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Violence on the Border---Too Close to Home: Prevalence of Proprietariness,

Jealousy, and Aggression in Latino/a Intimate Partner Relationships

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#### Abstract

More than 32 million Americans have been affected by intimate partner violence (IPV) in their lifetime, and in the state of Texas alone, 74% have either experienced some form of domestic violence themselves, or know a family member or friend who has. This study examines factors that predict IPV on the Southwest Texas-Mexico border. Thirty-one females and 17 males completed an on-line survey assessing jealousy, proprietariness factors (behavioral, social, informational control, and face threat reactivity), and physical and verbal aggression. Males reported higher verbal aggression, behavioral control, and informational control than females, while females reported higher emotional and sexual jealousy. Results of a two stepwise hierarchical regression indicated that jealousy and proprietariness factors predicted aggression: Specifically, the extent to which someone displays verbal aggression is significantly explained by their level of behavioral control and face threat reactivity as well as by not evoking jealousy. And, the extent to which an individual experiences physical aggression can be explained by their level of behavioral control and by not anticipating sexual jealousy. Proprietary behavior significantly predicts a person's level of relational aggression over and beyond other factors. Gender differences are discussed, and suggestions for intervention and prevention of intimate partner violence are provided.

Violence on the Border---Too Close to Home: Prevalence of Proprietariness, Jealousy, and Aggression in Latino/a Intimate Partner Relationships

More than 32 million Americans have been affected by intimate partner violence (IPV) in their lifetime (Tjaden & Thoennes, 2000). According to the Texas Council on Family Violence (2004) statewide poll on domestic violence, 74% have either experienced some form of domestic violence themselves, or know a family member or friend who has. In 2003, approximately 185,299 reports of domestic violence occurred in Texas, which is an increase of almost 50% from 1991. Although it is a serious epidemic that continues to rise, it is a preventable public health problem in the U.S.

The majority of reported incidences of IPV occur against women. In the United States, approximately 5.3 million incidents of intimate partner violence occur against women each year (CDC, 2004). One out of four American women has reported that they have been physically or sexually assaulted by a husband or boyfriend at some point in their lives. In 2001, there were 700,000 incidents of IPV reported in Texas alone, of which 85% were against women (Texas Council on Family Violence, 2004). Recent studies show that women between 16 and 24 are nearly three times more vulnerable to intimate partner violence than women in other age groups. Approximately 1,300 women are victims of uxoricide, intimate partner murder (Rennison & Welchans, 2000). The Texas Department of Public Safety (2003) reported that on average three women were killed by their intimate partner each week (see Figure 1). When compared with other states, intimate partner uxoricide in Texas is amongst the highest rates in the country.

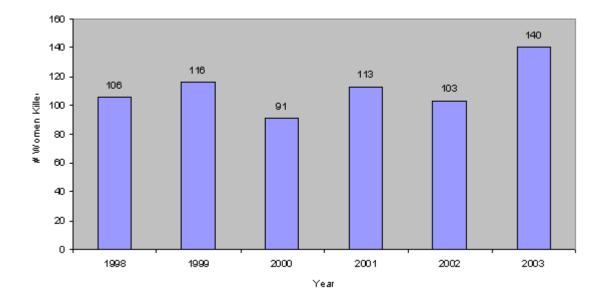


FIGURE 1. Number of women killed each year in intimate partner homicides in Texas between 1998 and 2003 (Texas Department of Public Safety, 2003).

According to the 2000 National Violence Against Women Survey (NVAWS), 23.4% of Hispanic/Latina females and 7.4% of Hispanic/Latino males were victimized by IPV in their lifetime (Tjaden & Thoennes, 2000). There were no differences found between Hispanic and non-Hispanic women's reports of IPV (Hispanic: 21.2% vs. non-Hispanic: 22.1%) and intimate partner stalking (4.8% for both groups). However, Latina women were more likely to report that they were raped by a current or former intimate partner (7.9%) than non-Hispanic women (5.7%), which is particularly noteworthy since a previous NVAW survey showed that Hispanic women reported less rape and victimization than non-Hispanic women.

These statistics are only estimates since many incidents of IPV are not reported to the police. Amongst women, only about 20% of the incidents of rape or sexual assaults, 25% of physical assaults, and 50% of stalkings are reported, while even fewer IPV

incidents against men are reported (Tjaden & Thoennes, 2000). It may be more difficult to find accurate statistics of intimate partner violence on the border, particularly in a community in which there is a large Latino/a population where cultural norms may prevent individuals from reporting a crime against their romantic partner or spouse.

The present study, which was funded by the Texas Center Grant Fellowship program, takes a closer look at the prevalence of IPV on the Texas-Mexico border in a predominantly Latino/a community. First, I will define IPV and the various types of intimate partner violence, and review the existing literature examining factors related to IPV and aggression, including proprietariness and jealousy.

## Defining IPV

Intimate partner violence is defined as any behavior intentionally inflicted in an intimate partner relationship that causes physical, sexual, or psychological harm (National Women's Health Information Center, 2003). IPV occurs on a continuum, ranging from a single hit that may or may not impact the victim to chronic, severe battering. Saltzman et al. (2002) describe four main types of IPV: (1) physical violence, (2) sexual violence, (3) threats of physical or sexual violence, and (4) psychological or emotional violence. Physical violence is the intentional use of physical force with the potential for causing injury, harm, death, or disability, such as pushing, shoving, grabbing, scratching, biting, choking, slapping, punching, burning, and use of restraints or one's body against another person. Sexual violence is defined as the use of physical force to compel a person to engage in a sexual act against his or her will (whether or not the act is completed); and/or an attempted or completed sex act involving a person who is unable to understand the nature or condition of the act, to decline to participate, or to

communicate unwillingness to engage in the sexual act due to illness, disability, the influence of alcohol or other drugs, intimidation or pressure. Threats of physical or sexual violence are the use of words, gestures, or weapons to communicate the intent to cause death, disability, injury, or physical harm. Finally, psychological or emotional violence involves trauma to the victim caused by acts, threats of acts, or coercive tactics, through use of humiliation, controlling what the victim can and cannot do, withholding information, deliberately doing something to make the victim feel diminished or embarrassed, isolating the victim from friends and family, and denying the victim access to money or other basic resources. Psychological and emotional violence can occur when there has been prior threat or actual physical or sexual violence. Stalking, also another form of IPV, is a repeated behavior that causes victims to feel a high level of fear (Tjaden & Thoennes, 2000).

#### Proprietariness and Entitlement

Numerous studies have examined factors that relate to acts of intimate partner violence. One of the few constructs that has been proposed as a precipitant of IPV is the threat, attempt, or act of leaving a romantic relationship (Brewer & Paulsen, 1999; Brewster, 2002; Campbell et al., 2003; Coleman, 1999; Davis, Ace & Andra, 2000; Dearwater et al., 1998; Dutton & Kerry, 1999; Esteal, 1990-1996; Farr, 2002; Fleury, Sullivan, & Bybee, 2000; Gentile, 2001; Hall, 1997; Johnson, 1995; Kennedy & Dutton, 1989; Kienlen, Birmingham, Solberg, O'Regan, & Meloy, 1997; Roberts, 2002; Serran & Firestone, 2004; Wallace, 1986). Del Ben and Fremouw (2002) found that in 70% of the cases of actual or attempted femicide, the victim initiated the relationship dissolution.

Two factors that may contribute to intimate partner violence are relational proprietariness and entitlement. Proprietariness is a set of beliefs and values that views a romantic partner as a type of property (Wilson & Daly, 1993, 1998, 2001). Proprietariness is defined as the belief system supporting the view that partnership presupposes ownership and the rights and privileges thereby implied. Examples of proprietariness include, "You can't do anything I don't give you permission to do," "I own your ass," and "I need to know where you are at all times." Entitlement is defined as a system of beliefs and values that extends from, or is at least likely to co-occur with, proprietariness. Previous discussions have not explicitly differentiated entitlement from proprietariness, but they are potentially distinct. Entitlement implies certain presumed relational rights and injunctions implicit in the attribution of "partner-as-property." Entitlement is defined as the belief system supporting the view that one's proprietary interest in a partner presupposes privileges of imposition and rights of return on *investment in the relationship*. Husbands who experience such entitlement may use threats (e.g., "If you leave, I will kill you," "If I can't have you, no one can") as coercive tactics to territorialize through terror (Polk & Ranson, 1991). Entitlement was one of the key themes in a narrative analysis of batterers' sense-making about their violence, in which batterers expressed justifications to "keep women in their place," and the belief that "if she feels like she can get away with something, she would push it to the extreme, so you nip it in the bud" (Wood, 2004, p. 564).

## Jealousy

Another factor that is strongly linked to intimate partner violence is jealousy (Puente & Cohen, 2003; Sugarman & Hotaling, 1989). Approximately one-third of

intimate homicides are precipitated by jealousy (Brewer & Paulsen, 1999; Serran & Firestone, 2004). Jealousy even appears to be a personal attribution that is cognitively associated with risk of a coercive relationship (Wilson, Jocic, & Daly, 2001). Brainerd, Hunter, Moore, and Thompson (1996) found that individuals who are high on the use of jealousy-inducing behaviors have a significantly higher need for control in their relationships, which in turn was related to their use of physical aggression toward their partner. In an examination of 540 husband-wife homicides, more husbands (20%) than wives (10%) had killed their spouse in a fit of jealousy over their mate's real or imagined infidelity (Langan & Dawson, 1995). Another study reported that about 12% of all spouse-killings stemmed from sexual jealousy (Wallace, 1986). Across a variety of studies, there is strong support for the relationship between feelings of jealousy and likelihood of violence in a relationship (Guerrero, Spitzberg, & Yoshimura, 2004; Stith et al., 2004; Sugarman & Hotaling, 1989).

# Gender Differences in Expression of Aggression

There are varies forms of aggressiveness (Tedeschi & Felson, 1994), which is particularly evident when examining gender differences. While men are more inclined to use strategic or *instrumental aggressiveness*, women, on the other hand, are more likely to display *expressive aggressiveness* as a result of losing self-control (Campbell, Muncer, McManus, & Woodhouse, 1999; Muncer & Campbell, 2004). Wilson and Daly (2001) argue that a large number of intimate murders each year are "relatively rare maladaptive by-products of human passions: the dysfunctionally extreme manifestations of proprietary and violent inclinations whose lesser expressions are effective in coercive control" (p. 14). Although intimate partner violence against women is high, female perpetration of aggression towards their partners is also high. Sugihara and Warner (2002) found that Mexican American female aggression against their partner is 85% for psychological aggression and 48% for physical aggression. Thus, it is important to examine gender differences in proprietary, jealous, and aggressive behaviors.

#### The Present Study

In 2005, I conducted a pilot study with my colleagues at San Diego State University surveying 300 undergraduate college students on the West coast to examine relational entitlement and proprietariness. Data indicated an interpretable factor structure of relational proprietariness and entitlement, consisting of social control, behavioral control, information control, and face-threat reactivity. There was strong support for the construct validity of the measure. Results validated our new measure, and our manuscript was accepted for publication in a peer referee journal (Horsch, Spitzberg, Wiering, & Teranishi, in press).

The present study, funded by the Texas Center Grant Fellowship program, is an exploratory study extending upon our previous research to examine the prevalence of IPV in a Texas-Mexico border community. This study aims to explore factors that contribute to predicting relational aggression and violence, and gender differences in relational proprietariness, jealousy, and aggression in the Laredo community. The following research questions are examined: (1) How many intimate partner violent offenses are reported in Laredo community and on the university campus each year? (2) Are there gender differences in jealous, proprietary, and relational aggressive behaviors? (3) To what extent does jealousy and relational proprietariness predict relational aggression?

# Method

# Participants

Approximately 50 Latino college students attending a four-year public university on the U.S.-Mexico border participated in an anonymous on-line survey. The university is comprised of approximately 4,000 students, of which 94% are Latino/a. Instructors from undergraduate summer session courses were asked to announce the survey in their class, and students were offered nominal extra credit points for participating in the on-line survey. The sample consisted of 31 females and 17 males; their ages ranged from 18 to 45 years old, (M = 25 years, SD = .65). All but two of the participants were of Latin American descent, specifying their ethnicity as "Hispanic" or "Mexican American." The remaining two specified their ethnicity as "Anglo" and "White." The majority of the participants were married (69%), while 25% were single, and 6% reported that they were separated at the time of the survey. Participants who identified themselves as single and separated also reported that they were not currently in a relationship.

## Measures

Participants were asked to complete an on-line survey assessing demographic background variables (gender, ethnicity, marital status, and current relational status), and measures of proprietariness, jealousy, and aggressiveness.

*Proprietariness*. Horsch, Spitzberg, Wiering, and Teranishi's (in press) 36-item measure of proprietariness includes four subscales: (1) *behavioral control* (11 items; e.g., "You do what I tell you to do;" "If you leave me, I'll make sure you regret it"); (2) *social control* (8 items; e.g., "I pay my partner a surprise visit just to see who is with him or her;" "I have the right to contact my partner's friends to see how he/she acts without me

around"); (3) *informational control* (10 items; e.g., "I have a right to know where my partner is all the time;" "I have the right to check my partner's cell phone and recent call list"), and (4) *face threat reactivity* (7 items; e.g., "If a partner feels like he/she can get away with something, it's important to nip it in the bud;" "If someone of the opposite sex lit up at the sight of my partner, I would become uneasy"). Respondents rated items on a 7-point scale from 1=Very Untrue of Me to 7=Very True of Me. Each subscale was calculated by summing the items in the scale and obtaining the mean. All subscales had high alpha reliability: Cronbach's alpha was .81 for the behavioral control scale, .90 for the social control scale, .81 for the informational control scale, and .81 for the face threat reactivity scale.

*Jealousy.* Four measures of jealousy were assessed: (1) evoking jealousy, (2) anticipated sexual jealousy, (3) emotional jealousy, and (4) cognitive jealousy. The Evoking Jealousy scale (Cayanus & Booth-Butterfield, 2004) is an 18-item measure including items such as, "I have tried to make my partner jealous by...dancing with someone else while he/she is around," "...telling him/her someone flirted with me," and "...telling him/her I found a person attractive." This scale was developed by summing all of the items and dividing by the number of items. Cronbach's alpha demonstrated high reliability (alpha = .90) for this subscale.

Respondents were asked, "How would you feel if your partner were to engage in the following behavior with another man/woman?" with the Anticipated Sexual Jealousy scale (Buunk, 1998). Four behaviors were listed, including sexual intercourse, light petting, a long-term sexual relationship, and falling in love. Respondents were asked to rate these items on a 5-point scale ranging from 1 = Not at all Upset to 5 = ExtremelyUpset. This measure was highly reliable (Cronbach's alpha = .83).

The Multidimensional Jealousy scale (Pfeiffer & Wong, 1989) has two subscales assessing emotional jealousy and cognitive jealousy. On the 8-item emotional jealousy subscale respondents were asked, "How would you emotionally react to the following situations?" Some of the situations are "My partner comments to me on how great looking a particular member of the opposite sex is;" "My partner hugs and kisses someone of the opposite sex;" and "My partner works very closely with a member of the opposite sex (in school or office." Respondents rate each item on a 7-item scale ranging from 1=Very pleased to 7=Very upset. For the 8-item cognitive jealousy subscale, respondents were asked, "How often do you have the following thoughts about your partner?" Items include, "I suspect that my partner is secretly seeing someone of the opposite sex;" "I am worried that some member of the opposite sex may be chasing after my partner;" and "I think that my partner is secretly developing an intimate relationship with someone of the opposite sex." Respondents rate each item on a scale from 1=Never to 7=All of the time. Items for each subscale were summed together and divided by the number of items. Both subscales were highly reliable: Cronbach's alpha was .95 for the cognitive jealousy subscale and .85 for the emotional scale.

*Aggressiveness*. Aggressiveness was operationalized using two measures of aggressiveness: (1) a measure of communicative or verbal aggression, and (2) a measure of physical aggression. Communicative aggressiveness (Infante & Wigley, 1986) is a 20-item measure with 10-items assessing non-verbal aggressiveness and 10-items assessing verbal aggressiveness. Items in the verbal aggressiveness subscale include, "When

individuals are very stubborn, I use insults to soften the stubbornness;" "If individuals I am trying to influence really deserve it, I attack their character;" and "When I am not able to refute others' positions, I try to make them feel defensive in order to weaken their positions." Items in the non-verbal aggressiveness subscale include, "I am extremely careful to avoid attacking individuals' intelligence when I attack their ideas;" "I try very hard to avoid having other people feel bad about themselves when I try to influence them;" and "I try to make other people feel good about themselves even when their ideas are stupid." Respondents rated the items on a 7-point scale from 1=Very Untrue of Me to 7=Very True of Me. Each subscale was calculated by summing up the items and obtaining the mean. The verbal aggressiveness scale was highly reliable (Cronbach's alpha = .86) and the non-verbal aggressiveness scale showed moderate reliability (Cronbach's alpha = .77).

Physical aggression was measured using the short form of the Conflict Tactic Scale (CTS2; Straus & Douglas, 2004). This measure was found to have adequate reliability and strong criterion validity with a sample of Mexican American females (Cervantes, Duenas, Valdez, & Kaplan, 2006). The CTS2 5-item scale was used for this study with two items assessing physical violence victimization (i.e., "My partner pushed, shoved, or slapped me," and "My partner punched or kicked or beat-me-up"); two items assessing being a perpetrator of physical violence (i.e., I pushed, shoved, or slapped my partner," and "I punched or kicked or beat-up my partner"), and one item assessing negotiation skills (i.e., "I explained my side or suggested a compromise for a disagreement with my partner"). Respondents were asked to state how many times they did each of these things in the past year on the following scale: 1 = Once in the past year, 2 = Twice in the past year, 3 = 3-5 times in the past year, 4 = 6-10 times in the past year, 5 = 11-20 times in the past year, 6 = More than 20 times in the past year. Respondents were asked to respond with a 7 if it did not happen in the past year, but it happened before and 8 if it has never happened. For purposes of this study, the four items assessing being a victim and perpetrator of violence were used. Moderate reliability was found for this aggression scale (Cronbach's alpha = .72).

# Results

#### Prevalence of IPV in the Laredo community and at TAMIU

To examine the prevalence of domestic violence occurrences reported in the Webb county, Laredo community, and the TAMIU university campus each year, statistics were obtained from the most recent published Texas Department of Public Safety annual crime reports on Domestic Violence between 2000 and 2004 (See Table 1).

Year	Location Reported	Number of Incidents of IPV
	Webb County SO	106
2000	Laredo PD	1867
	Laredo Community College PD	1
	Laredo United ISD PD	1
	Webb County SO	106
2001	Laredo PD	1871
	Texas A&M International	2
	University PD	1
	Laredo United ISD PD	
	Webb County SO	93
2002	Laredo PD	1782
	Laredo Community College PD	1
	Laredo United ISD PD	1
	Webb Co SO	96
2003	Laredo PD	1901
	Webb Co SO	81
2004	Laredo PD	1629
	Texas A&M International Univ. PD	1

TABLE 1. Number of incidents of IPV reported in Webb Co., Laredo, and local schools.

These statistics show the prevalence of domestic violence in Laredo, Texas located on the Southwest Texas-Mexico border. Over 50% of these incidents reported were due to intimate partner violence.

Although there were only three domestic violence incidents reported on the Texas A&M International University campus between 2000 and 2004, respondents in this study provide further insight into the prevalence of intimate partner violence among university students. Participants were asked how often they were a victim or a perpetrator of physical violence with a recent romantic partner. Table 2 shows their responses to individual items on the physical aggression measure, indicating that physical violence is high amongst college students in their intimate partner relationships.

	Never	Once in the post	Twice in	3-5 times	6-10 times	11-20 times in
		the past year	the past year	in the past year	in the past year	the past year
I pushed, shoved or slapped my partner.	67%	17%	8%	8%	6%	0%
I punched, kicked or beat up my partner.	92%	4%	0%	2%	0%	2%
My partner pushed, shoved or slapped me.	65%	19%	4%	6%	4%	2%
My partner punched, kicked or beat me up.	85%	11%	0%	0%	2%	2%

TABLE 2. Percentage of incidents of physical violence with their intimate partner.

*Note:* N = 21.

Due to the small sample in this exploratory study, the victim and perpetrator items of the CTS2 measure were combined to assess the overall number of participants who experienced physical violence with their romantic partner (Cronbach's alpha = .72). Approximately 43% of the participants (N = 21) reported having experienced physical violence with their romantic partner, whether being the perpetrator or the victim of physical violence, at least once in the past year.

# Gender Differences

Relationship estrangement is mostly viewed in terms of male proprietariness and female victimization. However, aggression, jealousy, and rage occur in both males and females. In order to examine possible gender differences, independent samples *t*-tests were conducted to compare males and females in their proprietary, jealous, and aggressive behaviors. Overall means, standard deviations, ranges, and bivariate correlations of all key variables are shown in Table 3.

Male respondents scored significantly higher than female respondents in verbal aggressiveness (t = -2.05; df = 46; p < .05;  $M_f = 2.36$ ,  $M_m = 3.05$ ). Males also scored significantly higher than females on the proprietariness subscales of behavioral control (t = -2.94; df = 46; p < .01;  $M_f = 1.46$ ,  $M_m = 2.19$ ) and informational control (t = -2.24; df = 46; p < .05;  $M_f = 2.12$ ,  $M_m = 2.79$ ). In contrast, females scored higher than males on emotional jealousy (t = 1.84; df = 46; p < .07;  $M_f = 5.15$ ,  $M_m = 4.62$ ) and anticipated sexual jealousy (t = 2.03; df = 46; p < .05;  $M_f = 4.63$ ,  $M_m = 4.04$ ). There was no difference between males and females in social control, face threat reactivity, or physical aggressiveness. These results indicate that males and females have different tendencies towards expressing verbal aggression, jealousy, and proprietariness.

Variables	Mean	STD	Range	1	2	3	4	5	6	7	8	9
1. Verbal Aggression	2.60	1.16	1 – 7									
2. Physical Violence	1.05	.99	1 – 7	.35								
3. Evoking Jealousy	6.24	1.36	1 – 5	31*	39+							
4. Sexual Jealousy	4.42	.83	1 – 5	24	50*	.35*						
5. Cognitive Jealousy	2.30	1.45	1 – 7	.24	.19	08	10					
6. Emotional Jealousy	4.96	.98	1 – 7	.02	35	.01	.39**	.04				
7. Behavioral Control	1.72	.78	1 – 7	.51**	.55**	16	26	.15	07			
8. Social Control	2.72	1.48	1 – 7	.32*	.11	04	.06	.13	.20	55**		
9. Info Control	2.36	1.03	1 – 7	.43**	.36	20	16	.35*	.15	.53**	.58**	
10. Face Threat	3.20	1.38	1 – 7	.52**	.27	20	.14	.31*	.41**	.55**	.55**	.54**

TABLE 3. Means, standard deviations, range, and bivariate correlations of key variables

*Note*: +p < .08; \*p < .05; \*\*p < .01; All Ns = 48, except for physical violence factor (N = 21).

## Predictors of Verbal Aggression and Physical Violence

Stepwise hierarchical regression analysis was conducted to examine the extent to which relational proprietariness would predict unique variance in relational aggression. Verbal aggressiveness was regressed onto the jealousy factors (step 1) and the proprietariness factors (step 2). Evoking jealousy initially entered the equation adding 9% of the explained variance (B = -.26; p < .05). Among the proprietariness factors, behavioral control entered the equation adding 21% of explained variance (B = .70; p < .001) and face threat reactivity entered the equation adding 6% of explained variance (B = .26; p < .05). Neither social nor the informational control factors entered the equation, failing to add statistically significant variance to the model (Overall R = .61;  $R^2 = .37$ ; df = .44; p < .001; See Table 4). Results suggest that the extent to which someone engages in verbal aggressiveness is significantly explained by their level of proprietariness and their tendency to not evoke jealousy.

TABLE 4

Model	R	$R^2$	$I^{a}$	β
Step 1:				
Evoking Jealousy	.31	.09		31*
Sexual Jealousy				
Cognitive Jealousy				
Emotional Jealousy				
Step 2:				
<b>Behavioral Control</b>	.56	.31	13.91**	.47**
Social Control				
Informational Control				
Step 3:				
Face Threat Reactivity	.61	.37	4.45*	.31*

Stepwise Hierarchical Multiple Regression for Jealousy, Proprietariness, and Verbal Aggressiveness

*Note.* N = 48. The factors in bold provided a significant contribution to the model. I<sup>a</sup> Increment in percentage of variance explained by the block of variables entered on Step 1, Step 2, and Step 3. \*p < .05; \*\*p < .01. Overall regression model was F(3, 47) = 8.68, p > .001.

Instrumental aggression may be more intense and severe than expressive aggression (Campbell et al., 1999; Muncer & Campbell, 2004). The same stepwise hierarchical regression analysis was conducted with physical aggression as the dependent variable. As mentioned earlier, due to the fact that there were so few respondents and only 43% of the participants experienced physical violence with their partners, a combined measure assessing overall experience of physical violence in a romantic relationship was developed, whether the person was the victim or the perpetrator of the violence. Physical violence was regressed onto the jealousy factors (step 1) and proprietariness factors (step 2). Sexual jealousy entered the model (B = -.59; p < .05) explaining 25% of the variance accounted for physical violence. Among the proprietariness factors, behavioral control entered the equation adding an additional 19% of the explained variance (B = .58; p < .05; overall R = .66;  $R^2 = .44$ ; df = 28; p < .01; see Table 5).

TABLE 5

Model	R	$R^2$	$I^{a}$	β
Step 1:				
Evoking Jealousy				
Sexual Jealousy	.50	.25		50*
Cognitive Jealousy				
Emotional Jealousy				
Step 2:				
<b>Behavioral Control</b>	.66	.44	6.06*	.45*
Social Control				
Informational Control				
Face Threat Reactivity				

Stepwise Hierarchical Multiple Regression for Jealousy, Proprietariness, and Physical Aggressiveness

*Note.* N = 21. The factors in bold provided a significant contribution to the model. I<sup>a</sup> Increment in percentage of variance explained by the block of variables entered on Step 1 and Step 2. \*p < .05; \*\*p < .01; \*\*\*p < .001. Overall regression model was F(2, 20) = 6.94; p > .01.

Results indicate that the extent to which someone experiences physical violence in an intimate partner relationship is significantly explained by their level of proprietary behavioral control and by not anticipating jealousy when their partner has an affair.

## Discussion

Following the national trends of intimate partner violence, there is a high prevalence of intimate partner violence in this Southwest Texas-Mexico border community. In this small sample of university students, 43% of the participants had experienced IPV in a recent relationship. About 33% reported that they were a perpetrator of physical violence toward their partner, stating that they "pushed, shoved, or slapped their partner" at least once in the past year. Similarly, over one-third of the respondents were victims of physical violence with 35% reporting that their partner had "pushed, shoved, or slapped" them, and 15% reporting that their partner "punched, kicked, or beat them up" at least once in the past year. Although in the state and local police reports there were not as many incidents of domestic violence reported, these findings suggest that the prevalence of this problem is much higher, even among college students.

Incidents of intimate partner violence are higher than statistics suggest since many incidents go unreported and many do not wish to press charges against their significant other. Possible reasons that people do not report domestic violence in this community may be due to their religious, cultural, or family values and beliefs. Some people do not want family or community members to know that they are going through relational problems. They may want to resolve issues within their immediate family without others getting involved, or they are trying to avoid "chisme," or gossip within the small town border community. Others may be more concerned about the family splitting apart because children are involved, or it is against their religious beliefs to get divorced or separated. Perhaps some have hope that they can resolve their problems with their romantic partners so they aim to give it another try even after a domestic violence incident occurs.

Gender differences were found in jealous, proprietary, and aggressive behaviors. Males reported higher verbal aggressiveness and proprietary behaviors through behavioral and informational control than females. In contrast, females displayed higher emotional jealousy and anticipated sexual jealousy than males. There were no significant differences in social control or face threat reactivity. Findings support our previous work that indicated that males had higher behavioral control and aggressive behaviors (Horsch, Spitzberg, Wiering, & Teranishi, in press). These findings may also be explained by research that shows that males demonstrate more strategic or instrumental aggression, while females demonstrate more expressive aggression (Campbell et al., 1999; Muncer & Campbell, 2004), which perhaps may be displayed through their jealous behavior.

It is important to note that although males displayed higher verbal aggressiveness and proprietary behavior, no differences were found in physically violent behavior. That is, both males and females were equally as likely to have been a victim or perpetrator of physical violence. While about 11% of Mexican American women report being physically abused by a current romantic partner (Lown & Vega, 2001), the number of Mexican American females as perpetrators of aggression against their partners is also high (Sugihara & Warner, 2003).

Findings showed that both verbal and physical aggressiveness with an intimate

partner was significantly predicted by proprietary behavior. Specifically, those who strategically engage in behavioral control tended to express more verbal and/or physical aggressiveness towards their partner. This is consistent with our previous findings (Horsch, Spitzberg, Wiering, & Teranishi, in press). By seriously examining the direct relationship between proprietary behaviors and intimate partner violence, we may be able to predict who is likely to commit this type of heinous crime and intervene before it occurs.

In contrast to the previous literature, findings indicated that jealousy negatively contributed to predicting aggressiveness. Specifically, evoking jealousy was negatively related to verbal aggressiveness, and sexual jealousy was negatively related to physical aggressiveness. In contrast, previous studies have shown a strong positive relationship between jealousy and relational violence (Brainerd, Hunter, Moore, & Thompson, 1996; Puente & Cohen, 2003; Sugarman & Hotaling, 1989). Some researchers argue that those who use jealousy-inducing behaviors have a higher need for control in their relationships, which leads to increased physical aggression toward their partner (Brainerd et al., 1996; Langan & Dawson, 1995). In addition, one study reported that sexual jealousy was a major precipitating factor in about 12% of all spouse-killings (Wallace, 1986). Contrary to these findings, this study indicates that those with less jealous behaviors predicted more aggressive behavior.

One explanation for these findings may be due to gender differences in jealousy. Cross-cultural research indicates the largest gender differences in jealousy were found in the U.S. when compared to Germany and the Netherlands; American men reported higher distress than women due to anticipated sexual jealousy than emotional jealousy (Buunk, Angleitner, Oubaid, & Buss, 1996). To the contrary, women in this study reported higher emotional and sexual jealousy than men. The participants in this study were predominantly Mexican American. Cross-cultural comparisons should be conducted with diverse ethnic groups in the U.S. to examine whether there is within-group variability in various types of jealousy.

Another possible explanation may be that respondents were not truthful in their feelings of jealousy towards their partner. They may be exhibiting impression management strategies by denying feelings of jealousy toward their partner. Alternatively, jealousy has been traditionally been studied as a behavioral tendency, not as a cognitive and affective state. It may be that those who do not display jealous behaviors may enforce more proprietary behaviors through psychologically and behaviorally coercive techniques, which in turn escalate conflicts to a physically aggressive level. That is, perhaps feelings of jealousy are manifested through proprietary behavior which leads to physical violence. Wilson and Daly (2001) found that intimate violence is generally attributed to 'jealousy,' but prefer to call offenders 'proprietary,' because proprietariness implies a "more encompassing mind-set, referring not just to the emotional force of one's desire for control and exclusivity, but also to feelings of entitlement and moral outrage" (p. 13).

Intervention and prevention strategies must be encouraged and enforced. One intervention technique is to encourage more men and women to report conflict, aggression, and rage occurring in their intimate partner relationships either to a counselor, educator, or law enforcement agent. Several of my students confided to me that they were being stalked by a former boyfriend or spouse. Stalking is often precipitated by the threat of partner departure, or motivated by the hope to get a partner to return to a dissolved relationship (Blackburn, 1999; Brewster, 2000; Budd & Mattinson, 2000; Coleman, 1999; Davis et al., 2000; Dye & Davis, 2003; Gentile, 2001; Hall, 1997; Kienlen et al., 1997; Langhinrichsen-Rohling, Palarea, Cohen, & Rohling, 2000; Meloy & Boyd, 2003; Sheridan, Davies & Boon, 2001). And, women face an increased risk of abuse and uxoricide within proximity of threats or attempts to leave a male partner (Barnard et al., 1982; Brewer & Paulsen, 1999; Campbell et al., 1999; Dearwater et al., 1998; Dussuyer, 2000; Dutton & Browning, 1988; Dutton & Kerry, 1999; Easteal, 1990-1996; Farr, 2002; Fleury et al., 2000; Gauthier & Bankston, 2004; Henning & Feder, 2004; Johnson & Hotton, 2003; Polk & Ranson, 1991; Shackelford, 2001; Shackelford, Buss, & Weekes-Shackelford, 2003; Wallace, 1986; Wilson & Daly, 1993). Uxoricide in Texas is amongst the highest rates in the country where on average, three women are killed by their intimate partner each week (Texas Department of Public Safety, 2003). If we can encourage individuals to be aware of and report problematic behaviors, we could stop the violence before it occurs and save lives.

Another intervention strategy is to encourage women to take self-defense classes like Rape Awareness Defense (RAD) courses that are offered every semester at the university campus. It is important to heighten women's awareness and teach them defense techniques to be better prepared in case they encounter aggressive or violent perpetrators. These classes help women to avoid being a victim of violence.

An important prevention strategy is to teach boys and girls at an early age to develop prosocial and better communication skills with their parents and peers as they are growing up. In addition, parents, educators, and counselors need to help children develop positive outlets for their negative emotions, jealousy and aggression. By teaching children how to communicate their feelings and emotions, they would be more adept at dealing with problems and issues that may arise in their future romantic relationships.

This study aimed to enhance our understanding of the prevalence of intimate partner violence in a Southwest Texas border community. Due to the high prevalence of intimate partner violence, it is important to be aware of the factors that precipitate these aggressive and violent acts. By knowing that proprietary behaviors significantly contribute to aggressive and violent behaviors, parents, teachers, counselors, and law enforcement agents can intervene and reduce the likelihood of intimate partner violence in our community.

#### References

- Barnard, G. W., Vera, H., Vera, M. I., & Newman, G. (1982). Till death do us part: A study of spouse murder. *Bulletin of the American Association of Psychiatry and Law*, 10, 271-280.
- Blackburn, E. J. (1999). Forever yours: Rates of stalking victimization, risk factors and traumatic responses among college women. Unpublished doctoral dissertation, University of Massachusetts, Boston.
- Brainerd, E. G., Jr., Hunter, P. A., Moore, D., & Thompson, T. R. (1996). Jealousy induction as a predictor of power and the use of other control methods in heterosexual relationships. *Psychological Reports*, 79, 1319-1325.
- Brewer, V. E., & Paulsen, D. J. (1999). A comparison of U.S. and Canadian findings on uxoricide risk for women with children sired by previous partners. *Homicide Studies*, *3*, 317-332.
- Brewster, M. P. (2000). Stalking by former intimates: Verbal threats and other predictors of physical violence. *Violence and Victims*, *15*, 41-54.
- Brewster, M. P. (2002). Trauma symptoms of former intimate stalking victims. *Women & Criminal Justice*, *13*, 141-161.
- Budd, T., & Mattinson, J. (2000). Stalking: Findings from the 1998 British crime survey (Home Office Research, Research Findings No. 129). London: Research Development and Statistics Directorate.

- Buunk, B. P., Angleitner, A., Oubaid, V., & Buss, D. M. (1996). Sex differences in jealousy in evolutionary and cultural perspective: Tests from Netherlands, Germany, and the United States. *Psychological Science*, 7, 359 - 363.
- Campbell, A., Muncer, S., McManus, I. C., & Woodhouse, D. (1999). Instrumental and expressive representations of aggression: One scale or two? *Aggressive Behavior*, 25, 435–444.
- Campbell, J. C., Webster, D., Koziol-McLain, J., Block, C., Campbell, D., Curry, M. A., Gary, F., Glass, N., McFarlane, J., Sachs, C., Sharps, P. Ulrich, Y., Wilt, S. A., Manganello, J., Zu, Z., Schollenberger, J., Frye, V., & Laughon, K. (2003). Risk factors for femicide in abusive relationships: Results from a multisite case control study. *American Journal of Public Health*, *93*, 1089-1097.
- Center for Disease Control. (2003). *Health, United States, 2003*. Retrieved August 6, 2006 from http://www.cdc.gov/ncipc/wisqars.
- Center for Disease Control. (2004). CDC National Center for Injury Prevention and Control. Intimate partner violence: Fact sheet. Retrieved 6 August, 2006 from http://www.cdc.gov/ncipc/factsheets/ipvfacts.htm.
- Cervantes, R. C., Duenas, N., Valdez, A., & Kaplan, C. (2006). Measuring violence risk and outcomes among Mexican American adolescent females. *Journal of Interpersonal Violence*, 21, 24-41.
- Coleman, F. L. (1999). *Clinical characteristics of stalkers*. Dissertation (UMI Dissertation Services No. 9949961), University of Memphis, Memphis, TN.

- Davis, K. E., Ace, A., & Andra, M. (2000). Stalking perpetrators and psychological maltreatment of partners: Anger-jealousy, attachment insecurity, need for control, and break-up context. *Violence and Victims*, 15, 407-425.
- Dearwater, S. R., Coben, J. H., Campbell, J. C., Nah, G., Glass, N., McLoughlin, E., & Bekemeier, B. (1998). Prevalence of intimate partner abuse in women treated at community hospital emergency departments. *Journal of the American Medical Association*, 280, 433-438.
- Del Ben, K., & Fremouw, W. (2002). Stalking: developing an empirical typology to classify stalkers. *Journal of Forensic Sciences*, 47, 152-158.
- Dussuyer, I. (2000, December). *Is stalking legislation effective in protecting victims?*Paper presented to the Criminal Justice Responses Conference, Australian Institute of Criminology, Sydney, Australia.
- Dutton, D. G., & Browning, J. J. (1988). Concern for power, fear of intimacy, and aversive stimuli for wife assault. In G. T. Hotaling, D. Finkelhor, J.T. Kirkpatrick, & M. A. Straus (Eds.), *Family abuse and its consequences: New directions in research* (pp. 163-175). Newbury Park, CA: Sage.
- Dutton , D. G. & Kerry, G. (1999) Modus operandi and personality disorder in incarcerated spousal; killers. *International Journal of Law and Psychiatry*, 22, 3-4, 287 – 299.
- Easteal, P. (1990-1996). Homicide between sexual intimates in Australia: A preliminary report. Conference proceedings, Australian Institute of Criminology. Retrieved 14 September, 2004, http://www.aic.gov.au/publications/proceedings/17/easteal.pdf

- Farr, K. A. (2002). Battered women who were being killed and survived it: Straight talk from survivors. *Violence and Victims*, 17, 267-281.
- Fleury, R. E., Sullivan, C. M., & Bybee, D. I. (2000). When ending the relationship does not end the violence. *Violence Against Women*, 6, 1363-1383.
- Gauthier, D. K., & Bankston, W. B. (2004). "Who kills whom" revisited. *Homicide Studies*, *8*, 96-122.
- Gentile, S. R. (2001). *The stalking of psychologists by their clients: A descriptive study*. Unpublished dissertation, Department of Psychology, Pepperdine University, CA.
- Guerrero, L. K., Spitzberg, B. H., & Yoshimura, S. (2004). Sexual and emotional jealousy. In J. H. Harvey, A. Wenzel, & S. Sprecher (Eds.), *The handbook of sexuality in close relationships* (pp. 311-345). Mahwah, NJ: Lawrence Erlbaum Associates.
- Hall, D. M. (1997). Outside looking in: Stalkers and their victims. Unpublished doctoral dissertation, Claremont Graduate School, Claremont, CA.
- Henning, K., & Feder, L. (2004). A comparison of men and women arrested for domestic violence: Who presents the greatest threat? *Journal of Family Violence*, *19*, 69-80.
- Horsch, A. F., Spitzberg, B. H., Wiering, L., & Teranishi, C. S. (in press). "If I Can't Have You, No One Can": Development of a Relational Entitlement and Proprietariness Scale (REPS). *Violence and Victims*.
- Infante, D. A., & Wigley, C. J. III. (1986). Verbal aggressiveness: An interpersonal model and measure. *Communication Monographs*, *53*, 63-69.

- Johnson, H. (1995). Risk factors associated with non-lethal violence against women by marital partners. In C. Block & R. Block (Eds.), *Trends, risks, and interventions in lethal violence: Proceedings of the Third Annual Spring Symposium of the Homicide Working Group* (NCJ 154254; pp. 151-168). Atlanta, GA.
- Johnson, H., & Hotton, T. (2003). Losing control: Homicide risk in estranged and intact intimate relationships. *Homicide Studies*, *7*, 58-84.
- Kennedy, L. W., & Dutton, D. G. (1989). The incidence of wife assault in Alberta. Canadian Journal of Behavioural Science, 21, 40-54.
- Kienlen, K. K., Birmingham, D. L., Solberg, K. B., ORegan, J. T., & Meloy, J. R. (1997). A comparative study of psychotic and nonpsychotic stalking. *Journal of the American Academy of Psychiatry and Law*, 25, 317-334.
- Langan, P. A., & Dawson, J. M. (1995). Spouse murder defendants in large urban counties (NCJ 153256). Washington, DC: U. S. Department of Justice.
- Langhinrichsen-Rohling, J., Palarea, R. E., Cohen, J., & Rohling, M. L. (2000). Breaking up in hard to do: Pursuit behaviors following the dissolution of romantic relationships. *Violence and Victims*, *15*, 73-90.
- Meloy, J. R., & Boyd, C. (2003). Female stalkers and their victims. Journal of the
- Muncer, S., & Campbell, A. (2004). Confirmatory factor analysis and the factor structure of EXPAGG in context: A reply to Forrest et al., 2002. *Aggressive Behavior*, 30, 146-147.
- National Women's Health Information Center (NWHIC). (2003). Violence against women: Domestic violence and intimate partner violence. Retrieved August 6, 2006 from http://www.cdc.gov/omh/Highlights/2004/HOct94.htm.

- Polk, K., & Ranson, D. (1991). The role of gender in intimate homicide. Australian and New Zealand Journal of Criminology, 24, 15-24.
- Puente, S., & Cohen, D. (2003). Jealousy and the meaning (or nonmeaning) of violence. Personality and Social Psychology Bulletin, 29, 449-460.
- Rennison, C. M., & Welchans, S. (2000, May). *Intimate partner violence*. Bureau of Justice Statistics Special Report (NCJ 178247). Washington DC: U.S. Department of Justice.
- Roberts, K. A. (2002). Stalking following the breakup of romantic relationships: Characteristics of stalking former partners. *Journal of Forensic Sciences*, 47, 1070-1077.
- Saltzman, L. E., Fanslow, J.L., McMahon, P. M., & Shelley, G. A. (2002). Intimate partner violence surveillance: Uniform definitions and recommended data elements. Atlanta, GA: Center for Disease Control and Prevention, National Center for Injury Prevention and Control.
- Serran, G., & Firestone, P. (2004). Intimate partner homicide: A review of the male proprietariness and the self-defense theories. *Aggression and Violent Behavior*, 9, 1-15.
- Shackelford, T. K. (2001). Partner-killing by women in cohabiting relationships and marital relationships. *Homicide Studies*, *5*, 253-266.
- Shackelford, T. K., Buss, D. M., & Weekes-Shackelford, V. A. (2003). Wife killings committed in the context of a lover's triangle. *Basic and Applied Social Psychology*, 25, 137-143.

- Sheridan, L., Davies, G. M., & Boon, J. C. (2001). The course and nature of stalking: A victim perspective. *Howard Journal of Criminal Justice*, 40, 215-234.
- Stith, S. M., Smith, D. B., Penn, C. E., Ward, D. B., & Tritt, D (2004). Intimate partner physical abuse perpetration and victimization risk factors: A meta-analytic review. *Aggression & Violent Behavior*, 10, 65-98.
- Straus, M., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The revised Conflict Tactics Scale (CTS2): The development and preliminary psychometric data. *Journal of Family Issues*, 17, 283-316.
- Sugarman, D. B. & Hotaling, G. T. (1989). Dating violence: Prevalence, context, and risk markers. In A. A. Pirog-Good and J. E. Stets (Eds.), *Violence in dating relationships: Emerging social issues* (pp. 3-31). New York: Praeger.
- Sugihara, Y., & Warner, J. A. (2002). Dominance and domestic violence among Mexican-Americans: Gender differences in the etiology of violence in intimate relationships. *Journal of Family Violence*, 17, 315-340.
- Tedeschi, J. T., & Felson, R. B. (1994). Violence, aggression, and coercive actions.Washington, D.C.: American Psychological Association.
- Texas Council on Family Violence. (2004). Abuse in Texas. Retrieved 6, August, 2006 from http://www.tcfv.org/info/abuse\_in\_texas.html
- Texas Department of Public Safety. (2003). The Texas Crime Report for 2003: Chapter 5 Family Violence. Retrieved 6, August, 2006, from http://www.txdps.state.tx.us/crimereports/04/2004index.htm#cit2003

Texas Department of Public Safety. (2004). The Texas Crime Report for 2004: Chapter 5 Family Violence. Retrieved 6, August, 2006, from http://www.txdps.state.tx.us/crimereports/04/2004index.htm#cit2004

- Tjaden, P., & Thoennes, N. (2000). Extent, nature, and consequences of intimate partner violence: Findings from the National Violence Against Women Survey. Washington, DC: U.S. Department of Justice; Publication No. NCJ 181867. Retrieved 6 August, 2006 from http://www.ojp.usdoj.gov/nij/pubs-sum/181867.htm.
- Wallace, A. (1986). *Homicide: The social reality*. Sydney: New South Wales Bureau of Crime Statistics and Research.
- Wilson, M., & Daly, M. (1993). Spousal homicide risk and estrangement. Violence and Victims, 8, 3-16.
- Wilson, M., & Daly, M. (1998). Lethal and nonlethal violence against wives and the evolutionary psychology of male sexual proprietariness. In R. E. Dobash & R. P. Dobash (Eds.), *Rethinking violence against women* (pp. 199-230). Thousand Oaks, CA: Sage.
- Wilson, M., & Daly, M. (2001). The evolutionary psychology of couple conflict in registered versus de facto marital unions. In A. Booth, A. C. Crouter, & M. Clements (Eds.), *Couples in conflict* (pp. 3-26). Mahwah, NJ: Lawrence Erlbaum Associates.
- Wilson, M., Jocic, V., & Daly, M. (2001). Extracting implicit theories about the risk of coercive control in romantic relationships. *Personal Relationships*, 8, 457-477.
- Wood, J. T. (2004). Monsters and victims: Male felons' accounts of intimate partner violence. *Journal of Social and Personal Relationships*, 21, 555-576.

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