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Experiences of Intimate Partner Violence Among U.S. Born, Immigrant and Migrant Latinas

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Abstract

The three aims of this stratified random sample study were: (1) To assess the prevalence and patterns of intimate partner violence, including physical, sexual, and emotional/psychological abuse, in three stratified groups of Latina women ((a) *Migrants*: Migrant or seasonal workers (includes immigrants and non-immigrants), (b) *Immigrants*: Immigrants, but not migrant or seasonal workers, and (c) *U.S. born Latinas)*; (2) to identify differential risk and protective factors associated with this violence, which included examining the role of cultural (e.g., acculturation, acculturative stress, ethnic identity, and bicultural self-efficacy), socioeconomic, psychosocial and social support factors; and based on these findings, (3) to outline specific implications of the findings for intimate partner violence prevention and intervention programming. The study used a quasi-experimental approach. The sample of 291predominantly Mexican American Latinas revealed a high rate of lifetime and past year experience with IPV. Thirty-three percent (33.9%) experienced some form of physical violence, 20.9% experienced sexual coercion, and 82.5% experienced psychological aggression by an intimate partner at some time in their life. Rates of victimization in the preceding year were high with 18.5% of the women reporting physical assault, 14.4% reporting sexual coercion, and 72.6% reporting psychological aggression. Having a partner with a substance use problem was associated with victimization in the present study. The study found an association between adult partner violence victimization and reports of intimate partner violence in women's families of origin after controlling for other potential childhood risk factors and demographic variables. Experiencing childhood sexual abuse was strongly related to reports of adult intimate partner violence victimization. Rates of IPV differed

between groups with US born populations experiencing the highest level of violence followed by migrants. Higher levels of acculturation were also found to be associated with IPV, as well. Recommendations are made regarding the need for early screening and intervention among Latina populations, but also for children who are exposed to IPV. A call is made for continued research on Latina populations, and specifically on the stratified groups of focus in this study. More research is also needed on the role of culture in IPV among Latina populations, as well.

Executive Summary

Project Goals and Objectives

Statement of Purpose. Violence against women is receiving increased national attention due to recognition of its alarming prevalence, and because of the need to expand services available to victims. While the past decade has seen significant growth in the amount of empirical research on this problem, what we know about its occurrence in the Latino population is extremely limited, even while it is one of the fastest growing ethnic minority groups in the U.S. (Morash 2000 p. 67). In order to address this gap in knowledge, we investigated the prevalence of various types of intimate partner violence among diverse Latina populations, as well as examined factors that increase and protect against victimization. More specifically, the three aims of the study were: (1) to assess the prevalence and patterns of intimate partner violence, including physical, sexual, and emotional/psychological abuse, in three groups of Latina women (migrant workers, immigrants who are not migrant workers, and U.S. born Latinas who are not migrant workers); (2) to identify differential risk and protective factors associated with this violence, which included examining the role of cultural (e.g., acculturation, acculturative stress, ethnic identity, and bicultural self-efficacy), socioeconomic, psychosocial and social support factors; and based on these findings, (3) to outline specific implications of the findings for intimate partner violence prevention and intervention programming.

Research Subjects. A study involving 291 predominantly Mexican American Latinas examined differential patterns of intimate partner violence among three groups: (1) *Migrants*: Migrant or seasonal workers (includes immigrants and non-immigrants), (2)

Immigrants: Immigrants, but not migrant or seasonal workers, and (3) *U.S. born Latinas:* Non-immigrants and not migrant or seasonal workers.

Research Design and Methodology

Methods. A quasi-experimental approach was used with random selection of the sample from a list of clients of a large primary health care organization serving over 43,000 predominantly low-income Latinos residing in one of the largest counties in California. The focus was on Latina women between the ages of 18 to 45. A survey interview gathered information on intimate partner violence experiences, as well as cultural, socioeconomic, psychosocial, family functioning, social problem, and social support network factors.

Data Analysis. This study added to our understanding of the experience of intimate partner violence among Latina women. The research acknowledged the tremendous diversity of this population and examined the role of culture in light of other risk and protective factors. The findings provided important information to organizations interested in addressing violence issues among Latina women.

Research Results and Conclusions

Intimate partner violence victimization was prevalent among the Latina women in the present study.

Lifetime Experiences Thirty-three percent (33.9%) experienced some form of physical violence, 20.9% experienced sexual coercion, and 82.5% experienced psychological aggression by an intimate partner at some time in their life.

Experiences in the Preceding Year Rates of victimization in the preceding year were high with 18.5% of the women reporting physical assault, 14.4% reporting sexual

coercion, and 72.6% reporting psychological aggression. The rates of physical assault were at least as high, and in some cases higher, than those generated by recent studies involving nationally representative samples. For instance, the rates of less severe (18.2%) and severe (7.5%) physical assault experienced in the preceding year were nearly equivalent to the rates reported by the National Comorbidity Survey (i.e., 17.4% for less severe, 6.5% for severe; Kessler et al., 2001). In contrast, the rate of any past year physical violence in the current sample was substantially higher than that obtained by the National Violence Against Women Survey (i.e., 18.5% vs. 1.3%; Tjaden & Thoennes, 2000).

The rate of 25.4% for past year physical assault experienced by the U.S. born women in our sample was higher than the 16-17% prevalence rates found in other recent studies (Aldarondo et al., 2002; Lown & Vega, 2001). Meanwhile, the rate of physical assault among the immigrant women (i.e., 12.8%) was approximately the same (i.e., 13.4% reported by Aldarondo et al., 2002) or higher (i.e., 7.1% reported by Lown & Vega, 2001) than reported by these other studies. For the migrant women, our results on recent physical assault (i.e., 14.3%) are relatively comparable to the findings of Hightower and colleagues, who reported a 19.0% rate of physical *or* sexual assault among women employed as migrant or seasonal workers.

Subgroup Comparisons Lifetime rates of intimate partner violence experienced by the U.S. born, immigrant, and migrant women in the current sample revealed differences. US born women more likely to have experienced physical assault and psychological aggression compared to the immigrant and migrant women. Differences were also noted

in the reports of sexual coercion with the US born women more likely to report these experiences than immigrant women.

Reports of physical assault and psychological aggression in the preceding year were highest among the US born women and they were more likely to experience these types of victimization compared to immigrant women. US born women were also more likely to report sexual coercion by a partner than immigrant women. Women in the migrant group were also more likely to report recent sexual victimization compared to immigrant women.

However, the study did not find a relationship between past year intimate partner violence victimization and women's status as U.S born, migrant/seasonal, or immigrant Latinas when sociodemographic and other background characteristics of the women and their partners were taken into account.

Socioeconomic Status and IPV Women's age, marital status, poverty status of household, number of children in the household, and partner education were also not associated with partner violence. The lack of association between women's age and risk of victimization is not consistent with previous findings that have identified younger age a risk factor in non-Latina and Latina women (e.g., Kessler et al., 2001; Lown & Vega, 2001; Suitor et al., 1990). The results do confirm previous findings with Latinos that have also not identified a relationship between intimate partner violence and marital status (Cunradi et al., 2002). Other research has similarly not found an association between income and partner violence among Latinos (Aldarondo et al., 2002; Kaufman Kantor et al., 1994; Lown & Vega, 2001) although this has not universally been the case (Cunradi et al., 2002).

Substance Use Having a partner with a substance use problem was associated with victimization in the present study. Thirty percent of the women who experienced intimate partner violence in the preceding year reported partner substance use problems compared to 13.9% of women who did not experience any violence. Women who reported that their partner had alcohol and/or drug problems had more than two times the odds of reporting experiences with intimate partner violence in the preceding year.

Past Family Experiences The study found an association between adult partner violence victimization and reports of intimate partner violence in women's families of origin after controlling for other potential childhood risk factors and demographic variables. Women reporting violence between their parents or parental caregivers had approximately twice the odds of experiencing recent partner violence victimization compared to women who did not report parental violence.

Past Childhood Abuse Experiencing childhood sexual abuse was strongly related to reports of adult intimate partner violence victimization. After controlling for other childhood risk factors and demographic variables, sexual abuse was associated with more than a three-fold increase in odds of reporting recent partner violence. Women who reported childhood physical abuse were approximately nine times more likely to report adult victimization.

Cultural Factors A look at differences between each of the stratified groups of Latinas revealed significant differences between the three groups of Latinas with U.S. born and migrant Latinas reflecting the highest proportions of experience with any form of intimate partner violence within the past year (40% and 39%, respectively), compared to immigrant Latinas at 23 percent who showed the least proportion ($X^2 = 8.25$, df = 2,

p<.02). Regardless of group or differences between groups, even at 23 percent, the proportion of Latinas experiencing any form of IPV is high—both numerically, and in comparison with proportions in the general population.

Acculturation proved to be a significant cultural variable both as a unidimensional variable and as a multidimensional variable denoting groups or typologies varying in acculturation levels. The findings showed that the greater the acculturation of Latinas the more likely they were victims of IPV. There were few who could be typed as American oriented based on their acculturation scores to see if this acculturation type is tied to higher or lower experiences with IPV. However, the findings did show statistically significant differences in experiences with IPV between culture of origin oriented, bicultural and marginalized Latinas where those with higher IPV scores where marginalized and bicultural individuals (47% and 38%, respectively). This compared with 27% of culture of origin-oriented individuals.

These findings suggest that acculturation is an important cultural variable that is tied to generalized IPV. The generalized IPV outcome variable is a macro measure and does not lend itself to a closer scrutiny of the relationship between the other cultural variables and AIPV. Further analysis is called for that uses an IPV measure with more variability, which can more carefully be examined in its relationship with the various cultural measures used in this study. Subsequent manuscripts will be prepared that will report on such analyses.

In general, the present findings of this study suggest the need for screening for intimate partner violence in health care and other settings that serve Latina women.

Recommendations

- Our findings on childhood risk factors suggest that early identification and intervention efforts should target children who are exposed to intimate partner violence and who are victims of maltreatment, especially sexual abuse, in order to reduce risks for future victimization in intimate relationships.
- Longitudinal studies that systematically investigate the interconnections between childhood and adult victimization are needed in order to identify optimal strategies for prevention and intervention programming. The findings underscore the importance of effective early intervention and prevention programs to mitigate short and long term risk of experiencing adverse outcomes. Such programming should be considered an essential component of the community response to intimate partner violence and childhood victimization.
- In addition to assessing experiences with psychological, sexual, and physical violence, risk factors, including partner substance use, childhood history of maltreatment and intimate partner violence in the family of origin, should be considered.
- In screening for intimate partner violence, service providers should also assess women's mental health functioning to ensure that the often disabling sequelae associated with victimization are not overlooked.
- The findings on cultural factors also suggest that cultural context is important, and in particular acculturation. The findings are in keeping with other health findings suggesting that those most at-risk are Latinos who are more acculturated (c.f., Gordon-Larsen, Harris, Ward, & Popkin, 2003).

- More research is needed which uses a larger sample size to more adequately examine the importance of various cultural factors, as well as other risk factors of focus in this study.
- Additional research is needed to investigate the applicability of these models to Latino populations and to test elaborated models that incorporate important cultural variables such as acculturative stress.
- There is a clear need for further investigation of the pathways between childhood exposure to intimate partner violence and adult victimization and of intervening individual, family, and community factors.
- Latino populations represent a large segment of the U.S. population with documented negative experiences with IPV. Their diversity in terms of culture and poor socioeconomic experiences status needs to continue to be acknowledged, incorporated and studied within future research on IPV.

Introduction

In recent years, there has been growing awareness about the pervasiveness and significant short and long term consequences of intimate partner violence. However, what we know about the occurrence of this social problem in the Latino population continues to be limited. In order to address this gap in knowledge, we investigated the prevalence of various types of intimate partner violence as well as the factors that may increase and protect against this victimization among Latina women who were migrant workers, immigrants, and U.S. born non-immigrants. The ultimate goal of this work was to obtain sufficient knowledge to inform the development of effective intimate partner violence prevention and intervention programs for Latina women.

The specific aims:

1. To determine the lifetime and past year rates of various types of intimate partner violence (physical, sexual, emotional/psychological) in three groups of Latina women (migrant workers, immigrants who are not migrant workers, and U.S. born Latinas who are not migrant workers). Rates and patterns of intimate partner violence were compared for the three groups of Latina women.
2. To examine, among these same groups, cultural, socioeconomic, and psychosocial factors that may serve as risk and protective factors for intimate partner violence.
3. To draw implications from the study findings that will inform future research and program development focusing on migrant and non-migrant Latina populations.

Terms Used in the Report

For the sake of clarification, definitions of the terms used in this study are in order. We use the term "**Latino**" to refer to the population of Latin American descent,

which includes those who trace their ethnic ancestry to the former Spanish colonies of the Caribbean, Mexico, Central America, and South America. "**Latina**" refers to the female population who trace their ancestry to the aforementioned regions. "**Immigrant**" refers to those who were born outside the United States. "**U.S. born or non-immigrant Latinas**" refers to Latinas who were born in the United States and trace their ancestry to the aforementioned regions. "**Migrants**" or "**seasonal workers**" refer to Latinas, both U.S. born and immigrants, who are employed in the seasonal/temporary labor force and/or must move locations to find work. This category also included women who had a household member who contributed financially and who worked as a migrant or seasonal worker. The individual classified as a migrant or seasonal worker had to be employed in the agricultural industry (with qualifying jobs based on federal migrant education guidelines) in the preceding 24 months and

a) that individual had moved in the preceding 24 months in order to perform his or her work or the individual was required to be absent overnight from his or her permanent place of residence (migrant worker) or

b) the individual was employed in agricultural work of a seasonal or temporary nature (less than 12 months out of the year or had a specific end date or timeframe that work would be completed) (seasonal worker).

Methods

Sampling

The sample is composed of three sub-groups of Latina women: SS_1 = Latina migrant or seasonal workers, SS_2 = Latina immigrants, and SS_3 = U.S. born Latinas. Both the Latina immigrant (SS_2) and U.S. born Latina (SS_3) subsamples include Latinas who were not employed as migrant or seasonal workers. Inclusion criteria for the study were: (1) female, (2) 18-45 years of age; (3) of Latino ethnic background; (4) English or Spanish as primary language; and (5) had an intimate partner or contact with a former intimate partner within the 12 months preceding the survey.

To study intimate partner violence in the Latino population, the research team secured access to the targeted population with the assistance of a large health care system made up of eight clinics in North San Diego County referred to in this report as HCS. Every patient or client of HCS provides information on ethnicity and occupation. For federal reporting purposes, HCS also categorizes clients as migrant or non-migrant. Using this information along with language and age, HCS provided us with a pool of 3,928 Latinas residing in North San Diego County who received health services between January 1, 2002 and March 31, 2002. It was unknown whether the women were immigrants or born in the United States and HCS's definition of migrant differed from our own. To compensate we used "proxy" cells to stratify the sample. We placed all women designated as migrant by the health clinics into the proxy migrant group (n=681); Spanish-speaking, non-migrant women were put into the proxy immigrant group (n=2,615); and English-speaking, non-migrant women (n=631) were put into the proxy U.S. born group. From the pilot study we learned that the majority of the

"misclassifications" would come from the migrant and U.S. born proxy groups (i.e., proxy U.S. born and proxy migrants would actually meet our criteria for immigrant). A system was developed for reintegrating the misclassified names back into their correctly classified "proxy" group to improve the accuracy of future recruitment draws.

Approximately each week, a proportion of names was selected for screening and recruitment from a randomly ordered list of the names in each of the three proxy groups. We drew a higher percentage of names from the U.S. born and migrant proxy groups because we expected to have the most misclassifications in these groups. Telephone contact was attempted with potential participants; if we were unable to reach individuals by phone, in person contact was attempted. During the recruitment call or in-person contact, a comprehensive screening was conducted to determine the group classification (i.e., migrant, immigrant, U.S. born) for the potential respondent and to ensure other study criteria were met. If the proxy classification matched the actual classification, the individual was asked to participate in the study and an interview was scheduled. If the status did not match the proxy classification, the individual was told that we would not be interviewing her at that time, but might be calling her in the near future for an interview. At the end of each week the names of the women who had been "misclassified" were placed in the correct "proxy" group. The list of names in each proxy group was then re-randomly ordered and the next proportion of names were selected for recruitment. If an individual appeared on the list who had already been screened and classified, the recruiters called the woman back and scheduled an interview.

During the fieldwork, a total of 1,528 names were released. All 631 proxy U.S. born and 681 proxy migrants were released and recruitment attempted. Two hundred and

sixteen names were released from the proxy immigrant group. We confirmed the group status of 1,312 (85.9 %) women. Of those whose classification we were able to confirm 58.2% (n=763) were misclassified. As expected, the majority of misclassifications came from the U.S. born and migrant proxy groups. Only 7.0% (n=41) of the 584 confirmed classifications from the migrant group were true migrants, 88.2% (n=515) fit the immigrant category, and 4.8% (n=28) the U.S. born category. From the U.S. born proxy group, 87.8% (n=554) classifications were confirmed. Of these, 62.8% (n=348) were U.S. born; 35.2% (n=195) were immigrants; and 2.0% (n=11) were migrants. From the immigrant proxy group, 174 (80.6%) women were confirmed. The majority, 92.0% (n=160), were immigrants; 6.3% (n=11) were migrants; and 2.0% (n=3) were U.S. born.

Of the 1,528 names released to recruiters, 627 (41.0%) cases were misclassifications that were subsequently not released. This left a potential of 901 women to interview. Overall the project completed 295 interviews: 118 immigrants, 50 migrants (5 U.S. born, 45 immigrants), and 127 U.S. born. Eighty-seven (9.7%) women could not be located; 172 (19.1%) women refused; 186 (22.9%) women did not meet study criteria, and 161 (19.8%) were eliminated as potential respondents because the U.S. born cell was full. If the 87 women who could not be located, the 161 women who were not eligible because the U.S. born cell was full, and the 186 who did not meet study criteria are excluded from the number of potential respondents, 295 (63.2%) of the remaining 467 cases were completed. Within each category the final status was as follows:

Table 1. Final Sample Status by Category

	Final Immigrants	Final Migrant	Final US Born	Final Unknown	Totals
Complete	118	50	127	N/A	295

Did not meet criteria	74	6	40	66	186
Refusal	52	7	49	64	172
Unable to locate	1	0	0	86	87
Cell full	0	0	161	N/A	161
Totals	245	63	377	216	901

The 172 refusals can be categorized into four main reasons for refusal: not interested in participating (n=57), too busy to participate (n=56), partner influenced non-participation (n=25), and those with whom we had 3 or more contacts without successful completion of the interview by the end of the project (n=34).

Pilot Study

A pilot study was conducted to test our sampling methodology and translation of measures. Twenty-eight women were interviewed: 15 immigrants, 7 migrants, and 6 U.S. born. The pilot testing enabled us to make necessary changes to our sampling methodology, test the length of the interview, gauge the effectiveness of the measures, and refine the Spanish translations of measures and supporting materials.

Pilot study sampling methodology. We randomly selected 180 names for recruitment from a list of 2,887 non-duplicated names of Latina women ages 18-45 that utilized services at HCS during November or December 2001. During the pilot, we used the migrant/non-migrant status the HCS assigned to approximate which category the women would belong to. We selected two-thirds (n=120) of the names from the non-migrant category assuming we had the best chance of identifying U.S. born and immigrant women from this category. The other third (n=60) were selected from those

labeled migrant. The list of names was randomly ordered and a proportion of names was selected weekly for recruitment.

A total of 113 (63%) of the 180 names were drawn for recruitment for the pilot study. Seventy-two (63.7%) of these names came from the non-migrant category and 41 (36.3%) from the migrant category. Recruitment was attempted with all of the women classified as English-speaking by the HCS (n=28, three of which were from the migrant category) and with 85 women classified as Spanish-speaking. We were able to locate and confirm migrant classification of 81 (71.7%) women: 28 (68.3%) from the migrant category and 53 (73.6%) from the non-migrant category. There were 12 confirmed migrants, 9 confirmed U.S. born and 60 confirmed immigrants. Of the 81 classified, 28 (34.6%) interviews were completed: seven migrant interviews, 15 immigrant interviews and 6 US. born interviews. Nine (11.1%) women refused to participate; four (4.9%) did not meet study criteria and 40 (49.4%) women were not pursued because the immigrant cell was full. Of those we were unable to classify (n=32), four were out of the area, one was in an institution, and 27 were not pursued because of time limitations on the pilot study.

Interviewing

Surveys were administered in a face-to-face format. Respondents chose the language they were most comfortable conversing in. Interviews were conducted in a location that was most convenient for the participant and that assured protection of privacy and safety. Usually the interview occurred in the participant's home and occasionally at one of the health clinics. Childcare was provided when necessary.

All interviewers were bicultural/bilingual and were trained by experienced research staff. Interviewers underwent an intensive initial training that included background information on intimate partner violence, methods of approaching respondents, procedures for ensuring protection of safety and confidentiality, standardized interviewing methods, crisis protocols and role-playing. Practice interviews were conducted with other interviewers and with research staff. Challenging interview situations were presented along with protocol for response and interviewers were assessed for their judgment and reaction. Before new interviewers became independent, they were required to conduct three successful "mock" interviews with experienced staff and their first three field interviews were "shadowed" by an experienced interviewer.

Human Subject Protocols

Procedures for the protection of human subjects were reviewed by the Institutional Review Board of California State University San Marcos. Prior to the initiation of any survey data collection, each research subject was informed in detail about the nature of the study, its sponsors, objectives and goals, probable duration of the study, and extent of respondent participation. Before beginning the interview, written informed consent was obtained with consent forms available in English and Spanish. Respondents were told that they could refuse to answer any questions, and could decline to participate or withdraw at any time without any adverse effect on their relationship with the HCS or other agencies.

Interviewers and other personnel were trained to be sensitive to the conditions faced by victims of intimate partner violence, particularly with regard to closely guarding the information and protecting women's safety. The research team was experienced in

taking appropriate precautions to minimize risk when recruiting and interviewing women who are victims of intimate partner violence. Respondents were assured that data would only be reported in aggregate form and would be stored in locked file cabinets with all identifiers removed. All computer files and databases were password protected, and only authorized research staff had access to project data.

Translation

All survey materials including informed consent forms were available in both Spanish and English. Interviews and supporting information were provided to respondents in the language of their choice. Fifty six percent chose to be interviewed in Spanish and 44% in English. Spanish translations of survey measures were taken from existing sources or were developed using established forward and back translation procedures when new translation was necessary.

Data Entry and Management

Data entry and management were overseen by the project data manager and included several components for ensuring the accountability, accuracy, and confidentiality of the data. The first was the tracking database, which served multiple functions. One was to maintain the three separate data tables based on migrant status and facilitate the integration of misclassified names, random ordering and release of new names for recruitment. It was also the main database used by the field coordinator to manage all day-to-day recruiting and interviewing operations. For data accountability, an initial check-off allowed the field coordinator to document that each interview measure and other paperwork were completed and submitted by the interviewer. A paper checklist was also initialed by the field coordinator and forwarded with the interview packet to the

data manager. Upon receiving the packet, the data manager verified all pieces of the interview were accounted for and that no responses were missing or unclear. The data manager then input basic data (respondent ID, migrant status, language, date of interview, interviewer ID#, and any comments pertinent to the case) into a Master SPSS file. On a weekly basis, the Master file was crosschecked with the Tracking database to verify that the data manager had received data for all completed interviews.

Weekly, each completed interview packet was separated into groups by measure for data entry into individual SPSS files. The majority of measures were double data entered for quality control. Fifteen percent from each of the remaining measures were randomly selected for double data entry. The individual SPSS measures files were crosschecked regularly with the Master file to verify all interview sections were data entered for each respondent.

Data were backed up nightly on a secure server and also downloaded on a zip disk weekly. To ensure confidentiality, access to all computer files were password-protected and all paper forms were placed in locked filing cabinets. Files that included identifying information were kept separate from data files, which were identifiable only by number. All back-up disks were stored in a locked filing cabinet.

Overview of Study Measures

The survey examined Latina women's experiences with various types of intimate partner violence and examined the relationship of intimate partner violence to cultural, socioeconomic, psychological, social problem, and childhood risk factors. The specific measures used in the study are listed in Table 2 below.

Table 2. Study Measures

Domain	Measure
Intimate Partner Violence	Revised Conflict Tactics Scales (CTS2; Straus, Hamby, Boney-McCoy, & Sugarman, 1995)
Cultural Factors	
Ethnic Identity	Multi-Group Ethnic Identity Measure (MEIM; Phinney, 1992)
Acculturation	Short Acculturation Scale (SAS; Marin et al., 1987)
	Pan-Acculturation Scale (PAN; Soriano, 1999)
Acculturative Stress	Acculturative Stress Scale (AS: Mena et al., 1987)
Bicultural Self-Efficacy	Bicultural Self-Efficacy Scale (BISES; Soriano & Bandura, 1994)
Childhood Risk Factors	
Parental Intimate Partner Violence	Conflict Tactics Scales – Adult Recall Version (CTS2-CA; Straus, Hamby, Finkelhor, Boney-McCoy, & Sugarman, 1995)
Child Maltreatment	Parent-Child Conflict Tactics Scales – Adult Recall Version (CTSPC-CA; Straus, Hamby, Finkelhor, Moore, & Runyan, 1995)
Parental Substance Use	Shuckit Family History Interview (Shuckit, 1984)
Mental Health Functioning	Brief Symptom Inventory (BSI; Derogatis, 1993)
	Short-Form Health Survey – Mental Health Scale (SF-12; Ware et al., 1996)
	Beck Scale for Suicide Ideation (BSS; Beck & Steer, 1991)
Physical Health Functioning	Short-Form Health Survey – Physical Health Scale (SF-12; Ware et al., 1996)
Substance Use	
Alcohol use Respondent Partner	Alcohol Use Disorders Identification Test (AUDIT; Saunders et al., 1993)
Drug use Respondent Partner	Drug Abuse Screening Test (DAST; Skinner, 1994)
Demographic Characteristics	Demographic questionnaire - Age, race/ethnicity, language, socioeconomic status variables (education, occupation, income), household characteristics

Description of Measures

Intimate partner violence

In keeping with recent recommendations by the Centers for Disease Control and Prevention (1999), we assessed the following categories of intimate partner violence: physical violence, sexual violence, psychological/emotional abuse, and injury related to violence. Women's experiences with these types of intimate partner violence were assessed with the Revised Conflict Tactics Scales (CTS2; Straus et al., 1995). The CTS2 contains the following scales: psychological aggression, physical assault, sexual coercion, and injury. Each scale has minor and severe subscales, reflecting the severity of the abusive or violent acts. For example, on the physical assault scale, the less severe subscale includes items inquiring about being pushed, shoved, grabbed, and slapped, whereas the severe subscale includes questions about being choked, punched, burned, beaten up, and threatened with a knife or gun. Response categories range from 0 (never) to 6 (more than 20 times), indicating the frequency of occurrence of the abusive or violent acts in the preceding 12 months. For events that did not occur in the previous 12 months, the respondent was asked to indicate if they ever happened in an intimate relationship.

For each scale and subscale, prevalence scores reflecting lifetime and past year experiences can be derived. The prevalence variables are dichotomous, with a score of 1 assigned if one or more of the acts in the scale (or subscale) occurred and a score of 0 assigned if none of the acts occurred. Good internal consistency has been reported for the

CTS2 scales, with reliability coefficients ranging from .79 to .95 (Straus, Hamby, Boney-McCoy, & Sugarman, 1996).

Cultural factors

Ethnic identity. Ethnic identity was measured using the Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992), a widely used 14-item scale that covers self-identification (ethnic label) and ethnicity, ethnic behaviors and practices, affirmation and belonging, and ethnic identity achievement. In our study, the alpha coefficient for the MEIM was .73.

Acculturation. Acculturation was measured with the Short Acculturation Scale (SAS; Marin et al., 1987) and the Pan-Acculturation Scale (PAN; Soriano, 1999). The Short Acculturation Scale is a 12 item self report acculturation measure developed for Latino populations. It includes items inquiring about language use, preferences regarding media, and social relationships. The scale has been found to correlate highly with respondents' generation, length of residence in the United States, age at arrival, and ethnic self-identification. Acceptable reliability and validity have been reported (Marin et al., 1987). In the current study, alpha reliability was .95.

The PAN is comprised of six subscales measuring language use, identity, social support, cultural practices, generational status, and cultural values and beliefs. Responses to the 22 items of the scale are used to measure affinity to one's culture of origin and to American culture. It can also be used to classify respondents as bicultural, American dominant, culture of origin dominant, and marginalized (affinity to neither). In the present sample, alpha reliability was .91. The scale has been validated using a Mexican

American subsample, which reflected a correlation of .65 with Mendoza's Cultural Lifestyles Inventory.

Acculturative stress. Acculturative stress has been discussed extensively in the area of Latino health (Vega & Rumbaut, 1991; Zimmerman, Vega, & Gil, 1994). In the present study, Mena et al.'s (1987) 24-item acculturative stress scale was used (alpha = .87 in the current sample). This instrument measures strains due to contact with a host society in the areas of language problems, perceived discrimination, and perceived cultural incompatibilities.

Bicultural self-efficacy. Bicultural self-efficacy was measured using the Bicultural Self-Efficacy Scale (BISES; Soriano & Bandura, 1994). The BISES is a 13 item scale that measures the respondent's efficacy in responding to personal and social challenges related to their affinity or involvement with members of the dominant (host) society. Essentially, it measures efficacious responses to challenges posed by members of their culture of origin and dominant culture within the life domains of school or work, peers, family, community, and society. The alpha reliability coefficient was .82 in this study.

Childhood risk factors

Parent/caregiver intimate partner violence. Information on study participants' childhood exposure to violence between parents or caregivers was obtained with the Conflict Tactics Scales – Adult Recall Version (CTS2-CA; Straus, Hamby, Finkelhor, Boney-McCoy, & Sugarman, 1995). For the analyses described in this report, the physical assault and injury scales of the CTS2-CA were used. Thus, parent/caregiver intimate partner violence was considered present if the respondent reported that sometime

during childhood either parent (or other significant caregiver such as a stepparent) had engaged in one or more acts of physical assault against the other parent (e.g, pushing, shoving, grabbing, beating up, burning, using a weapon), had experienced a physical injury, or used medical services related to a violent incident.

Child maltreatment. The Parent-Child Conflict Tactics Scales – Adult Recall Version (CTSPC-CA; Straus, Hamby, Finkelhor, Moore, & Runyan, 1995) was used to assess childhood history of maltreatment. The CTSPC-CA includes scales that assess experiences with physical assault, sexual abuse, and neglect. Separate items inquire about the commission of each of the abusive acts by the respondent's mother (or maternal caregiver) and by the father (or paternal caregiver). (Note: The sexual abuse questions are an exception in that no reference is made to the identity of the person responsible for the abuse.) For the analyses described herein, separate dichotomous scores were derived for presence of physical abuse, sexual abuse, and neglect with a score of 0 indicating that none of the abusive acts were committed during the respondent's childhood by either her mother (or maternal caregiver) or father (or paternal caregiver) and a score of 1 indicating that one or more acts were committed by either the mother (or maternal caregiver) or father (or paternal caregiver).

The physical assault scale of the CTSPC-CA contains subscales organized according to the severity of the abusive acts, specifically minor, severe, and very severe. For this study, childhood physical abuse was considered present if the respondent reported she had experienced one or more of the abusive acts contained in the severe and very severe assault subscales. These items include being thrown to the ground, hit with a fist, beat up, burned or scalded, and threatened with a knife or gun. The sexual abuse

scale inquires about unwanted sexual touch and forced sexual contact with an adult (i.e., family member or non-family member) or older child experienced prior to the age of 18. Childhood sexual abuse was considered present if the respondent reported that any abusive acts occurred on one or more occasions during childhood. The neglect scale consists of items measuring parent or caregiver failure to meet the respondent's basic needs during childhood such as not providing adequate food or supervision. Childhood neglect was considered present if the respondent indicated she had experienced any of the neglectful acts assessed by the scale.

Parental/caregiver substance use. The Shuckit Family History Interview (Shuckit, 1984) was used to obtain information on respondents' family history of alcohol and drug problems. In this study, a substance use problem was defined as the occurrence of one or more of the following significant alcohol or drug related problems: marital separation or divorce; job loss or layoff; two or more arrests; harm to physical health; inability to carry out daily responsibilities; receipt of treatment for substance use problems; and intravenous drug use. Parental/caregiver substance use problems were considered present if the respondent reported that either a biological parent or other significant caregiver (e.g., step parent, adoptive parent) experienced one or more of these problems during the respondent's childhood.

Mental health functioning

Participants' mental health functioning was assessed with the Global Severity Index of the Brief Symptom Inventory (Derogatis, 1993) and the mental health scale of the Short-Form Health Survey (SF-12; Ware, Phillips, Yody, & Adamczyk, 1996). The Global Severity Index reflects overall psychological distress with higher scores indicative

of greater distress (alpha = .96 in the current sample). The SF-12 mental health scale assesses general mental health functioning and limitations due to mental health problems, with higher standard scores reflective of better functioning. Prior research has supported the reliability and validity of both the Brief Symptom Inventory (Derogatis, 1993) and SF-12 (Ware et al., 1996).

An item from the Beck Scale for Suicide Ideation (BSS; Beck & Steer, 1991) was used to assess history of suicide attempts. Respondents reported whether they had ever attempted suicide at some time in their lives.

Physical health functioning

Physical functioning was assessed with the physical health scale of the Short-Form Health Survey (SF-12; Ware, Phillips, Yody, & Adamczyk, 1996). This scale includes questions about physical functioning, general health, experiences with bodily pain, and limitations due to physical health problems. Acceptable test-retest reliability and validity have been reported for the SF-12 physical health scale (Ware et al., 1996).

Substance use – Respondent and partner

Respondent alcohol use problems were assessed with the Alcohol Use Disorders Identification Test (AUDIT; Saunders et al., 1993). The AUDIT is a 10 item screening questionnaire which obtains information on the quantity and frequency of alcohol use, major life problems caused by alcohol use (e.g., occurrence of injuries), and alcohol dependence symptoms (e.g, need for alcohol after awakening to avoid or relieve withdrawal symptoms) experienced in the preceding 12 months. The total AUDIT score ranges from 0 to 40 (alpha = .88 in the current sample); a score of 8 or greater has been derived as a cutpoint indicating problems with alcohol use.

Respondent drug use was assessed with the Drug Abuse Screening Test (DAST; Skinner, 1994). The DAST consists of 10 questions that assess the use of drugs, physical and medical complications, and emotional and personal problems resulting from drug use in the preceding 12 months. The total score, which has a range of 0 to 10, is obtained by summing across all item scores (alpha = .71 in the current sample). Acceptable psychometric properties have been reported for both the AUDIT (Saunders et al., 1993) and DAST (Gavin et al., 1989; Skinner, 1994).

Modified versions of the AUDIT and DAST were used to obtain participant reports on their current or most recent partners' alcohol and drug use in the preceding 12 months. The questions in both measures were reworded in order to ask women about their partners' use of substances and the occurrence of substance related problems. The partner versions of the AUDIT and DAST followed the same scoring rules as the original measures. For the purposes of the analyses contained in this report, partner substance use problems were considered present if a total score of 8 or greater was obtained on the AUDIT and/or if a total score of 6 or greater was obtained on the DAST. In the present study, alpha reliability was .97 for the partner version of the AUDIT and .87 for the partner version of the DAST.

Results

Sample Characteristics

Sample characteristics are presented in Table 3. Demographic information is provided for the overall sample and for the three groups of participants (i.e., US born, immigrant, migrant/seasonal). All 295 study participants were of Latino or Hispanic origin, with the majority (92.2%) Mexican or Mexican American. Fifty three percent of

the women were born in Mexico, 44.7% were born in the United States, and 2.0% were born in other countries. The mean age of the participants was 27.8 years (sd = 7.13). Slightly more than half (i.e., 54.9%) had less than a high school diploma or equivalent, and only 30.8% were employed full-time. Thirty two percent were living at or below the federal poverty threshold.

Demographic characteristics of the intimate partners of the study participants are presented in Table 4. This information is provided for the participants' current partners or for their most recent partners if they were not in an intimate relationship at the time of the interview. For 51.9% of the women, the partner they reported on was their spouse, for 29.2%, it was a cohabitant, for 12.5%, it was someone they were seriously dating, and for 6.4%, it was someone they were casually dating. The mean age of the partners was 30.15 years (sd = 7.45), and the majority (i.e., 84.6%) were Latino. While seventy nine percent were employed full-time, more than half (i.e., 60.3%) had less than a high school diploma or equivalent.

Lifetime Rates of Intimate Partner Violence

Lifetime rates of psychological, physical, and sexual intimate partner violence are presented in Table 5, and rates of victimization by specific acts of abuse and violence are provided in Tables 7-9. Lifetime intimate partner violence was considered present if violence was reported in the past year or any prior period. Rates are reported for the overall sample and for the three groups of study participants (US born, immigrant, migrant/seasonal). To examine differences between groups, 3 (US born, immigrant, migrant) X 2 (presence vs. absence of type of intimate partner violence) chi-square analyses were conducted. Where there were significant differences ($p < 0.05$), follow-up

pairwise chi-square tests were carried out with a Bonferroni correction applied to each set of pairwise analyses (i.e., the acceptable alpha level was .05/3 = .017).

Lifetime physical assault – overall sample. As shown in the first column of Table 5, 33.9% of the women in the sample reported that they experienced physical violence perpetrated by an intimate partner at some time in their life, with 32.9% reporting at least one incident of less severe assault (such as being pushed, grabbed, or slapped) and 17.8% reporting at least one incident of severe physical assault (such as being punched, kicked, or beat up). Lifetime rates of specific types of less severe physical assault ranged from 12.0% of the sample being slapped to 21.6% being grabbed, pushed, or shoved. Rates of experiencing severe acts of physical violence ranged from 0.7% being burned or scalded to 12.7% being slammed against a wall.

Lifetime physical assault – subgroups. In the U.S. born group, 48.4% of the women reported victimization by physical violence, including 47.6% of the women reporting experiences with less severe physical assault and 20.6% reporting experiences with severe physical assault. Among the immigrant women, 22.2% reported physical assault in their lifetime, with 22.2% reporting less severe physical assault and 15.4% reporting severe physical assault. Some 24.5% of the women in the migrant/seasonal worker group experienced physical violence, including 20.4% reporting less severe assault and 16.3% reporting severe physical assault. There were significant group differences for any physical assault and for less severe physical assault but not for severe physical assault. Pairwise chi-square tests indicated that the US born group experienced a significantly higher rate of less severe physical assault and any physical assault compared to the immigrant and migrant groups.

Lifetime sexual coercion – overall sample. The study found that 20.9% of the sample experienced sexual coercion by an intimate partner in their lifetime, with 19.9%

reporting a least one incident of less severe sexual coercion (such as a partner insisting on sex without a condom) and 6.5% reporting at least one incident of severe sexual coercion (such as a partner using physical force or a weapon to coerce sexual intercourse). Rates of experiencing specific acts of less severe sexual coercion ranged from 6.8% of the sample reporting that a partner had insisted on oral or anal sex to 16.4% indicating that a partner had insisted on sex without using physical force. Rates of experiencing more severe acts of sexual coercion ranged from 2.7% of women reporting that a partner had used threats to coerce oral or anal sex to 5.5% indicating that a partner had used physical force or a weapon to coerce sexual intercourse.

Lifetime sexual coercion – subgroups. Lifetime rates of any sexual coercion were highest in the U.S. born group. Some 29.4% of the women in this group reported sexual coercion by an intimate partner whereas 20.4% of the migrant women and 12.0% of the immigrant women reported similar experiences. There was a significant difference in the rates of any sexual coercion, with U.S. born women more likely to report these experiences than immigrant women. Rates of experiencing less severe acts of sexual coercion were also highest in the U.S. born group; 27.8% of the women in the U.S. born group, 18.4% of the women in the migrant group, and 12.0% of the women in the immigrant group reported experiences with less severe sexual coercion. The women in the U.S. born group were significantly more likely to report these experience than women in the immigrant group. Rates of more severe sexual coercion were 8.2% in the migrant group, 6.3% in the U.S. born group, and 6.0% in the immigrant group. These rates were not significantly different.

Lifetime psychological aggression – overall sample. The study results indicated that the majority of women in the sample experienced psychological aggression in an intimate relationship at some time in their life. In the overall sample, 82.5% reported experiencing some form of psychological aggression, with 82.2% experiencing less severe and 33.9% experiencing severe psychological aggression by an intimate partner. The most frequently reported acts of less severe psychological aggression were being shouted or yelled at, followed by being insulted or sworn at. With regard to severe psychological aggression, being called "fat" or "ugly" and having a partner destroy one's possessions were reported most frequently.

Lifetime psychological aggression – subgroups. The lifetime rates of any psychological aggression experienced in an intimate relationship were highest in the U.S. born group (92.9%), followed by the migrant (79.6%) and immigrant (72.6%) groups. The women in the U.S. born group were significantly more likely to report any psychological aggression than the women in immigrant and migrant groups. Similarly, the women in the U.S. born group had a higher rate of experiencing less severe psychological aggression and were significantly more likely to report these experiences compared to immigrant women. The women in the U.S. born group were also significantly more likely to report experiences with severe forms of psychological aggression than women in the immigrant group. However, they did not differ from the migrant women in their reports of severe psychological aggression, nor did the immigrant and migrant groups differ.

Past Year Rates of Intimate Partner Violence

Rates of psychological, physical, and sexual intimate partner violence experienced in the year preceding the survey are presented in Table 6, and rates of victimization by specific acts of violence are provided in Tables 7-9. Rates are reported for the overall sample and for the three groups of study participants (US born, immigrant, migrant/seasonal). To examine differences between groups, 3 (US born, immigrant, migrant) X 2 (presence vs. absence of type of intimate partner violence) chi-square analyses were conducted. Where there were significant differences ($p < 0.05$), follow-up pairwise chi-square tests were carried out with a Bonferroni correction applied to each set of pairwise analyses (i.e., the acceptable alpha level was .05/3 = .017).

Past year physical assault – overall sample. Some 18.5% of the sample reported that they were victims of physical assault perpetrated by an intimate partner in the year prior to the interview, with 18.2% reporting at least one incident of less severe assault (e.g., being pushed, grabbed, or slapped) and 7.5% reporting at least one incident of severe physical assault (e.g., being punched, kicked, or beat up). Rates of victimization by less severe types of physical assault ranged from 3.4% of the women in the sample being slapped to 10.3% being grabbed. Reports of severe acts of physical violence ranged from 0.3% being burned or scaled or experiencing a knife or gun being used in a violent incident, to 4.8% being slammed against a wall.

Past year physical assault – subgroups. Past year rates of any physical assault by an intimate partner were highest among the U.S born women. The women in this group had a significantly higher rate of any past year physical assault (25.4%) compared to women in the immigrant group (12.8%). However, the U.S. born group did not differ from migrant group, nor was there a significant difference between the immigrant and

migrant groups. Comparisons among the three groups did not reveal significant differences in reports of less severe physical assault (e.g., being pushed, shoved, slapped). Similarly, the groups did not differ in victimization by acts of severe physical violence (e.g., being punched, choked, beat up).

Past year sexual coercion – overall sample. As shown in Table 6, 14.4% of the sample reported experiences with sexual coercion by an intimate partner in the preceding year. The rate of less severe sexual coercion was 13.4% (e.g., partner insisting on sex without a condom) and the rate of severe sexual coercion was 1.7% (e.g., partner using physical force or a weapon to coerce sexual intercourse). Rates of experiencing specific types of less severe sexual coercion ranged from 3.4% reporting that a partner insisted on oral or anal sex without using physical force to 10.3% reporting that a partner insisted on sexual intercourse without using physical force. Reports of experiencing more severe acts of sexual coercion ranged from 0.0% indicating that a partner had used threats to force oral or anal sex to 1.4% reporting that a partner had used physical force or a weapon to coerce sexual intercourse.

Past year sexual coercion – subgroups. The study found that 21.4% of the women in the U.S. born group, 18.4% of the women in the migrant group, and 5.1% of the women in the immigrant group experienced some type of sexual coercion in the preceding year. The rate of sexual coercion was significantly higher in the U.S. born group compared to the immigrant group as well as in the migrant group compared to the immigrant group. The U.S. born and migrant groups did not differ.

Rates of experiencing less severe types of sexual coercion were highest in the U.S. born group (20.6%), followed by the migrant group (14.3%) and immigrant group (5.1%). The rate of less severe sexual coercion was significantly higher among the U.S. born women compared to the immigrant women, but was not significantly higher relative to the women in the migrant group. Further, there was no significant difference between the immigrant and migrant groups.

The past year rate of more severe sexual coercion was 6.1% in the migrant group and 1.6% in the U.S born group. None of the immigrant women indicated that they had experienced any of the severe forms of sexual coercion. Comparisons among the groups revealed a significant difference between the migrant and immigrant women in their reports of severe sexual coercion; however, this finding should be interpreted with caution given the small sample size.

Past year psychological aggression – overall sample. In the overall sample, 72.6% reported some form of psychological aggression by an intimate partner in the preceding year, with 71.6% experiencing at least one incident of less severe psychological aggression and 21.6% experiencing at least one incident involving more severe psychological abuse. Rates of exposure to less severe psychological aggression ranged from 16.8% indicating that a partner said something to spite them to 53.8% reporting that a partner shouted or yelled at them. Rates of experiencing more severe psychological aggression ranged from 3.1% reporting that a partner accused them of "being a lousy lover" to 14.7% reporting that a partner had called them "fat" or "ugly".

Past year psychological aggression – subgroups. In the U.S. born group, 84.1% of the women reported psychological aggression by an intimate partner in the preceding year, with 81.7% reporting experiences with less severe psychological aggression and 24.6% indicating they had experienced severe psychological aggression. Among the immigrant women, 60.7% reported psychological aggression, with 60.7% reporting less severe and 15.4% reporting experiences with severe psychological aggression. In the migrant group, 71.4% reported exposure to psychological aggression including 71.4% indicating they had experienced less severe psychological aggression and 28.6%

reporting experiences with severe psychological aggression. There were significant group differences for any psychological aggression and for less severe but not for severe psychological aggression. Pairwise chi-square tests indicated that the U.S. born group experienced a significantly higher rate of less severe psychological aggression and any psychological aggression compared to the immigrant group. There were no significant differences between the U.S born and migrant groups, and between the immigrant and migrant groups in the rates of any psychological aggression and less severe psychological aggression.

Lifetime Rates of Injury and Receipt of Medical Care By Victims of Physical Assault

Lifetime injury - overall sample. The lifetime rates of physical injury and receipt of medical care reported by women victimized by physical assault are presented in Table 10. As shown in the first column, 50.5% of the women in the overall sample who experienced physical assault at some time in their life also experienced a physical injury, reported need for medical care, or reported receipt of medical care. Most frequently reported were relatively minor injuries such as sprains, bruises, and cuts (41.4%). Reports of more severe injuries, such as broken bones (5.1%) and passing out from being hit on the head (6.1%), were less common. Approximately one in five women reported that they needed medical care at some point but did not receive it, and only 14.1% reported the use of medical care on at least one occasion because of a violent incident with their partner.

Lifetime injury – subgroups. Some 39.3% of women in the U.S. born group who were victims of physical assault in their lifetime reported injury, or indicated the need for or use of medical care. In this group, 26.2% sustained sprains, bruises, or cuts inflicted

by an intimate partner and 32.8% had complaints of pain following a violent incident with their partner. As with the overall sample, broken bones (3.3%) and passing out from a blow to the head (6.6%) were less frequently reported. With regard to use of medical services, 16.4% perceived that they needed medical care on at least one occasion but had not received it, and 14.8% indicated they had received medical care at least once.

Among the victims of physical assault in the immigrant group, it is noteworthy that the majority (73.1%) reported some type of injury or indicated the need for or use of medical care because of partner inflicted physical injury. Almost 70% reported that they sustained sprains, bruises, or minor cuts and 42.3% had complaints of pain. Relatively few reported more serious injuries such as broken bones (7.7%). Slightly less than one-quarter felt they required medical care following a violent incident but did not receive assistance, and 15.4% reported receipt of medical care on at least one occasion.

Of the victims of physical assault in the migrant group, 58.3% indicated that they had experienced an injury, needed medical care, or used medical care. Slightly more than 50% of these women reported minor injuries, such as sprains, bruises, and cuts, but reports of more serious injuries were infrequent. While almost half of the women perceived the need for medical assistance in relation to a violent incident with their partner, the receipt of medical care under these circumstances was rare.

Past Year Rates of Injury and Receipt of Medical Care By Victims of Physical Assault

Past year injury - overall sample. The past year rates of physical injury and use of medical care by women who experienced physical assault are presented in Table 11. In the overall sample, 35.2% of the women who were victims of physical assault experienced some type of injury or reported either the need for or use of medical care

related to partner violence. The most frequently reported types of injuries were sprains, bruises, and minor cuts (27.8%), followed by broken bones (3.7%), and passing out due to a blow to the head (1.9%).

With regard to use of medical care, 11.1% perceived that they needed services at some time in the preceding year as a result of intimate partner violence but did not receive it, while only 1.9% reported they had received medical care at least once in the past year related to their victimization.

Past year injury – subgroups. In the U.S. born group, 28.1% of the victims of physical assault in the preceding year reported that they experienced an injury, had need for medical care, or received medical care due to violence perpetrated by an intimate partner. In the immigrant group, the rate was 33.3%, and in the migrant group, 71.4%. Across the three groups, minor injuries, such as sprains, bruises, and cuts, were most commonly reported, and few women experienced more severe injuries. Use of medical services related to victimization was also rare.

Background and Sociodemographic Factors Associated with Intimate Partner Violence

The associations of intimate partner violence with background and sociodemographic characteristics of the respondent and her intimate partner were examined with multiple logistic regression (see Table 12). In this analysis, the outcome variable was past year intimate partner violence victimization, which was considered present if a respondent reported any physical assault, sexual coercion or severe psychological aggression by an intimate partner in the year preceding the survey. In the overall sample, 97(33.2%) women were classified as experiencing intimate partner violence based on these criteria.

Predictors included in the logistic regression model were: respondent age (18-24, 25-31, 32-38, 39-45), respondent marital status (never married, divorced or separated, living with partner, married), poverty status of household relative to the federal poverty threshold (at or below poverty level, above poverty level), number of children in household (0, 1-2, 3 or more), partner education (less than high school, high school or GED, at least some post-secondary education), partner substance use problem (yes/no), and group (U.S. born, immigrant, migrant). Partner substance use problems were coded as present if the recommended cutpoint was met or exceeded on either the partner version of the Alcohol Use Disorders Identification Test or the Drug Abuse Screening Test. The variables included in the logistic regression model were selected a priori based on theoretical considerations and previous research. Diagnostic procedures did not detect problems with collinearity among the predictor variables.

Prior to conducting the final logistic regression analysis, we checked for interactions between the dummy variables for group (i.e., U.S. born vs. immigrant, migrant vs. immigrant) and each of the other predictor variables. Separate logistic regression analyses were run in which the group dummy variables, other predictor variable, and group dummy variables X predictor interactions were entered with the outcome variable past year intimate partner violence. There were no significant group X predictor interactions; therefore, no interaction terms were included in the final logistic regression model. All variables were entered simultaneously in the final model. The Hosmer and Lemeshow statistic suggested that the model had a reasonable fit to the data.

Table 12 presents the odds ratios and 95% confidence intervals for the sociodemographic and background variables. Only having a partner with substance use

problems was associated with intimate partner violence. The odds of reporting intimate partner violence were 2.395 times higher (95% confidence interval = 1.205, 4.757) among women whose partners had substance use problems compared to women whose partners did not have such problems. No associations were found for respondent age, marital status, poverty status of household, number of children in household, partner education, and group.

Childhood Risk Factors Associated With Intimate Partner Violence

Multiple logistic regression was used to examine the associations of past year intimate partner violence with childhood risk factors (see Table 13). As in the preceding analysis, the outcome variable was intimate partner violence victimization, which was considered present if a respondent reported any physical assault, sexual coercion, or severe psychological aggression by an intimate partner in the preceding year.

Predictor variables included: parent/caregiver substance use problem (yes/no), parental/caregiver intimate partner violence (yes/no), physical abuse as a minor (yes/no), sexual abuse as a minor (yes/no), and neglect as a minor (yes/no). Control variables, which were selected a priori, were respondent age (18-24, 25-31, 32-38, 39-45), education (less than high school, high school or GED, at least some post-secondary education), and group (U.S. born, immigrant, migrant). Diagnostic procedures did not indicate problems with collinearity among the predictor and control variables.

As described above, prior to conducting the final logistic regression analysis, we checked for interactions between each of the predictor variables and the group dummy variables (U.S. born vs. immigrant, migrant vs. immigrant). Separate logistic regression analyses were run in which the group dummy variables, predictor variables, and group X

predictor interactions were entered with the outcome variable past year intimate partner violence. There were no significant group X predictor interactions; therefore, no interaction terms were included in the final logistic regression model. All variables were entered simultaneously. The Hosmer and Lemeshow statistic suggested that the model had a reasonable fit to the data.

Table 13 presents the odds ratios and 95% confidence intervals for the childhood risk and control variables. The results indicated that exposure to parental/caregiver intimate partner violence was associated with adult victimization by an intimate partner. The odds of reporting intimate partner violence were 2.194 times higher (95% confidence interval = 1.094, 4.397) among women who reported violence between their parents or caregivers compared to women who did not report such experiences. Being a victim of sexual abuse as a minor was also associated with victimization by a partner. The odds of reporting intimate partner violence were 3.537 times higher (95% confidence interval = 1.612, 7.762) among women who reported sexual abuse compared to women who did not report such victimization. No associations were found for parent/caregiver substance use problems, physical abuse as a minor, neglect as a minor, respondent age, education, or group (U.S. born, immigrant, migrant).

Intimate Partner Violence, Mental Health, Physical Health, and Substance Use Problems

The relationships between intimate partner violence victimization in the past year, mental health, and physical health functioning were assessed with multiple linear and logistic regression. In these analyses, intimate partner violence was coded as being present if a respondent reported any physical assault, sexual coercion or severe psychological aggression by an intimate partner in the year preceding the survey.

Mental health

Mental health functioning was assessed with the Global Severity Index of the Brief Symptom Inventory and the mental health scale of the Short-Form Health Survey. The Global Severity Index reflects overall psychological distress with higher scores indicative of greater distress. The SF-12 mental health scale assesses general mental health functioning and limitations due to mental health problems, with higher standard scores reflective of better functioning.

Multiple linear regression analyses predicting Global Severity Index and SF-12 mental health scores were conducted. The following variables were simultaneously entered in each respective model: age (years), education (less than high school, high school or GED, at least some post-secondary education), marital status (living with partner, divorced or separated, never married, married), group (U.S. born vs. immigrant, migrant vs. immigrant), and past year intimate partner violence. Interaction terms for intimate partner violence victimization and group status (U.S. born, migrant, immigrant) were initially entered but were not significant, and therefore not retained in the final models. Diagnostic procedures did not detect problems with multi-collinearity.

The study also assessed women's history of suicide attempts with an item from the Beck Scale for Suicide Ideation. History of suicide attempts was coded as present or absent. Multiple logistic regression predicting women's history of suicide attempts was conducted. The predictor variable in the logistic regression model was intimate partner violence victimization (physical, sexual, or severe psychological) in the past year (yes/no). Control variables, which were selected a priori, were respondent age (18-24, 25-31, 32-38, 39-45), education (less than high school, high school or GED, at least some

post-secondary education), marital status (living with partner, divorced or separated, never married, married) and group (U.S. born, migrant, immigrant). All variables were simultaneously entered in the model.

BSI Global Severity Index. The means and standard deviations for the Global Severity Index for the overall sample and for women who did and did not report past year intimate partner violence are presented in Table 14. In multiple regression analysis (see Table 15), education was a significant predictor of Global Severity Index scores, with women who had less than high school education more likely to have higher GSI scores (indicative of greater psychological distress) compared to individuals with at least some post-high school education (standardized $\beta = .160$, $p < 0.05$). Marital status was also a significant predictor with women who were divorced or separated (standardized $\beta = .133$, $p < 0.05$) and women who were never married (standardized $\beta = .199$, $p < 0.01$) more likely to have higher GSI scores compared to women who were married. Age and group status were not significant predictors of Global Severity Index scores. Intimate partner violence victimization was significantly related to Global Severity Index scores (standardized $\beta = .272$, $p < 0.0001$), after controlling for demographic and group status variables, with women who experienced intimate partner violence more likely to have higher scores (indicating greater psychological distress).

SF-12 mental health scale. The means and standard deviations for the SF-12 mental health standard scores are provided in Table 14, and the multiple linear regression results are presented in Table 16. Similar to the results for the Global Severity Index, marital status was a significant predictor of SF-12 mental health standard scores in the multiple regression analysis, with women who were divorced or separated (standardized

$\beta = -.211$, $p < 0.0001$) and women who were never married (standardized $\beta = -.218$, $p = 0.001$) more likely to have lower SF-12 mental health scores (indicating poorer functioning) than women who were married. Age, education, and group status were not significantly associated with SF-12 mental health scores. Past year intimate partner violence was a significant predictor (standardized $\beta = -.241$, $p < 0.0001$). Women who reported victimization were more likely to have lower SF-12 mental health standard scores reflecting poorer functioning.

History of suicide attempts. In the overall sample, 15.6% of the women reported one or more suicide attempts (see Table 14). Almost 17% of women who experienced intimate partner violence in the past year and 15% of the women who did not experience violence had a history of suicide attempts. Table 17 presents the odds ratios and 95% confidence intervals for the logistic regression analysis predicting history of suicide attempts. Age, education, and group status were not significantly associated with women's suicide attempts. The odds of reporting one or more suicide attempts was 3.401 times higher (95% confidence interval = 1.427, 8.107) among women who were never married compared to married women. Being a victim of partner violence in the past year was not associated with a history of attempting suicide.

Physical health

Physical health functioning was assessed with the physical health scale of the Short-Form Health Survey. The SF-12 physical health scale assesses physical health functioning and limitations due to physical health problems, with higher standard scores indicative of better functioning.

A multiple linear regression analysis predicting SF-12 physical health standard scores was conducted. The following variables were simultaneously entered in the model: age (years), education (less than high school, high school or GED, at least some post-secondary education), marital status (living with partner, divorced or separated, never married, married), group (U.S. born, migrant, immigrant), and past year intimate partner violence. Interaction terms for intimate partner violence victimization and group (U.S. born vs immigrant, migrant vs. immigrant) were initially entered but were not significant and therefore not retained in the final model. Diagnostic procedures did not suggest problems with multi-collinearity.

As reported in Table 18, results of the regression analysis showed that age was a significant predictor of SF-12 physical health standard scores with increasing age associated with lower scores (standardized $\beta = -.167$, $p < 0.05$). Education, marital status, group and partner violence victimization were not significantly associated with physical health scores.

Substance use

Women's alcohol use was assessed with the Alcohol Use Disorders Identification Test and drug use with the Drug Abuse Screening Test. Relatively few women in the sample were classified as exhibiting problematic drinking. As shown in Table 14, only 3.4% of the sample had an AUDIT score that met or exceed the recommended cutpoint. The survey also obtained information on the quantity and frequency of alcohol use, and this information was used to categorize levels of use based on a slightly modified version of the classification scheme developed by Kaufman Kantor and Straus (1987). About 52% of the sample were classified as "abstainers", 30.8% were classified as exhibiting

"low" alcohol use, 11.8% as exhibiting "moderate" use, and 5.9% as exhibiting "high/binge" use. Similarly, very few women reported problematic drug use. Based on categories developed for the DAST, 92.1% of the sample reported no problems with drug use, 4.5% were classified as having "low" drug use, 2.7% were classified as having "moderate" use, 0.7% as having 'substantial" use, and none were classified as having "severe" use.

It should be noted that regression models predicting women's alcohol and drug use could not be fit. Estimates were unstable due to the small number of cases reporting problematic alcohol and drug use.

Cultural Factors

An important objective of this study was to assess the relationship between IPV and various cultural factors. Several cultural measures were used to assess the importance of culture. These were: (1) acculturation (two measures of acculturation (PAN and the SAS), (2) acculturative stress (AS), (3) ethnic identity (MEIM), and (4) bicultural self-efficacy (BISES).

Acculturation The Short Acculturation Scale--SAS (Marin et al., 1987) was used, along with another more recently established measure called the Pan Acculturation Scale (Soriano & Hough, 2000). The SAS is an established twelve item scale measuring acculturation on a single dimension ranging from high acculturation (high participation in American culture) to low acculturation (high participation in one's culture of origin). Like most other acculturation scales (e.g., ARSMA (Cuellar, et al., 1994)), the SAS relies primarily on assessing acculturation using language use as a proxy for cultural participation in one of two cultures--American and in one's culture of origin. The Pan

Acculturation Scale (Pan) was also used because it measures acculturation multidimensionally. The Pan is a 23-item multidimensional scale with scoring that allows respondents to be simultaneously affiliated to both their culture of origin and to American culture (or to each independently or to none at all). It also relies less on language use and more on an assessing respondent participation in various cultural practices related to one's culture of origin and to American culture. Items assess cultural participation within each of the following domains: (1) Language use, (2) values and beliefs, (3) social environment, (4) ethnic identity, (5) cultural traditions and practices. For each of the 23 items, such as "The traditions I follow are from…", respondents indicated to which group such characteristic are reflective of: (1) "My Cultural Group", (2) "American Culture", (3) "Both" or (4) "Neither". The Pan allows for the placement of individuals into one of four acculturation typologies using the criteria of indicating their 23 cultural characteristics being tied to any response category (own culture of origin, American culture, both or neither). Therefore the four typologies were: (1) Adhered to Own Culture of Origin, (2) American Oriented, (3) Bicultural, and (4) Marginal. The scale also allows each respondent to have ordinal level scores for each of four acculturation dimension based on the number of times each orientation was selected for any of the 23 cultural characteristics.

In this report the dichotomous variable Any Intimate Partner Violence (AIPV) was used to assess the relationship between intimate partner violence and cultural factors. Any respondent indicating affirmative experience with any form of intimate partner violence (physical victimization) over the past year using the Conflict Tactic Scale (CTS) were assigned a 1 and those without such experience were assigned a zero or "0". Much

of the following analysis on culture collapses all three stratified groups of Latinas (migrant, immigrant and U.S. born), because of small sample sizes within each group. The SAS was used to examine the relationship between AIPV and overall acculturation levels. The correlation between SAS and AIPV was found to be statistically significant ($r = .143$, $p<.02$), suggesting that higher acculturation levels were associated with increases in experiences with AIPV among respondents.

Using the PAN, because of the cultural nature of most respondents (most being adhered more closely to their culture of origin) very few respondents could be categorized into American or "marginalized" categories. Fifty six percent met the criteria for inclusion into the "Own Culture of Origin Oriented", while 28 percent were scored as "bicultural". Less than two percent met the criteria for fitting under either the American or "Marginalized". Twelve percent did not meet any of the criteria for any of the four typologies and were therefore combined with the marginalized group, since they like those few categorized as marginalized were in fact unable to be categorized in any of the other cultural categories and as such were considered marginalized with respect to the two cultures they interact with—culture of origin and American. Hence, three acculturation groups were viable for analysis using the Pan:

	Number	**Percent**
Culture of Origin Oriented	168	57
Bicultural	82	28
Marginalized	40	14
American	5	2

Using the numerically viable three cultural types, a cross tabulation was conducted to test for the relationship between AIPV and acculturation across these acculturation types, minus the American oriented typology. This cross tabulation was found to be statistically significant, suggesting that the Marginalized type indicated experiencing the highest level of AIPV at 47%, followed by the Bicultural and Culture of Origin Oriented at 38% and 27%, respectively ($X^2 = 6.56$, df=2, $p<.04$).

Acculturative Stress A point-biserial correlation between acculturative stress and AIPV revealed no significant correlation for the sample as a whole or for any of the stratified groups of Latinas. This suggested that acculturative stress is different from acculturation.

Bicultural Self-Efficacy (BISES) A point-biserial correlation between BISES and AIPV showed no significant correlation, therefore, no relationship between these variables for the overall sample of Latinas and for the individual stratified groups, as well.

Ethnic Identity The Multiple Ethnic Identity Measure (MEIM) was used to assess ethnic identity. A point biserial correlation between the MEIM and AIPV showed almost a statistically significant correlation (-.114; $p<.06$). This finding suggested that ethnic identity could potentially serve as a protective factor for Latinas.

Logistic Regression Analysis on Cultural Factors Logistic regression analysis was used to assess the relative importance of each cultural factor in AIPV. Plans included considering differences between U.S.-born, immigrant and migrant groups within the final logistical regression model examining cultural factors and IPV. To do so

interaction terms were created between birthplace (U.S. and Other) and migrant status (migrant and other), which were used into logistic regression runs. To assess the interactions between stratified groups and individual cultural factors, several logistical regression runs were conducted that reflected the following variables entered into the model:

Independent Variables Entered into Logistic Regression for Each Cultural Factor

1. Birth Country (US=2 and Other=1)
2. Migrant Status (Migrant =2 and Other=1)
3. Immigrant Status (Constant)
4. Cultural Factor (main effect)
5. Birth Place Interaction (Birth Country X Cultural Factor)
6. Migrant Interaction (Migrant Status X Cultural Factor)

The dependent variable was AIPV. In this way, non-significant interaction variables could be excluded from the final model. Four logistic runs were conducted with one of the following cultural variables entered: (1) Acculturation (using SAS score), (2) Acculturative Stress, (3) Bicultural Self-Efficacy, and (4) Ethnic Identity (using the MEIM). The findings resulted in none of the interaction terms being significant. This meant that the relationship between individual cultural factors and AIPV did not differ across stratified groups (i.e., U.S. born, immigrant and migrant groups). This allowed for the exclusion of interaction terms in the final regression model. However, before the final logistic regression run that included all cultural variables simultaneously, additional log runs were conducted with the omission of interaction terms listed above for each cultural measure to determine the individual relationship between each cultural variable

with the AIPV. The results from these runs revealed no relationship between any of the cultural variables and AIPV.

A final logistical regression was conducted with all four cultural variables entered as independent variables and with AIPV as the dependent variable. This run also failed to reveal any of the cultural variables as significant predictors. Point-biserial correlations between AIPV and all the cultural variables revealed significant correlations between AIPV and three acculturation variables: Short Acculturation Scale (SAS) and the bicultural and culture of origin dimensions of the Pan (.143 ($p<.02$), .126 ($p<.03$), -.147 ($p<.01$), respectively). These findings suggest that those biculturalism and acculturation or affinity with American culture is associated with AIPV, whereas closer affinity to one's culture of origin is associated with lower levels of AIPV.

Discussion

Intimate partner violence victimization was prevalent among the Latina women in the present study. In the overall sample, 33.9% experienced some form of physical violence, 20.9% experienced sexual coercion, and 82.5% experienced psychological aggression by an intimate partner at some time in their life. Rates of victimization in the preceding year were also high with 18.5% of the women reporting physical assault, 14.4% reporting sexual coercion, and 72.6% reporting psychological aggression.

As shown in Table 19, the rates of physical assault were at least as high, and in some cases higher, than those generated by recent studies involving nationally representative samples. For instance, the rates of less severe (18.2%) and severe (7.5%) physical assault experienced in the preceding year were nearly equivalent to the rates reported by the National Comorbidity Survey (i.e., 17.4% for less severe, 6.5% for

severe; Kessler et al., 2001). In contrast, the rate of any past year physical violence in the current sample was substantially higher than that obtained by the National Violence Against Women Survey (i.e., 18.5% vs. 1.3%; Tjaden & Thoennes, 2000).

There are few estimates of the prevalence of sexual assault or coercion by an intimate partner based on national probability samples and to our knowledge, there have been no published national estimates of intimate partner psychological or emotional abuse. Using data from a 1997 national probability sample, Basile (2002) found that 34% of women experienced some type of sexual coercion by an intimate partner in their lifetime, which is higher than the 20.9% rate of lifetime sexual coercion found in the current sample.

The rates of physical assault obtained in this study along with the rates reported by other studies involving Latino populations are presented in Table 20. The lifetime rate of physical violence in the current overall sample was approximately 1½ times greater than the lifetime prevalence rates reported for Hispanic women in the National Violence Against Women Survey (Tjaden & Thoennes, 2000) and the Los Angeles Epidemiologic Catchment Area (ECA) study (Sorenson & Telles, 1991). The lifetime rates of physical violence experienced by the U.S born and immigrant women in the present study also exceeded those reported for Mexican American and Mexican born adults in the Los Angeles ECA (Sorenson & Telles, 1991).

With regard to recent physical violence, the rate of 18.5% obtained in the current sample was similar to the 17.0% prevalence estimate obtained with a national sample of Hispanic couples in the National Alcohol Survey (Caetano et al., 2000) and higher than the 10.7% obtained with a sample of Mexican origin women residing in Fresno County,

California (Lown & Vega, 2001). The rate of 25.4% for past year physical assault experienced by the U.S. born women in our sample was higher than the 16-17% prevalence rates found in other recent studies (Aldarondo et al., 2002; Lown & Vega, 2001). Meanwhile, the rate of physical assault among the immigrant women (i.e., 12.8%) was approximately the same (i.e., 13.4% reported by Aldarondo et al., 2002) or higher (i.e., 7.1% reported by Lown & Vega, 2001) than reported by these other studies. For the migrant women, our results on recent physical assault (i.e., 14.3%) are relatively comparable to the findings of Hightower and colleagues, who reported a 19.0% rate of physical *or* sexual assault among women employed as migrant or seasonal workers.

Comparisons of the lifetime rates of intimate partner violence experienced by the U.S. born, immigrant, and migrant women in the current sample revealed some noteworthy findings. There were significant differences in the reports of physical assault and psychological aggression, with the US born women more likely to have experienced these forms of victimization compared to the immigrant and migrant women. There was also a significant difference in the reports of sexual coercion with the US born women more likely to report these experiences than immigrant women.

With regard to past year intimate partner violence, a similar pattern of findings was obtained. Reports of physical assault and psychological aggression in the preceding year were highest among the US born women and they were more likely to experience these types of victimization compared to immigrant women. US born women were also more likely to report sexual coercion by a partner than immigrant women. Women in the migrant group were similarly more likely to report recent sexual victimization compared to immigrant women.

However, the study did not find a relationship between past year intimate partner violence victimization and women's status as U.S born, migrant/seasonal, or immigrant Latinas when sociodemographic and other background characteristics of the women and their partners were taken into account. Women's age, marital status, poverty status of household, number of children in the household, and partner education were also not associated with partner violence. The lack of association between women's age and risk of victimization is not consistent with previous findings that have identified younger age a risk factor in non-Latina and Latina women (e.g., Kessler et al., 2001; Lown & Vega, 2001; Suitor et al., 1990). The results do confirm previous findings with Latinos that have also not identified a relationship between intimate partner violence and marital status (Cunradi et al., 2002). Other research has similarly not found an association between income and partner violence among Latinos (Aldarondo et al., 2002; Kaufman Kantor et al., 1994; Lown & Vega, 2001) although this has not universally been the case (Cunradi et al., 2002).

Having a partner with a substance use problem was associated with victimization in the present study. Thirty percent of the women who experienced intimate partner violence in the preceding year reported partner substance use problems compared to 13.9% of women who did not experience any violence. Women who reported that their partner had alcohol and/or drug problems had more than two times the odds of reporting experiences with intimate partner violence in the preceding year. These findings are concordant with a growing body of literature that has identified partner substance use as a risk factor for partner violence (see Schumacher et al., 2001 for a review) among Latino and non-Latino populations (e.g., Coker et al., 2000; Van Hightower et al., 2000).

Several models have been posited to explain this relationship, including the indirect effects, proximal effects, and spurious models (see Fals-Stewart, 2003). According to the indirect effects model, substance use problems lead to conflict and dissatisfaction in relationships over time, with these dynamics in turn contributing to the occurrence of violence. In contrast, the proximal effects model suggests that the acute effects of alcohol and drugs facilitate violence, possibly through their effects on cognitive processing or through expectancies regarding their disinhibitory effect on behavior (e.g., see Caetano et al., 2001; Fals-Stewart, 2003). Others have argued that the relationship between substance use and intimate partner violence perpetration is likely a spurious one, reflecting linkages between these problems and other factors, such as personality characteristics (e.g., impulsivity), or exposure to violence in the family of origin (e.g., see Downs et al., 1996; Fals-Stewart, 2003). Additional research is needed to investigate the applicability of these models to Latino populations and to test elaborated models that incorporate important cultural variables such as acculturative stress.

Consistent with previous research (Bensley et al., 2003; Coker et al., 2000; Ehrensaft et al., 2003; Kessler et al., 2001; Whitfield et al., 2003), the study found evidence of an association between adult partner violence victimization and reports of intimate partner violence in women's families of origin after controlling for other potential childhood risk factors and demographic variables. Women reporting violence between their parents or parental caregivers had approximately twice the odds of experiencing recent partner violence victimization compared to women who did not report parental violence. Although they used a broader definition of victimization that included experiences with childhood physical abuse or exposure to parental intimate

partner violence, Caetano et al. (2000) also found close to a two-fold elevation in risk of intimate partner violence victimization among Latina women with a history of childhood victimization. One explanation proposed to account for such findings suggests that individuals who are exposed to intimate partner violence in childhood may learn to perceive violence as a normal means of resolving interpersonal conflict, thereby heightening the risk for establishing and continuing in abusive relationships (e.g., O'Leary, 1988). While this social learning theory of the inter-generational transmission of intimate partner violence has been much discussed is the literature, there has been relatively little research examining it and alternative theoretical models. There is a clear need for further investigation of the pathways between childhood exposure to intimate partner violence and adult victimization and of intervening individual, family, and community factors.

Experiencing childhood sexual abuse was also strongly related to reports of adult intimate partner violence victimization. After controlling for other childhood risk factors and demographic variables, sexual abuse was associated with more than a three-fold increase in odds of reporting recent partner violence. While a growing body of research has obtained similar results with community, college, and clinical samples (e.g., Coid et al., 2001; Desai et al., 2002; Messman-Moore & Long, 2000; Whitfield et al., 2003; see Messman & Long, 1996 for a review), there is a dearth of studies examining this relationship among Latina women. One exception is an investigation by Gilbert and colleagues (1997), which examined the relationship between adult intimate partner violence victimization and childhood abuse in a sample of women in methadone maintenance programs, most of whom were Latina or African American. The study

found that women who reported childhood sexual abuse were almost four times more likely to report adult victimization, and in contrast to our findings, that women who reported childhood physical abuse were approximately nine times more likely to report adult victimization.

Our findings on childhood risk factors suggest that early identification and intervention efforts should target children who are exposed to intimate partner violence and who are victims of maltreatment, especially sexual abuse, in order to reduce risks for future victimization in intimate relationships. Longitudinal studies that systematically investigate the interconnections between childhood and adult victimization are needed in order to identify optimal strategies for prevention and intervention programming. The present findings on the relationship between intimate partner violence victimization and psychological distress, along with the work of others demonstrating increased risk for poorer mental health functioning among adult victims of partner violence with childhood histories of trauma (e.g., Bensley et al., 2003; Follette et al., 1996; Maker et al., 1998), underscore the importance of effective early intervention and prevention programs to mitigate short and long term risk of experiencing adverse outcomes. Such programming should be considered an essential component of the community response to intimate partner violence and childhood victimization.

In regards to cultural factors and IPV, analyses were presented with a dichotomous outcome variable indicating experience or no experience with any form of partner violence (physical) within the past year. A look at differences between each of the stratified groups of Latinas revealed significant differences between the three groups of Latinas with U.S. born and migrant Latinas reflecting the highest proportions of

experience with any form of intimate partner violence within the past year (40% and 39%, respectively), compared to immigrant Latinas at 23 percent who showed the least proportion ($X^2 = 8.25$, df = 2, $p<.02$). Regardless of group or differences between groups, even at 23 percent, the proportion of Latinas experiencing any form of IPV is high—both numerically, and in comparison with proportions in the general population.

Acculturation did prove to be a significant cultural variable both as a unidimensional variable and as a multidimensional variable denoting groups or typologies varying in acculturation levels. The findings showed that the greater the acculturation of Latinas the more likely they were victims of IPV. There were few who could be typed as American oriented based on their acculturation scores to see if this acculturation type is tied to higher or lower experiences with IPV. However, the findings did show statistically significant differences in experiences with IPV between culture of origin oriented, bicultural and marginalized Latinas where those with higher IPV scores where marginalized and bicultural individuals (47% and 38%, respectively). This compared with 27% of culture of origin-oriented individuals. These findings suggest that acculturation is an important cultural variable that is tied to generalized IPV. The generalized IPV outcome variable is a macro measure and does not lend itself to a closer scrutiny of the relationship between the other cultural variables and AIPV. Further analysis is called for that uses an IPV measure with more variability, which can more carefully be examined in its relationship with the various cultural measures used in this study. Subsequent manuscripts will be prepared that will report on such analyses.

In general, the present findings of this study suggest the need for screening for intimate partner violence in health care and other settings that serve Latina women. In

addition to assessing experiences with psychological, sexual, and physical violence, risk factors, including partner substance use, childhood history of maltreatment and intimate partner violence in the family of origin, should be considered. In screening for intimate partner violence, service providers should also assess women's mental health functioning to ensure that the often disabling sequelae associated with victimization are not overlooked. The findings on cultural factors also suggest that cultural context is important, and in particular acculturation. The findings are in keeping with other health findings suggesting that those most at-risk are Latinos who are more acculturated (c.f., Gordon-Larsen, Harris, Ward, & Popkin, 2003). More research is needed which uses a larger sample size to more adequately examine the importance of various cultural factors, as well as other risk factors of focus in this study.

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Appendix Section

Data Tables

(Tables 3-20)

Table 3. Sociodemographic Characteristics of Respondents

	Total (n=295)		U.S.-Born (n=127)		Immigrant (n=118)		Migrant (n=50)	
	No.	%	No.	%	No.	%	No.	%
Age								
18-24 years	124	42.0	77	60.6	31	26.3	16	32.0
25-31 years	81	27.5	25	19.7	38	32.2	18	36.0
32-38 years	57	19.3	12	9.4	34	28.8	11	22.0
39-45 years	33	11.2	13	10.2	15	12.7	5	10.0
Ethnicity								
Hispanic or Latino	295	100.0	127	100.0	118	100.0	50	100.0
Language of interview								
English	131	44.4	122	96.1	4	3.4	5	10.0
Spanish	164	55.6	5	3.9	114	96.6	45	90.0
Country of Birth								
United States	132	44.7	127*	100.0	--	--	5	10.0
Mexico	157	53.2	--	--	114	96.6	43	86.0
Other	6	2.0	--	--	4	3.4	2	4.0
Marital Status								
Married	145	49.2	51	40.2	73	61.9	21	42.0
Living with partner	75	25.4	26	20.5	24	20.3	25	50.0
Separated or divorced	29	9.8	14	11.0	12	10.2	3	6.0
Never married	46	15.6	36	28.3	9	7.6	1	2.0

*One woman born in Puerto Rico, but lived in U.S. all her life.

Table 3. Sociodemographic Characteristics of Respondent, cont.

	Total (n=295)		U.S.-Born (n=127)		Immigrant (n=118)		Migrant (n=50)	
	No.	%	No.	%	No.	%	No.	%
Education								
0-6 years	82	27.8	2	1.6	56	47.5	24	48.0
7-12 years	80	27.1	34	26.8	33	28.0	13	26.0
HS diploma or GED	68	23.1	41	32.3	19	16.1	8	16.0
At least some post high school	65	22.0	50	39.4	10	8.5	5	10.0
Employment								
Full-time	91	30.8	44	34.6	33	28.0	14	28.0
Part-time or casual	71	24.1	35	27.6	26	22.0	10	20.0
Unemployed or student not working	45	15.3	27	21.3	12	10.2	6	12.0
Homemaker	88	29.8	21	16.5	47	39.8	20	40.0
Income (n=281)								
Less than $15,000	60	21.4	20	16.9	24	21.2	16	32.0
$15,000 to $24,999	104	37.0	25	21.2	58	51.3	21	42.0
$25,000 to $39,999	82	29.2	46	39.0	25	22.1	11	22.0
$40,000 or more	35	12.5	27	22.9	6	5.3	2	4.0
Poverty Index (n=281)								
At or below poverty index	90	32.0	24	20.3	72	63.7	25	50.0
Above poverty index	191	68.0	94	79.7	41	36.3	25	50.0

Table 4. Sociodemographic Characteristics of Current or Most Recent Partners

	Total (n=295)		U.S.-Born (n=127)		Immigrant (n=118)		Migrant (n=50)	
	No.	%	No.	%	No.	%	No.	%
Age (n=293)								
18-24 years	78	26.6	54	42.9	16	13.7	8	16.0
25-31 years	101	34.5	44	34.9	38	32.5	19	38.0
32-38 years	72	24.6	14	11.1	43	36.8	15	30.0
39 and > years	42	14.3	14	11.1	20	17.1	8	16.0
Ethnicity (n=293)								
Hispanic or Latino	248	84.6	91	72.2	110	94.0	47	94.0
White or Caucasian	16	5.5	13	10.3	3	2.6	--	--
Black or African-American	11	3.8	9	7.1	2	1.7	--	--
Biracial	12	4.1	9	7.1	2	1.7	1	2.0
Other	6	2.0	4	3.2	--	--	2	4.0
Relationship to Respondent								
Casually dating	19	6.4	15	11.8	2	1.7	2	4.0
Seriously dating	37	12.5	24	18.9	11	9.3	2	4.0
Living together	86	29.2	34	26.8	27	22.9	25	50.0
Married	153	51.9	54	42.5	78	66.1	21	42.0
Education (n=277)								
0-6 years	75	27.1	7	6.2	39	33.6	29	60.4
7-12 years	92	33.2	29	25.7	50	43.1	13	27.1
HS diploma or GED	69	24.9	47	41.6	17	14.7	5	10.4

Post secondary	40	14.8	30	26.5	10	8.6	1	2.1

Table 4. Sociodemographic Characteristics of Current or Most Recent Partners, cont.

	Total (n=295)		U.S.-Born (n=127)		Immigrant (n=118)		Migrant (n=50)	
	No.	%	No.	%	No.	%	No.	%
Employment (n=290)								
Full-time	228	78.6	89	71.8	101	86.3	38	77.6
Part-time or casual	31	10.7	15	12.1	9	7.7	7	14.3
Unemployed or student not working	31	10.7	20	16.1	7	6.0	4	8.2

Table 5. Lifetime Rates of Intimate Partner Violence

	Total (n = 292)		U.S. Born (n = 126)		Immigrant (n = 117)		Migrant (n = 49)			
Type of Intimate Partner Violence	No.	%	No.	%	No.	%	No.	%	χ^2	*p*
Less severe physical assault	96	32.9	60	47.6	26	22.2[a]	10	20.4[a]	21.880	< .0001
Severe physical assault	52	17.8	26	20.6	18	15.4	8	16.3	1.231	.540
Any physical assault	99	33.9	61	48.4	26	22.2[a]	12	24.5[a]	20.899	< .0001
Less severe sexual coercion	58	19.9	35	27.8[a]	14	12.0[b]	9	18.4[ab]	9.612	.008
Severe sexual coercion	19	6.5	8	6.3	7	6.0	4	8.2	0.279	.870
Any sexual coercion	61	20.9	37	29.4[a]	14	12.0[b]	10	20.4[ab]	11.121	.004
Less severe psychological aggression	240	82.2	116	92.1[a]	85	72.6[b]	39	79.6[ab]	15.894	< .0001
Severe psychological aggression	99	33.9	51	40.5[a]	30	25.6[b]	18	36.7[ab]	6.169	.046
Any psychological aggression	241	82.5	117	92.9	85	72.6[a]	39	79.6[a]	17.539	< .0001

Note: groups with the same superscript are not significantly different ($p < 0.017$)

Table 6. Past Year Rates of Intimate Partner Violence

	Total (n = 292)		U.S. Born (n = 126)		Immigrant (n = 117)		Migrant (n = 49)			
Type of Intimate Partner Violence	No.	%	No.	%	No.	%	No.	%	χ^2	*p*
Less severe physical assault	53	18.2	31	24.6[ab]	15	12.8[ac]	7	14.3[bc]	6.261	.044
Severe physical assault	22	7.5	11	8.7	6	5.1	5	10.2	1.732	.421
Any physical assault	54	18.5	32	25.4[a]	15	12.8[b]	7	14.3[ab]	7.057	.029
Less severe sexual coercion	39	13.4	26	20.6[a]	6	5.1[b]	7	14.3[ab]	12.650	.002
Severe sexual coercion	5	1.7	2	1.6[ab]	0	0.0[a]	3	6.1[b]	7.713	.021
Any sexual coercion	42	14.4	27	21.4[a]	6	5.1	9	18.4[a]	13.848	.001
Less severe psychological aggression	209	71.6	103	81.7[a]	71	60.7[b]	35	71.4[ab]	13.229	.001
Severe psychological aggression	63	21.6	31	24.6	18	15.4	14	28.6	4.750	.093
Any psychological aggression	212	72.6	106	84.1[a]	71	60.7[b]	35	71.4[ab]	16.803	< .0001

Note: groups with the same superscript are not significantly different ($p < 0.017$)

Table 7. Percent Endorsement of Specific Acts of Physical Assault (Lifetime)

Lifetime

	Total (n = 292)		U.S. Born (n = 126)		Immigrant (n = 117)		Migrant (n = 49)	
	No.	%	No.	%	No.	%	No.	%
Less severe								
Had something thrown	***43***	***14.8***	***26***	***20.8***	***11***	***9.4***	***6***	***12.2***
Arm or hair twisted	***39***	***13.4***	***19***	***15.1***	***15***	***12.8***	***5***	***10.2***
Pushed or shoved	63	21.6	38	30.2	18	15.4	7	14.3
Grabbed	63	21.6	35	27.8	21	17.9	7	14.3
Slapped	***35***	***12.0***	***15***	***11.9***	***16***	***13.7***	***4***	***8.2***
Severe								
Knife or gun used	***11***	***3.8***	***4***	***3.2***	***6***	***5.1***	***1***	***2.0***
Punched or hit	***27***	***9.2***	***16***	***12.7***	***8***	***6.8***	***3***	***6.1***
Choked	21	7.2	10	7.9	9	7.7	2	4.1
Slammed against wall	37	12.7	17	13.5	15	12.8	5	10.2
Beat up	***28***	***9.6***	***12***	***9.5***	***11***	***9.4***	***5***	***10.2***
Burned or scalded	***2***	***0.7***	***2***	***1.6***	***0***	***0.0***	***0***	***0.0***
Kicked	***20***	***9.6***	***11***	***8.8***	***5***	***4.3***	***4***	***8.2***

Table 7. Percent Endorsement of Specific Acts of Physical Assault (Past Year)

Past Year

	Total (n = 292)		U.S. Born (n = 126)		Immigrant (n = 117)		Migrant (n = 49)	
	No.	%	No.	%	No.	%	No.	%
Less severe								
Had something thrown	***15***	***5.2***	***9***	***7.2***	***3***	***2.6***	***3***	***6.1***
Arm or hair twisted	***16***	***5.5***	***9***	***7.1***	***4***	***3.4***	***3***	***6.1***
Pushed or shoved	29	9.9	15	11.9	8	6.8	6	12.2
Grabbed	30	10.3	18	14.3	6	5.1	6	12.2
Slapped	***10***	***3.4***	***2***	***1.6***	***5***	***4.3***	***3***	***6.1***
Severe								
Knife or gun used	1	***0.3***	1	0.8	0	0.0	0	0.0
Punched or hit	***6***	***2.1***	***5***	***4.0***	***0***	***0.0***	***1***	***2.0***
Choked	6	***2.1***	2	1.6	3	2.6	1	2.0
Slammed against wall	14	***4.8***	5	4.0	6	5.1	3	6.1
Beat up	***6***	2.1	***3***	***2.4***	***1***	***0.9***	***2***	***4.1***
Burned or scalded	***1***	0.3	***1***	***0.8***	***0***	***0.0***	***0***	***0.0***
Kicked	***6***	***2.1***	***3***	***2.4***	***0***	***0.0***	***3***	***6.1***

Table 8. Percent Endorsement of Specific Acts of Sexual Coercion (Lifetime)

Lifetime

	Total (n = 292)		U.S. Born (n = 126)		Immigrant (n = 117)		Migrant (n = 49)	
	No.	%	No.	%	No.	%	No.	%
Less severe								
Partner insisted on sex without a condom (without physical force)	***25***	***8.6***	***14***	***11.1***	***6***	***5.1***	***5***	***10.2***
Partner insisted on sex (without physical force)	***48***	***16.4***	***26***	***20.6***	***14***	***12.0***	***8***	***16.3***
Partner insisted on oral or anal sex (without physical force)	20	6.8	12	9.5	5	4.3	3	6.1
Severe								
Partner used physical force or a weapon to coerce oral or anal sex	***11***	***3.8***	***4***	***3.2***	***6***	***5.1***	***1***	***2.0***
Partner used physical force or a weapon to coerce sexual intercourse	***16***	***5.5***	***6***	***4.8***	***7***	***6.0***	***3***	***6.1***
Partner used threats to coerce oral or	8	2.7	3	2.4	3	2.6	2	4.1

anal sex								
Partner used threats to coerce sexual intercourse	13	4.5	5	4.0	6	5.1	2	4.1

Table 8. Percent Endorsement of Specific Acts of Sexual Coercion (Past Year)

Past Year

	Total (n = 292)		U.S. Born (n = 126)		Immigrant (n = 117)		Migrant (n = 49)	
	No.	%	No.	%	No.	%	No.	%
Less severe								
Partner insisted on sex without a condom (without physical force)	***15***	***5.1***	***11***	***8.7***	***0***	***0.0***	***4***	***8.2***
Partner insisted on sex (without physical force)	***30***	***10.3***	***18***	***14.3***	***6***	***5.1***	***6***	***12.2***
Partner insisted on oral or anal sex (without physical force)	10	3.4	9	7.1	0	0.0	1	2.0

Severe								
Partner used physical force or a weapon to coerce oral or anal sex	***2***	***0.7***	***2***	***1.6***	***0***	***0.0***	***0***	***0.0***
Partner used physical force or a weapon to coerce sexual intercourse	***4***	***1.4***	***2***	***1.6***	***0***	***0.0***	***2***	***4.1***
Partner used threats to coerce oral or anal sex	0	0.0	0	0.0	0	0.0	0	0.0
Partner used threats to coerce sexual intercourse	2	0.7	1	0.8	0	0.0	1	2.0

Table 9. Percent Endorsement of Specific Acts of Psychological Aggression (Lifetime)

Lifetime

	Total (n = 292)		U.S. Born (n = 126)		Immigrant (n = 117)		Migrant (n = 49)	
	No.	%	No.	%	No.	%	No.	%
Less severe								
Insulted or swore	***187***	***64.0***	***100***	***79.4***	***60***	***51.3***	***27***	***55.1***
Shouted or yelled at	***196***	***67.1***	***94***	***74.6***	***70***	***59.8***	***32***	***65.3***
Partner stomped out during a disagreement	126	43.3	74	59.2	35	29.9	17	34.7
Partner said something to spite	69	23.7	32	25.6	24	20.5	13	26.5

Severe								
Called fat or ugly	***61***	***20.9***	***26***	***20.6***	***21***	***17.9***	***14***	***28.6***
Partner destroyed possessions	***51***	***17.5***	***28***	***22.2***	***14***	***12.0***	***9***	***18.4***
Accused of being a lousy lover	20	6.8	10	7.9	8	6.8	2	4.1
Partner threatened to hit or throw something	46	15.8	27	21.4	14	12.0	5	10.2

Table 9. Percent Endorsement of Specific Acts of Psychological Aggression (Past Year)

Past Year

	Total (n = 292)		U.S. Born (n = 126)		Immigrant (n = 117)		Migrant (n = 49)	
	No.	%	No.	%	No.	%	No.	%
Less severe								
Insulted or swore	***153***	***52.4***	***86***	***68.3***	***43***	***36.8***	***24***	***49.0***
Shouted or yelled at	***157***	***53.8***	***75***	***59.5***	***53***	***45.3***	***29***	***59.2***
Partner stomped out during a disagreement	100	34.4	58	46.4	26	22.2	16	32.7
Partner said something to spite	49	16.8	20	16.0	18	15.4	11	22.4
Severe								
Called fat or ugly	***43***	***14.7***	***17***	***13.5***	***14***	***12.0***	***12***	***24.5***
Partner destroyed possessions	***24***	***8.2***	***12***	***9.5***	***5***	***4.3***	***7***	***14.3***
Accused of being a lousy lover	9	3.1	5	4.0	3	2.6	1	2.0
Partner threatened to hit or throw something	16	5.5	10	7.9	3	2.6	3	6.1

Table 10. Injury and Receipt of Medical Care Reported by Respondents Victimized by Physical Assault (Lifetime)

	Total (n = 99)		U.S. Born (n = 61)		Immigrant (n = 26)		Migrant (n = 12)	
	No.	%	No.	%	No.	%	No.	%
Less severe								
Experienced sprain, bruise, small cut	41	41.4	16	26.2	18	69.2	7	58.3
Felt physical pain that still hurt the next day	37	37.4	20	32.8	11	42.3	6	50.0
Severe								
Passed out from being hit on head	6	6.1	4	6.6	1	3.8	1	8.3
Experienced a broken bone	5	5.1	2	3.3	2	7.7	1	8.3
Needed to see a physician but did not receive care	21	21.2	10	16.4	6	23.1	5	41.7
Received care from a physician	14	14.1	9	14.8	4	15.4	1	8.3
Any less severe injury/medical care	47	47.5	22	36.1	18	69.2	7	58.3
Any severe injury/medical care	27	27.3	13	21.3	9	34.6	5	41.7
Any injury/medical care	50	50.5	24	39.3	19	73.1	7	58.3

Table 11. Injury and Receipt of Medical Care Reported by Respondents Victimized by Physical Assault (Past Year)

	Total (n = 54)		U.S. Born (n = 32)		Immigrant (n = 15)		Migrant (n = 7)	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Less severe								
Experienced sprain, bruise, small cut	15	27.8	5	15.6	5	33.3	5	71.4
Felt physical pain that still hurt the next day	13	24.1	6	18.8	3	20.0	4	57.1
Severe								
Passed out from being hit on head	1	1.9	1	3.1	0	0.0	0	0.0
Experienced a broken bone	2	3.7	1	3.1	1	6.7	0	0.0
Needed to see a physician but did not receive care	6	11.1	2	6.3	1	6.7	3	42.9
Received care from a physician	1	1.9	1	3.1	0	0.0	0	0.0
Any less severe injury/medical care	18	33.3	8	25.0	5	33.3	5	71.4
Any severe injury/medical care	7	13.0	2	6.3	2	13.3	3	42.9
Any injury/medical care	19	35.2	9	28.1	5	33.3	5	71.4

Table 12. Logistic Regression Model – Background/Sociodemographic Characteristics and Past Year IPV (N=257)

	IPV (n=89)		No IPV (n=168)		OR (95% CI)		*p*
	No.	%	No.	%			
Respondent age							
18-24	51	52.6	72	36.9	.942	.338-2.627	0.910
25-31	23	23.7	56	28.7	.790	.277-2.254	0.659
32-38	13	13.4	44	22.6	.790	.256-2.436	0.682
39-45	10	10.3	23	11.8	Reference		
Respondent marital status							
Never married	22	22.7	24	12.3	2.121	.859-5.239	0.103
Divorced or separated	9	9.3	20	10.3	2.239	.745-6.728	0.151
Living with partner	29	29.9	43	22.1	1.473	.734-2.955	0.275
Married	37	38.1	108	55.4	Reference		
Poverty status of household							
At or below poverty level	22	23.4	67	36.2	.510	.258-1.005	.052
Above poverty level	72	76.6	118	3.8	Reference		
Number of children in household							
1-2 children	65	67.0	110	56.4	1.171	.535-2.562	0.694
3 or more children	14	14.4	57	29.2	.579	.200-1.672	0.312
No children	18	18.6	28	14.4	Reference		
Partner education							
Less than high school diploma/equivalent	51	54.8	115	63.5	.965	.398-2.339	0.937
High school diploma/equivalent	26	28.0	42	23.2	.853	.347-2.098	0.730
At least some post-secondary	16	17.2	24	13.3	Reference		
Partner with substance use problem							
Yes	28	30.4	26	13.9	2.395	1.205-4.757	0.013
No	64	69.6	161	86.1	Reference		
Group Variable							
US Born	52	41.3	74	58.7	1.492	.713-3.122	0.288
Migrant	18	36.7	31	63.3	1.813	.802-4.099	0.153

Immigrant	27	23.1	90	76.9	Reference

Table 13. Logistic Regression Model - Childhood Risk Factors and Past Year IPV (N=205)

	IPV (n=63)		No IPV (n=142)				
	No.	%	No.	%	OR (95% CI)		*p*
Parent/caregiver substance use problems							
Yes	34	40.0	50	28.6	.981	.471-2.044	0.959
No	51	60.0	125	71.4	Reference		
Parental physical violence or injury							
Yes	50	64.1	66	39.8	2.194	1.094-4.397	0.027
No	28	35.9	100	60.2	Reference		
Abuse as a minor							
Physical abuse							
Yes	38	45.8	82	45.6	.743	.352-1.566	0.434
No	45	54.2	98	54.4	Reference		
Sexual abuse							
Yes	37	38.5	28	14.5	3.537	1.612-7.762	0.002
No	59	61.5	165	85.5	Reference		
Neglect							
Yes	48	55.8	100	54.6	.929	.441-1.958	0.846
No	38	44.2	83	45.4	Reference		
Respondent age							
18-24	51	52.6	72	36.9	1.243	.394-3.927	0.711
25-31	23	23.7	56	28.7	.834	.251-2.771	0.768
32-38	13	13.4	44	22.6	.798	.216-2.950	0.736
39-45	10	10.3	23	11.8	Reference		
Respondent education							
Less than high school diploma/equivalent	39	40.2	120	61.5	.489	.202-1.185	0.113
High school diploma/equivalent	28	28.9	40	20.5	1.186	.471-2.989	0.717

At least some post-secondary	30	30.9	35	17.9	Reference		

Table 13. Logistic Regression Model - Childhood Risk Factors and Past Year IPV (N=205), cont.

Group							
U.S. Born	52	41.3	74	58.7	1.161	.505-2.671	0.726
Migrant	18	36.7	31	63.3	2.169	.852-5.522	0.104
Immigrant	27	23.1	90	76.9	Reference		

Table 14. Mental Health, Physical Health, Substance Use and Past Year IPV

	Total (n=292)		IPV (n=97)		No IPV (n=195)	
			No.	%	No.	%
	Mean (SD)		Mean (SD)		Mean (SD)	
Respondent mental health						
Brief Symptom Inventory Global Severity Index (n=294)	.61	.54	.62	.58	.60	.52
SF-12 Mental health (standard score)	48.58	11.54	44.29	11.19	50.72	11.14
	No.	%	No.	%	No.	%
Ever attempted suicide*	45	15.6	16	16.7	29	15.0
	Mean (SD)		Mean (SD)		Mean (SD)	
Respondent physical health						
SF-12 Physical health (standard score)	48.72	9.30	48.86	9.81	48.66	9.07
	No.	%	No.	%	No.	%
Respondent substance use						
Levels of alcohol use*						
Abstainer	149	51.6	43	44.8	106	54.9
Low	89	30.8	35	36.5	54	28.0
Moderate	34	11.8	10	10.4	24	12.4
High/binge	17	5.9	8	8.3	9	4.7
AUDIT (Total score = 8 or >)	10	3.4	8	8.2	2	1.0
DAST – Levels of drug use (n=292)						
No problems reported	269	92.1	80	82.5	189	96.9
Low	13	4.5	8	8.2	5	2.6
Moderate	8	2.7	7	7.2	1	0.5
Substantial	2	0.7	2	2.1	0	0.0
Severe	0	0.0	0	0.0	0	0.0

*Note: n=289, IPV n = 96, No IPV n = 193

Table 15. Multiple Regression Analysis Predicting Brief Symptom Inventory Global Severity Index Scores (N=291)

Variable	Standardized Beta	*p*
Age	.037	.543
Less than high school [a]	.160	.041
High school or GED [a]	.095	.176
Living with partner[b]	.032	.604
Divorced or separated[b]	.133	.025
Never married[b]	.199	.002
U.S. born[c]	.098	.164
Migrant[c]	.118	.057
IPV past year	.272	.000

[a] Comparison group is > high school
[b] Comparison group is married
[c] Comparison group is immigrant

Table 16. Multiple Regression Analysis Predicting SF-12 Mental Health Scores (N=291)

Variable	Standardized Beta	*p*
Age	-.024	.692
Less than high school [a]	-.149	.056
High school or GED [a]	-.113	.108
Living with partner[b]	-.075	.223
Divorced or separated[b]	-.211	.000
Never married[b]	-.218	.001
U.S. born[c]	-.105	.132
Migrant[c]	-.042	.497
IPV past year	-.241	.000

[a] Comparison group is > high school
[b] Comparison group is married
[c] Comparison group is immigrant

Table 17. Logistic Regression Analysis Predicting History of Suicide Attempts (N=292)

Variable	OR (95% CI)		*p*
Respondent age			
18-24	.606	.203 - 1.812	.370
25-31	.866	.284 - 2.639	.800
32-38	.364	.091 - 1.460	.154
39-45	Reference		
Respondent education			
Less than high school	1.176	.475 - 2.914	.726
High school or GED	1.567	.625 - 3.927	.338
At least some post-secondary	Reference		
Respondent marital status			
Living with partner	1.187	.483 - 2.920	.709
Divorced or separated	1.237	.364 - 4.200	.733
Never married	3.401	1.427 - 8.107	.006
Married	Reference		
Group			
U.S. born	2.168	.904 - 5.200	.083
Migrant	1.400	.462 - 4.236	.552
Immigrant	Reference		
IPV past year			
Yes	1.145	.568 - 2.306	.705
No	Reference		

Table 18. Multiple Regression Analysis Predicting SF-12 Physical Health Scores (N=291)

Variable	Standardized Beta	*p*
Age	-.167	.011
Less than high school [a]	-.048	.559
High school or GED [a]	.040	.595
Living with partner[b]	-.035	.605
Divorced or separated[b]	-.002	.978
Never married[b]	.083	.211
U.S. born[c]	-.139	.062
Migrant[c]	-.056	.392
IPV past year	-.015	.808

[a] Comparison group is > high school
[b] Comparison group is married
[c] Comparison group is immigrant

Table 19. Rates of Physical Violence in the Current Sample and Nationally Representative Samples

Type of Physical Violence	Current Sample	National Comorbidity Survey[a]	National Violence Against Women Survey[b]	National Alcohol Survey[c]	National Family Violence Resurvey[d]
	%	%	%	%	%
Any less severe physical violence (lifetime)	32.9	--	--	--	--
Any severe physical violence (lifetime)	17.8	--	--	--	--
Any physical violence (lifetime)	33.9	--	22.1	--	--
Any less severe physical violence (past year/current)	18.2	17.4	--	--	--
Any severe physical violence (past year/current)	7.5	6.5	--	--	3.4
Any physical violence (past year/current)	18.5	--	1.3	5.21 - 13.61[e]	11.6

[a] Kessler et al., 2001
[b] Tjaden & Thoennes, 2000
[c] Schafer et al., 1998
[d] Straus & Gelles, 1988
[e] represents lower and upper bound estimates

Table 20. Rates of Physical Intimate Partner Violence in the Current Sample and Other Latino Samples

	Lifetime Physical Violence %
Current Sample – Overall	33.9
Hispanic women (NVAWS; Tjaden & Thoennes, 2000)	21.2
Mexican origin adults (ECA; Sorenson & Telles, 1991)	20.0
Current Sample – US born	48.4
Mexican American adults (US born) (ECA; Sorenson & Telles, 1991)	30.9
Current Sample - Immigrant	22.2
Mexican born adults (ECA; Sorenson & Telles, 1991)	12.8

	Past Year/Current Physical Violence %
Current Sample – Overall	18.5
Mexican origin women (Lown & Vega, 2001)	10.7
Hispanic couples (NAS; Caetano et al., 2000)	17.0
Current Sample – US born	25.4
Mexican American women (US born) (NAFVS; Aldarondo et al., 2002)	16.7
Mexican American women (US born) (Lown & Vega, 2001)	15.8
Current Sample – Immigrant	12.8
Mexican born women (NAFVS; Aldarondo et al., 2002)	13.4
Mexican born women (Lown & Vega, 2001)	7.1
Current Sample – Migrant/seasonal	14.3
Migrant/seasonal (Hightower et al., 2000)	19.0[a]

[a] % of sample reporting physical *or* sexual assault