (Hirschi 1969). Specifically, this finding addresses the commitment component of Hirschi's social bond theory. Commitment indicates the degree that a person is tied to conventional normative ways of behaving. Certainly being employed indicates one's commitment to society. Additionally, research by Maxwell, Garner, and Fagen studied the effects of arrest on intimate partner violence (Maxwell et al. 2001). They also found that Non-Mexican White employed suspects had lower levels of repeat offending according to police records. According to these two studies arrest only works with individuals who have something at stake in society, in other words, they are socially bonded in some way.

References

Archer, J. (1999). Assessment of the reliability of the Conflict Tactics Scales: A meta-analytic review. *Journal of Interpersonal Violence, 14*(12), 1263–1289.

Benson, M. L., Fox, G. L., DeMaris, A., & Van Wyk, J. (2000). Violence in families: The intersection of race, poverty, and community context. In G. L. Fox & M. L. Benson (Eds.), *Contemporary perspectives in family research* (Vol. 2, pp. 91–109). New York: Elsevier.

Berry, J. W., & Kim, U. (1988). Acculturation and mental health. In J. W. Berry & N. Sartorius (Eds.), *Health and cross-cultural psychology:Towards application* (pp. 207–236). London: Sage.

Champion, J. D. (1996). Woman abuse, assimilation, and self-concept in a rural Mexican American community. *Hispanic Journal of Behavioral Sciences, 18*(4), 508–521.

Cronbach, L. J. (1970). *Essentials of psychological testing (3rd ed.).* New York: Harper and Row.

Cuellar, I., Harris, L. C., & Jasso, R. (1980). An acculturation scale for Mexican American normal and clinical populations. *Hispanic Journal of Behavioral Sciences, 2*(3), 199–217.

Fagan, J. A., Stewart, D. K., & Hansen, K. V. (1983). Violent men or violent husbands? Background factors and situational correlates. In D. Finkelhor, R. J. Gelles, G. T. Hotaling & M. A. Straus (Eds.), *The dark side of families* (pp. 49–68). Beverly Hills, CA: Sage.

Hamilton, L. (1998). *Statistics with Stata 5.* Boston, Massachusetts: Duxbury.

Hirschi, T. (1969). *The causes of delinquency.* Berkeley and Los Angeles, California: University of California Press.

Jasinski, J. (1998). The role of acculturation in wife assault. *Hispanic Journal of Behavioral Sciences, 20*(2), 175–191.

Kaufman Kantor, G., Jasinski, J., & Aldarondo, E. (1994). Socioeconomic status and incidence of marital violence in Hispanic families. *Violence and Victims, 9,* 207–222.

Lackey, C., & Williams, K. R. (1995). Social bonding and the cessation of partner violence across generations. *Journal of Marriage and the family, 57,* 295–305.

Maxwell, C. D., Garner, J. H., & Fagan, J. A. (2001). *The effects of arrest on intimate partner violence: New evidence from spouse assault replication program.* National Institute of Justice: Research in Brief.

O'Leary, K. D., Malone, J., & Tyree, A. (1994). Physical aggression in early marriage: Prerelationship and relationship effects. *Journal of Consulting and Clinical Psychology, 62*(3), 594–602.

Olmedo, E. L., & Padilla, A. M. (1978). Empirical and construct validation of a measure of acculturation for Mexican Americans. *Journal of Social Psychology, 105,* 179–187.

Renison, C. M., & Welchans, S. (2000). *Intimate partner violence. Statistics special report* Washington, DC: Bureau of Justice.

Reynolds, W. M. (1982). Development of reliable and valid short forms of the Marlowe-Crowne Social Desirability Scale. *Journal of Clinical Psychology, 38*(1), 119–125.

Rogler, L. H., Cortes, D. E., & Malgaday, R. G. (1991). Acculturation and mental health status among Hispanics. *American Psychologists, 46,* 585–597.

Ross, S. B., & Straus, M. A. (1995). *The social integration scale.* Paper presented at the at the 4th International Conference on Family Violence Research, Durham, NH.

Sherman, L. (1992). *Policing domestic violence: Experiments and dilemmas.* New York: Free.

Sorenson, S. B., & Telles, C. A. (1988). *Violence in Hispanic families: Immigration issues.* Paper presented at the Research Conference of Violence and Homicide in Hispanic Communities, Los Angeles California.

Sorenson, S. B., & Telles, C. A. (1991). Self reports of spousal violence in a Mexican American and Non-Hispanic White population. *Violence & Victims, 6,* 3–15.

Sorenson, S. B., Upchurch, D. M., & Shen, H. (1996). Violence and injury in marital arguments. *American Journal of Public Health, 86,* 35–40.

Straus, M. A. (1990). The Conflict Tactics Scales and its critics: An evaluation and new data on validity and reliability. In M. A. Straus & R. J. Gelles (Eds.), *Physical violence in American families: Risk factors and adaptations to violence in 8,145 families* (pp. 49–73). New Brunswick, NJ: Transaction Publications.

Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The revised Conflict Tactics Scales (CTS2): Development and preliminary psychometric data. *Journal of Family Issues, 17*(3), 283–316.

Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. (1999). *The personal and relationships profile (PRP).* Durham, NH: Family Research Laboratory, University of New Hampshire.

Straus, M. A., & Mouradian, V. E. (1999, November 19, 1999). *Preliminary psychometric data for the personal and relationships profile (PRP): A multi-scale tool for clinical screening and research on partner violence.* Paper presented at the American Society of Criminology, Toronto, Ontario.

Straus, M. A., & Smith, C. (1990). Violence in Hispanic families in the United States: Incidence rates and structural interpretations. In M. A. Straus & R. J. Gelles (Eds.), *Physical violence in American families: Risk factors and adaptations to violence in 8,145 families* (pp. 341–368). New Brunswick, NJ: Transaction.

Sugarman, D. B., & Hotaling, G. T. (1991). Dating violence: A review of contextual and risk factors. In B. Levy (Ed.), *Dating violence: Young women in danger* (pp. 100–118). Seattle: Seal.

White, J. W., & Koss, M. P. (1991). Courtship violence: Incidence in a national sample of higher education students. *Violence and Victims, 6*(4), 247–256.