

Attitudinal Acceptance of and Experiences with Intimate Partner Violence among Rural Adults

Laura M. Schwab-Reese¹ · Lynette M. Renner²

Published online: 10 November 2016
© Springer Science+Business Media New York 2016

Abstract There is little research on the associations between acceptance of and experiences with intimate partner violence (IPV) in rural samples, which may be different from associations in urban areas due to the higher prevalence of IPV in rural areas and the social and physical environment issues related to seeking help. The purpose of our study was to determine the proportion of participants who reported accepting male- and female-perpetrated IPV and the associations between experiences of IPV and acceptance of IPV. Data were collected from a cross-sectional survey of rural residents in one Midwest state. Approximately 4 % of participants reported it is ever acceptable for a male to hit his partner. Approximately 20 % of males and 12 % of females reported it is ever acceptable for a female to hit her partner. A higher proportion of individuals who were victims or perpetrators of IPV reported accepting retaliatory IPV (i.e., when partner hits first) perpetrated by individuals of their own gender. This finding suggests the previously reported high rates of bidirectional IPV in rural areas may be fueled by this acceptance of physical retaliation. Interventions to break this cycle of IPV may be guided by qualitative research into the specific ways the rural environment contributes to acceptance of retaliatory aggression.

Keywords Intimate partner violence · Attitudinal acceptance · Perpetration · Victimization

Findings from the 2010 National Intimate Partner and Sexual Violence Survey revealed that 4 % of females and males (4.8 and 5.4 million, respectively) reported being slapped, pushed or shoved by an intimate partner in the prior year (Breiding et al. 2014). Some researchers have drawn a link between the acceptance of intimate partner violence (IPV) and increased perpetration of IPV (see meta-analysis by Stith et al. 2004). However, few researchers have explicitly examined the relationships between attitudes about IPV and experiences with IPV, especially the acceptance of IPV among victims (Eckhardt and Crane 2014). Given the dearth of evidence regarding the role of attitudes in the onset and maintenance of IPV, examination of the relationships between attitudes about IPV and victimization and/or perpetration may provide additional insight into developing or tailoring interventions based on attitudes for victims and perpetrators of IPV.

Acceptance of IPV

Internationally, the acceptance of IPV, defined as reporting that emotional or physical violence between romantic partners is justifiable, has been an emerging topic among researchers. Researchers have examined the acceptance of IPV by females residing in Iran (Faramarzi et al. 2005), Bangladesh (Schuler and Islam 2008), and North Africa and the Middle East (Boy and Kulczycki 2008). In a study of female residents of Zambia, Lawoko (2006) found that being married, having lower levels of education, working an agricultural job, limited autonomy in household decisions, and a history of IPV

✉ Lynette M. Renner
renn0042@umn.edu

¹ College of Public Health, Department of Community & Behavioral Health, The University of Iowa Injury Prevention Research Center, Iowa City, IA, USA

² College of Education and Human Development, School of Social Work, University of Minnesota, 1404 Gortner Avenue, St. Paul, MN 55108, USA

victimization were associated with increased tolerance or acceptance of IPV by their partner.

Over the past several decades, however, few researchers have focused on attitudinal acceptance of IPV among couples and/or individuals in the United States (U.S.). Using a nationally representative sample of 2143 U.S. couples, Dibble and Straus (1980) found that 27.6 % of respondents believed that slapping a spouse was either ‘necessary, normal, or good’, and of these, 33 % reported ever perpetrating an act of violence against their spouse. Researchers have also found that male participants approved more strongly of wife beating compared to females (Locke and Richman 1999; Markowitz 2001). However, there has been evidence of greater public acceptance of physically-abusive behavior perpetrated by females compared with males (Bethke and DeJoy 1993; Greenblat 1985).

Situational Acceptance of IPV Acceptance of IPV perpetration or victimization may be dependent upon the situation in which the violence occurs. In one study, more than 60 % of male respondents identified some circumstances, such as finding the wife in bed with another man or if she is sobbing, under which they found a husband’s use of physical violence to be acceptable or appropriate (Greenblat 1985). More recently, in a study of English- or Spanish-speaking adult respondents in all 50 states and the District of Columbia, 5238 adults were asked to report their acceptance of three circumstances surrounding a partner’s use of violence: ‘if she/he hit him/her first’, ‘to discipline or keep her/him in line’, and ‘anytime he/she wants’ (Simon et al. 2001). Few male or female participants reported it was okay to hit a partner anytime, but a greater number reported acceptance of retaliatory IPV (i.e., one’s partner hit first) or IPV for “discipline”. Age, ethnicity, marital status, household income, education level, and having been hit, slapped, pushed, or kicked by another person in the past year (not necessarily by an intimate partner) were all significantly associated with one or more of the measures of attitudinal acceptance of IPV in this study.

Linking Acceptance and Perpetration Attitudes condoning violence within an intimate relationship have been linked to the perpetration of IPV among college-aged males (Reitzel-Jaffe and Wolfe 2001) and adolescent females (Gray and Foshee 1997), as well as other general population samples (Alexander et al. 2010; Price et al. 1999; Simon et al. 2001). In a meta-analysis, Stith et al. (2004) found a significant relationship between physical IPV perpetration and attitudes condoning IPV. However, the relationship between physical IPV perpetration and attitudes about perpetration has not been found across all samples (Robertson and Murachver 2007; Nabors and Jasinski 2009).

Although much of the small body of literature linking acceptance of IPV and perpetration has focused on explicit acceptance, some researchers have assessed implicit attitudes about violence and women. Researchers of one study found males enrolled in IPV intervention programs more readily associated the constructs of “women” and “violence” compared with nonviolent males (Eckhardt et al. 2012). Yet, IPV perpetration was not associated with explicit acceptance of IPV (Eckhardt et al. 2012). Additionally, male IPV perpetrators who have a lower implicit preference for nonviolence were more likely to reoffend and be noncompliant with treatment (Eckhardt and Crane 2014).

Acceptance of IPV in Rural Areas Although 19.3 % of the U.S. population are rural residents (United States Census Bureau 2012), the majority of IPV research has focused on urban areas (Annan 2008; Sandberg 2013). IPV is context-specific and rurality/geography is an often overlooked context (Sandberg 2013). The severity and patterns of violence appear to differ for rural populations, and researchers have suggested that increasing rurality and isolation increases the risk of victimization (Peek-Asa et al. 2011). The rural sociocultural context may also increase an individual victim’s vulnerability to IPV and a perpetrator’s unchallenged use of violence toward a partner. A recent meta-analysis found that rural victims are less likely to seek help or disclose their experiences than their urban peers, and also found that embarrassment, fear of perpetrator retaliation, system bureaucracy, and gender role stereotypes in law enforcement contributed to rural victims’ reticence (Bosch and Bergen 2006; Eastman and Bunch 2007; Edwards 2014). Fewer rural victims may also have sought help due to the perception that the community will know about the violence if they disclosed or that their families’ would have been shamed if they publicly disclosed family/personal issues (Logan et al. 2005). In addition to the cultural contributors to reduced disclosure, victims of IPV in rural areas face service challenges when seeking support as rural services tend to be limited, underfunded, offer fewer services, and provide less training for employees, which may result in poorer experiences for victims (Edwards 2014).

Study Objectives

In light of the limited literature on situational acceptance of IPV perpetrated by males or females, especially in rural samples, the purpose of our study was to report the proportion of rural males and females who accept male-to-female or female-to-male physical IPV in three situations. Additionally, we explored the association between experiences of physical IPV (perpetration and/or victimization) and attitudinal acceptance of IPV. We hypothesized that males and females who experienced IPV (victimization or perpetration) would report more favorable attitudes toward IPV.

Method

Data Source and Sample

This study was a secondary analysis of data collected from Wave 2 of the Keokuk County Rural Health Study (KCRHS), a cross-sectional survey nested within a community-based prospective cohort study of one county in Iowa. Keokuk County is a predominantly white, rural county with no towns larger than 2500 people (United States Census Bureau 2016). The median household income for Keokuk County is approximately \$40,000 (United States Census Bureau 2016). The median age in Keokuk County is 43.8 years (United States Census Bureau 2016).

Over one-thousand households were randomly selected for participation from all county households. Following informed consent, each adult study participant completed surveys administered by trained staff to investigate injury and disease incidence related to environmental exposures (Merchant et al. 2002). If both intimate partners from a household completed the study, partners completed the surveys separately. Data collection occurred between 1999 and 2004 (Stromquist et al. 2009). More details of the methodology for the KCRHS are available in Merchant et al. (2002) and Stromquist et al. (2009). The study received approval from the local university institutional review board.

Of the total 1588 adult participants who completed Wave 2 of the KCRHS (Stromquist et al. 2009), a total of ten individuals were excluded from this analysis because they did not answer questions on acceptance of physical IPV for a sample size of 1578. For analysis of the associations between experience with and acceptance of physical IPV, 309 participants were not asked to report their IPV experiences because they did not have an intimate partner in the prior year and so were excluded from this sub-analysis. Three additional participants were excluded due to nonresponse to questions of IPV for a sample size of 1266.

Measures

Acceptance of IPV Participants answered questions regarding their acceptance of physical violence between partners. The first three questions were used to ascertain circumstances under which it is acceptable for a male to hit his wife or girlfriend (if she hits him first; to discipline or keep her in line; anytime he wants). Response options for these questions were ‘yes’, ‘no’, ‘don’t know’, and ‘refuse’. Participants who reported “don’t know” or “refuse” were not included in the analysis for that question due to the ambiguity of the answer. The three questions and response options were repeated for each circumstance under which it may be acceptable for a female to hit her husband or boyfriend. Participants who answered ‘yes’ to any male-perpetrator question were coded as

being accepting of males hitting their female partners (i.e., ‘ever acceptable’). The same coding scheme was used for the female-perpetrator questions.

Intimate Partner Violence The Conflict Tactics Scale (CTS) was used to measure experiences of IPV (Straus 1979). The CTS contains 19 items across subscales of verbal and physical violence (Straus 1979). Because the attitudinal acceptance measure focused only on physical IPV, we only included questions of physical IPV victimization and perpetration. Eight items focused on physical victimization or perpetration (i.e., threw something at you; pushed, grabbed or shoved you; slapped you; kicked, bit, or hit with a fist; hit or tried to hit you with something; beat you up; used a knife or fired a gun on you; and used a knife or fired a gun at you). Each participant was asked how frequently s/he was a victim of each of these behaviors during the prior 12 months using a 5-point scale ranging from 0 (never) to 4 (daily). Each participant was also asked about his/her perpetration of each behavior using the same items, referent period, and 5-point response scale. Because our analyses focused on the overall experience of IPV victimization and perpetration in the past twelve months, we created two dichotomous variables to indicate if the participant experienced any victimization and/or any perpetration (0 = no experiences; 1 = at least one experience).

Analysis Plan

To address the potential for effect modification based on sex, we report analyses that are stratified by the sex of the study participant. First, we described the demographic characteristics and physical IPV victimization and perpetration among this sample. Next, we examined the differences, by sex, in acceptance of each IPV situation using mixed effects logistic regression to account for potential clustering at the household level and reported the *f*-value and *p*-value of these results. Finally, we conducted bivariate analyses (Fisher’s exact test, due to small expected cell sizes) to examine the association between perpetration and acceptance of physical IPV. These analyses were repeated to examine the association between victimization and acceptance of physical IPV. All analyses were performed using SAS (version 9.4, SAS Institute Inc., Cary, NC).

Results

Respondent Characteristics

On average, male participants were 55.2 years old (*sd* = 16.4) and female participants were 54.7 years old (*sd* = 16.4) at the time of the interview. Nearly every participant in the sample identified as White (98 %), which reflects the racial

composition of the surrounding community. Many male and female participants had earned at least some college credit (41.0 % vs. 51.9 %, respectively) and were employed (60.4 % vs. 69.5 %, respectively) (see Table 1). A high proportion of male and female participants were married (81.9 % vs. 73.8 %, respectively). Fewer than half of male and female participants lived in a household with an annual household income of less than forty thousand dollars (40.7 % vs. 40.8 %, respectively), which was the approximate median household income in Keokuk County. Nearly 6 % ($n = 24$) of males and 4 % ($n = 29$) of females in partnerships during the past 12 months reported physical IPV victimization. Approximately 3 % of males ($n = 17$) and females ($n = 20$) reported physical IPV perpetration.

Acceptance of IPV

In general, few participants reported that it was acceptable for a male to hit his wife or girlfriend (see Table 2). Retaliatory aggression (i.e., hitting when partner hits first) was the most commonly accepted form of male-to-female IPV and few male or female participants reported it was acceptable to hit for discipline or anytime he wants. No participants reported it is acceptable for a man to hit his partner anytime he wants. There

were no significant differences between male and female participants in acceptance of male-to-female IPV.

More participants reported that it was acceptable for a female to hit her husband or boyfriend (Table 2). Significantly more men than women reported that it was ever acceptable (20.0 % vs 11.6 %; $p < .0001$), that it was acceptable to for a female to retaliate (i.e., if partner hit first) (19.5 % vs 11.2 %; $p < .0001$), or to discipline the male partner (3.5 % vs 0.9 %; $p = <.001$). Five male (0.7 %) and two female (0.2 %) participants reported it was acceptable for a female to hit her partner anytime she wants.

Association between IPV Behavior and Attitudes

There was a significant association between perpetration of IPV and acceptance of retaliatory IPV (i.e., if partner hit first) between intimate partners (see Table 3). Among male participants, a significantly higher percentage of perpetrators reported accepting retaliatory IPV than non-perpetrators for both male-to-female (23.5 % vs. 1.8 %, respectively; $p = <.0001$) and female-to-male (41.2 % vs 16.6 %, respectively; $p = .01$) IPV. Among female participants, a significantly higher percentage of perpetrators than non-perpetrators reported accepting retaliatory

Table 1 Demographic Characteristics and Experiences with IPV

Demographic Characteristics ^a	Male ($n = 691$) n(%)	Female ($n = 887$) n(%)
Education		
High School Diploma or Less	408 (59.0)	427 (48.1)
At Least Some College Credit	283 (41.0)	460 (51.9)
Employment		
Currently Employed	480 (69.5)	536 (60.4)
Not Currently Employed	210 (30.4)	351 (39.6)
Married		
Married	566 (81.9)	655 (73.8)
Unmarried	125 (18.1)	232 (26.2)
Annual Household Income		
Less than \$40,000	248 (40.7)	362 (40.8)
At least \$40,000	407 (58.9)	422 (47.6)
Experiences with Physical IPV ^b		
	Male ($n = 589$) n(%)	Female ($n = 677$) n(%)
Victim		
Yes	34 (5.8)	29 (4.3)
No	555 (94.2)	648 (95.7)
Perpetrator		
Yes	17 (2.9)	20 (3.0)
No	572 (97.1)	657 (97.0)

Due to missing values, percentages may not sum to 100 %

^a Among all participants ($n = 1578$)

^b Among participants in a relationship in the prior 12 months ($n = 1266$)

Table 2 Self-Reported Acceptance of IPV by Sex in a Rural Sample (*n* = 1578)

	Male Participants	Female Participants	Difference F Value (<i>p</i> -value)
Accept Male-to-Female IPV			
Ever acceptable ^a			0.47 (.49)
Yes	24 (3.6 %)	37 (4.3 %)	
No	645 (96.4 %)	828 (95.7 %)	
If female hits him first			0.97 (.32)
Yes	20 (3.0 %)	34 (3.9 %)	
No	650 (97.0 %)	833 (96.1 %)	
To discipline or keep her in line			1.03 (.31)
Yes	6 (0.9 %)	4 (0.5 %)	
No	680 (99.1 %)	876 (99.6 %)	
Anytime he wants			--
Yes	0 (0.0 %)	0 (0.0 %)	
No	688 (100.0 %)	884 (100.0 %)	
Accept Female-to-Male IPV			
Ever acceptable ^a			19.6 (<.0001)
Yes	132 (20.0 %)	99 (11.6 %)	
No	527 (80.0 %)	754 (88.4 %)	
If male hits her first			19.8 (<.0001)
Yes	129 (19.5 %)	95 (11.2 %)	
No	532 (80.5 %)	757 (88.9 %)	
To discipline or keep him in line			11.3 (<.001)
Yes	24 (3.5 %)	8 (0.9 %)	
No	654 (96.5 %)	867 (99.1 %)	
Anytime she wants			1.95 (.16)
Yes	5 (0.7 %)	2 (0.2 %)	
No	682 (99.3 %)	882 (99.8 %)	

^a Participant reported it was acceptable to hit a partner in at least one situation: if partner hits first, to discipline or keep in line, and/or anytime

female-to-male IPV (31.6 % vs. 10.9 %, respectively; *p* = .01). There were no significant differences in acceptance of disciplinary or anytime IPV by perpetration experience in male or female participants.

A significantly higher percentage of physical IPV victims than non-victims accepted retaliatory IPV perpetrated by individuals of their same sex (see Table 4). For example, 12.1 % of male victims reported that male-to-female retaliatory IPV is acceptable compared with 10.1 % of male non-victims. By comparison, 27.6 % of female victims reported that female-to-male retaliatory IPV is acceptable compared with 10.7 % of female non-victims. In contrast, victims of either sex were not significantly more likely to accept retaliatory IPV perpetrated by individuals of the opposite sex.

Discussion

We conducted a secondary data analysis of data from a randomly-selected cohort of adult males and females from a

rural county in Iowa to determine the prevalence of attitudinal acceptance of physical IPV, and examined hypotheses regarding the relationship between experiences with IPV and attitudinal acceptance of three situations in which IPV may occur. We anticipated that males and females who experienced either physical IPV perpetration or victimization or both would report more favorable attitudes toward the use of physical violence. Overall, the hypotheses were supported but the relations between physical IPV perpetration and victimization and acceptance were not consistent across the three IPV situations.

Although accepting IPV for discipline purposes or anytime desired was very rare in this sample, a relatively large number of participants reported that there was at least one acceptable reason for using physical IPV toward a partner. Many participants reported it was acceptable to hit a partner if the partner hit first. Although the belief that it is acceptable to display acts of physical violence toward an intimate partner for any reason may be startling, the percentages reported by participants in our study were substantially lower than earlier research on this topic, which may be attributed to the change in attitudes over

Table 3 Association between Physical IPV Perpetration and Acceptance of IPV among Partnered Participants (n = 1266)

	Male Participants			Female Participants		
	IPV Perpetrator	Not IPV Perpetrator	p-value ^a	IPV Perpetrator	Not IPV Perpetrator	p-value ^a
Acceptance of Male-to-Female Physical IPV						
If she hits him first			<.0001			.57
Yes	4 (23.5 %)	10 (1.8 %)		1 (5.3 %)	28 (4.3 %)	
No	13 (76.5 %)	544 (98.2 %)		18 (94.7 %)	619 (95.7 %)	
To discipline or keep her in line			.11			.91
Yes	1 (5.9 %)	3 (0.5 %)		0 (0 %)	3 (0.5 %)	
No	16 (94.1 %)	567 (99.5 %)		20 (100 %)	649 (99.5 %)	
Anytime he wants			--			--
Yes	0 (0 %)	0 (0 %)		0 (0 %)	0 (0 %)	
No	17 (100.0 %)	571 (100.0 %)		20 (100.0 %)	655 (100.0 %)	
Acceptance of Female-to-Male Physical IPV						
If he hits her first			.01			.01
Yes	7 (41.2 %)	91 (16.6 %)		6 (31.6 %)	69 (10.9 %)	
No	10 (58.8 %)	456 (86.4 %)		13 (68.4 %)	566 (89.1 %)	
To discipline or keep him in line			.42			1.00
Yes	1 (5.9 %)	17 (3.0 %)		0 (0 %)	5 (0.8 %)	
No	16 (94.1 %)	544 (97.0 %)		20 (100.0 %)	642 (99.2 %)	
Anytime she wants			1.00			1.00
Yes	0 (0.0 %)	3 (0.5 %)		0 (0.0 %)	1 (0.2 %)	
No	17 (100.0 %)	567 (99.5 %)		20 (100.0 %)	655 (99.9 %)	

^a Fischer's Exact Test; Bold indicates p < 0.05

time, may indicate a difference in acceptance between this rural area and other geographical areas, or may be due to other factors. Comparatively, Dibble and Straus (1980) found that 27.6 % of a nationally representative sample thought that slapping a spouse was either 'necessary, normal, or good'. A more recent study found that 34 % of males and 27 % of females accept female-to-male retaliatory IPV and 10 % of males and 7 % of females accept male-to-female retaliatory IPV (Simon et al. 2001).

Our results revealed that, in this rural area, female-perpetrated IPV was more commonly accepted than male-perpetrated IPV, especially with respect to retaliatory forms of violence. These differences in acceptance rates by sex of the perpetrator were consistent with relationships found in prior literature, where there is evidence to suggest that abusive behavior perpetrated by females is more acceptable than abuse perpetrated by males (Bethke and DeJoy 1993; Greenblat 1985; Simon et al. 2001). Results from a survey administered to 1200 randomly sampled residents from New York State revealed that both male and female respondents considered punching a partner, forcing a partner to have sex, or slapping a partner to be 'domestic violence', regardless of the sex of the perpetrator; however, respondents showed less agreement that

these acts of physical violence counted as domestic violence when a female was described as the perpetrator (Carlson and Worden 2005). Other researchers have suggested that males are more likely than females to approve of IPV (Markowitz 2001). Although a higher proportion of male participants than female participants in our sample reported accepting female-to-male IPV, the proportion of male and female participants who reported accepting male-to-female IPV was nearly equal. In combination with prior literature, our findings may suggest the context of the IPV and sex of the perpetrator are important contributors to the acceptance of IPV between partners. To more fully examine this contribution, future research could consider how these attitudes develop and how the context of the IPV influences acceptance.

In this rural area, there were statistically significant differences in acceptance of IPV between participants with and without physical IPV experiences. As was expected based on the extant literature, male and female perpetrators were, in some instances, significantly more likely to report accepting IPV (Robertson and Murachver 2007; Stith et al. 2004). However, perpetrators were only more accepting of retaliatory aggression. Female perpetrators were only more accepting of female-to-male IPV, but male perpetrators were

Table 4 Association between Physical IPV Victimization and Acceptance of IPV among Partnered Participants (n = 1266)

	Male Participants			Female Participants		
	IPV Victim	Not IPV Victim	p-value ^a	IPV Victim	Not IPV Victim	p-value ^a
Acceptance of Male-to-Female Physical IPV						
If she hits him first			<.01			1.00
Yes	4 (12.1 %)	10 (1.9 %)		1 (3.6 %)	28 (4.4 %)	
No	29 (87.9 %)	528 (98.1 %)		27 (96.4 %)	610 (95.6 %)	
To discipline or keep her in line			.21			1.00
Yes	1 (2.9 %)	3 (0.5 %)		0 (0.0 %)	3 (0.5 %)	
No	33 (97.1 %)	550 (99.5 %)		100 (0.0 %)	640 (99.5 %)	
Anytime he wants			--			--
Yes	0 (0.0 %)	0 (0.0 %)		0 (0.0 %)	0 (0.0 %)	
No	34 (100.0 %)	554 (100.0 %)		29 (100.0 %)	646 (100.0 %)	
Acceptance of Female-to-Male Physical IPV						
If he hits her first			.35			.01
Yes	8 (23.5 %)	90 (17.0 %)		8 (27.6 %)	67 (10.7 %)	
No	26 (76.5 %)	440 (83.0 %)		21 (72.4 %)	558 (89.3 %)	
To discipline or keep him in line			.62			1.00
Yes	0 (0.0 %)	18 (3.3 %)		0 (0.0 %)	5 (0.8 %)	
No	34 (100.0 %)	526 (96.7 %)		29 (100.0 %)	633 (99.5 %)	
Anytime she wants			1.00			1.00
Yes	0 (0.0 %)	3 (0.5 %)		0 (0.0 %)	1 (0.2 %)	
No	34 (100.0 %)	550 (99.5 %)		29 (100.0 %)	646 (99.9 %)	

^a Fischer’s Exact Test; Bold indicates p < 0.05

more accepting of retaliatory IPV committed by males and females. Perpetrators were not more accepting of the others forms of IPV (disciplinary or anything the partner wanted to hit) and this finding was consistent with another study which found that explicit attitudes were not associated with violence against women (Eckhardt et al. 2012). However, in this study, implicit attitudes, which reflects thoughts, beliefs, or values individuals are unwilling or unable to articulate, was significantly associated with perpetration (Eckhardt et al. 2012). Additional research on implicit attitudes and methods of altering implicit attitudes, in combination with research on explicit attitudes, may be beneficial to IPV intervention and prevention efforts.

Similarly to perpetrators, victims of IPV accepted retaliatory IPV at a higher rate than their non-victimized peers in our rural sample. To our knowledge, only one research team has examined the relationship between victimization of violence (not necessarily by an intimate partner) and acceptance of IPV in specific circumstances (Simon et al. 2001). Simon et al. (2001) found that individuals who were exposed to at least one incidence of violence (not necessarily perpetrated by an intimate partner) had higher odds of accepting IPV.

To our knowledge, no other studies have examined attitudes about IPV in a rural area. Research suggests rurality

and isolation increases the risk of victimization and perpetration (Peek-Asa et al. 2011) and the rural context may also shape attitudes toward IPV. Rural victims have reported that they are less likely to disclose their experiences due to embarrassment and fears that the community would learn about the violence and shame their family (Bosch and Bergen 2006; Eastman and Bunch 2007; Edwards 2014; Logan et al. 2005), which suggests the rural community is not, overall, accepting of IPV. However, the relatively high acceptance of retaliatory aggression may explain why bidirectional IPV (both partners perpetrate) is common in rural areas because partners may believe it is acceptable to continue the cycle once their partner hit first. One study found that as many as 29 rural couples per 1000 experienced bidirectional physical IPV (Renner et al. 2015). The persistence of IPV in rural couples may be reduced if either partner could be taught alternative coping skills that do not involve violently responding to their own victimization, thus breaking the cycle of retaliation. However, there are few clearly effective prevention programs for IPV so it is not clear how best to break this cycle of retaliation (Whitaker et al. 2013). Qualitative research focused on the rural context and how it shapes attitudes about IPV may be helpful to further inform the development of these interventions.

Limitations

The cross-sectional nature of the data is a limitation to this study. At the time of the interview, participants reported on their current attitudes and their experiences with IPV during the past twelve months. Although the measure for attitudes was at the time of the interview and the measure for experiences of IPV were prior to the interview (thus, IPV experience preceded report of acceptance), the data collection happened at one point in time. The design of the study would be strengthened by incorporating a follow-up measure, or multiple follow-up measures, to determine if the attitudes reported by individuals who experienced victimization or perpetration of IPV were consistent over time or if they changed based on ongoing experiences. In addition, the inclusion of an urban and/or suburban comparison group would allow for more definitive conclusions regarding the relationships of rural environment, attitudes about IPV, and victimization and perpetration of IPV. The study was also limited by a focus on physical IPV attitudes and experiences. At the time of data collection, validated measures of attitudinal acceptance of IPV were limited, but recent developments, including the Intimate Partner Violence Attitude Scale, allow for examination of attitudes about other forms of IPV, such as control and psychological/emotional abuse (Fincham et al. 2008).

We were also unable to account for several factors that may increase the likelihood of experiencing IPV perpetration or victimization and one's belief that those behaviors are acceptable. For example, we were not able to control for participants' prior experiences of violence or aggression. Individuals who are exposed to violence in their family of origin are more likely to engage in violent behaviors and to view violence as an acceptable part of intimate relationships (Kinsfogel and Grych 2004; Reitzel-Jaffe and Wolfe 2001). Other individual and social factor, such as attachment style, gender role stress or cultural norms and values, may also influence the development of attitudes about IPV (McDermott and Lopez 2013; Wang 2016) and could influence the relationship between IPV experiences and attitudes. Additionally, all participants in this sample reported heterosexual relationships so it was not possible to examine these associations in same-sex relationships. Given internalized homophobia, minority stress, and gender/sexual identity influence the development of attitudes about violence and perpetration of violence (Edwards and Sylaska 2013; Jacobson et al. 2015), it is likely the relationship between attitudes and perpetration would also be influenced by these factors. Other forms of minority stress, such as racism and sexism, may also shape the development of attitudes about violence (Archer 2006; Herrero et al. 2016) and could be further examined in future research (Archer 2006).

As with many studies of IPV, response bias by the participants was a concern for this study, as participants may not

report that they engage in behaviors that are contrary to their beliefs about violence (Witte and Mulla 2013). In essence, participants who perpetrated or were victims of IPV may have failed to disclose their experiences of IPV if they did not believe it was acceptable. If this is the case, the participants who report accepting IPV may also be the only participants willing to disclose their own experiences. Although this issue is unavoidable in this current research design, future studies could include implicit measures of acceptance, such as those used by Eckhardt et al. (2012), and methods that allowed for triangulating IPV experiences, such as talking with both partners.

Conclusions

Overall, acceptance of IPV for reasons other than retaliation (i.e., hitting when partner hits first) was very low in this sample. However, acceptance of retaliatory aggression was quite high, which may contribute to the persistence of bidirectional IPV in rural areas. Developing effective interventions to reduce acceptance of retaliation or to teaching alternate non-violence coping mechanism may interrupt the cycle of bidirectional IPV.

Acknowledgment This research was supported [in part] by Grants # U07/CCU706145 (Round 1) and #U50 OH07548 (Round 2 and Round 3) from the National Institute for Occupational Safety and Health to the Great Plains Center for Agricultural Health, The University of Iowa.

References

- Alexander, P. C., Morris, E., Tracy, A., & Frye, A. (2010). Stages of change and the group treatment of batterers: A randomized clinical trial. *Violence and Victims, 25*(5), 571–587.
- Annan, S. L. (2008). Intimate partner violence in rural environments. *Annual Review of Nursing Research, 26*(1), 85–113.
- Archer, J. (2006). Cross-cultural differences in physical aggression between partners: A social-role analysis. *Personality and Social Psychology Review, 10*(2), 133–153.
- Bethke, T. M., & DeJoy, D. M. (1993). An experimental study of factors influencing the acceptability of dating violence. *Journal of Interpersonal Violence, 8*(1), 36–51.
- Bosch, K., & Bergen, M. B. (2006). The influence of supportive and nonsupportive persons in helping rural women in abusive partner relationships become free from abuse. *Journal of Family Violence, 21*(5), 311–320.
- Boy, A., & Kulczycki, A. (2008). What we know about intimate partner violence in the Middle East and North Africa. *Violence Against Women, 14*(1), 53–70.
- Breiding, M. J., Smith, S. G., Basile, K. C., Walters, M. L., Chen, J., & Merrick, M. T. (2014). Prevalence and characteristics of sexual violence, stalking, and intimate partner violence victimization—National Intimate Partner and Sexual Violence Survey, United States, 2011. *MMWR Surveillance Summaries, 63*(SS-8), 1–18.
- Carlson, B. E., & Worden, A. P. (2005). Attitudes and beliefs about domestic violence: Results of a public opinion survey I. Definitions

- of domestic violence, criminal domestic violence, and prevalence. *Journal of Interpersonal Violence*, 20(10), 1197–1218.
- Dibble, U., & Straus, M. A. (1980). Some social structure determinants of inconsistency between attitudes and behavior: The case of family violence. *Journal of Marriage and the Family*, 42(1), 71–80.
- Eastman, B. J., & Bunch, S. G. (2007). Providing services to survivors of domestic violence a comparison of rural and urban service provider perceptions. *Journal of Interpersonal Violence*, 22(4), 465–473.
- Eckhardt, C. I., & Crane, C. A. (2014). Male perpetrators of intimate partner violence and implicit attitudes toward violence: Associations with treatment outcomes. *Cognitive Therapy and Research*, 38(3), 291–301.
- Eckhardt, C. I., Samper, R., Suhr, L., & Holtzworth-Munroe, A. (2012). Implicit attitudes toward violence among male perpetrators of intimate partner violence a preliminary investigation. *Journal of Interpersonal Violence*, 27(3), 471–491.
- Edwards, K. M. (2014). Intimate partner violence and the rural-urban-suburban divide myth or reality? A critical review of the literature. *Trauma, Violence & Abuse*, 16(3), 359–373.
- Edwards, K. M., & Sylaska, K. M. (2013). The perpetration of intimate partner violence among LGBTQ college youth: The role of minority stress. *Journal of Youth and Adolescence*, 42, 1721–1731.
- Faramarzi, M., Esmailzadeh, S., & Mosavi, S. (2005). A comparison of abused and non-abused women's definitions of domestic violence and attitudes to acceptance of male dominance. *European Journal of Obstetrics, Gynecology, and Reproductive Biology*, 122(2), 225–231.
- Fincham, F. D., Cui, M., Braithwaite, S., & Pasley, K. (2008). Attitudes towards intimate partner violence in dating relationships. *Psychological Assessment*, 20(3), 260–269.
- Gray, H. M., & Foshee, V. (1997). Adolescent dating violence differences between one-sided and mutually violent profiles. *Journal of Interpersonal Violence*, 12(1), 126–141.
- Greenblat, C. S. (1985). “Don’t hit your wife... unless...”: Preliminary findings on normative support for the use of physical force by husbands. *Victimology*, 10(1–4), 221–241.
- Herrero, J., Rodríguez, F. J., & Torres, A. (2016). Acceptability of partner violence in 51 societies: The role of sexism and attitudes toward violence in social relationships. *Violence Against Women*. doi:10.1177/1077801216642870.
- Jacobson, L. E., Daire, A. P., Abel, E. M., & Lambie, G. (2015). Gender expression differences in same-sex intimate partner violence victimization, perpetration, and attitudes among LGBTQ college students. *Journal of LGBT Issues in Counseling*, 9, 199–216.
- Kinsfogel, K. M., & Grych, J. H. (2004). Interparental conflict and adolescent dating relationships: Integrating cognitive, emotional, and peer influences. *Journal of Family Psychology*, 18(3), 505–515.
- Lawoko, S. (2006). Factors associated with attitudes toward intimate partner violence: a study of women in Zambia. *Violence and Victims*, 21(5), 645–656.
- Locke, L. M., & Richman, C. L. (1999). Attitudes toward domestic violence: Race and gender issues. *Sex Roles*, 40(3–4), 227–247.
- Logan, T., Shannon, L., & Walker, R. (2005). Protective orders in rural and urban areas a multiple perspective study. *Violence Against Women*, 11(7), 876–911.
- Markowitz, F. E. (2001). Attitudes and family violence: Linking intergenerational and cultural theories. *Journal of Family Violence*, 16(2), 205–218.
- McDermott, R. C., & Lopez, F. G. (2013). College men's intimate partner violence attitudes: Contributions of adult attachment and gender role stress. *Journal of Counseling Psychology*, 60(1), 127–136.
- Merchant, J. A., Stromquist, A. M., Kelly, K. M., Zwerling, C., Reynolds, S. J., & Burmeister, L. E. (2002). Chronic disease and injury in an agricultural county: The Keokuk County rural health cohort study. *The Journal of Rural Health*, 18(4), 521–535.
- Nabors, E. L., & Jasinski, J. L. (2009). Intimate partner violence perpetration among college students the role of gender role and gendered violence attitudes. *Feminist Criminology*, 4(1), 57–82.
- Peek-Asa, C., Wallis, A., Harland, K., Beyer, K., Dickey, P., & Saftlas, A. (2011). Rural disparity in domestic violence prevalence and access to resources. *Journal of Women's Health*, 20(11), 1743–1749.
- Price, E. L., Byers, E. S., Belliveau, N., Bonner, R., Caron, B., Doiron, D., et al. (1999). The attitudes towards dating violence scales: Development and initial validation. *Journal of Family Violence*, 14(4), 351–375.
- Reitzel-Jaffe, D., & Wolfe, D. A. (2001). Predictors of relationship abuse among young men. *Journal of Interpersonal Violence*, 16(2), 99–115.
- Renner, L. M., Schwab Reese, L. M., Peek-Asa, C., & Ramirez, M. (2015). Reporting patterns of unidirectional and bidirectional verbal aggression and physical violence among rural couples. *Journal of Family Violence*, 30(8), 1069–1078.
- Robertson, K., & Murachver, T. (2007). It takes two to tangle: Gender symmetry in intimate partner violence. *Basic and Applied Social Psychology*, 29(2), 109–118.
- Sandberg, L. (2013). Backward, dumb, and violent hillbillies? Rural geographies and intersectional studies on intimate partner violence. *Affilia*. doi:10.1177/0886109913504153.
- Schuler, S. R., & Islam, F. (2008). Women's acceptance of intimate partner violence within marriage in rural Bangladesh. *Studies in Family Planning*, 39(1), 49–58.
- Simon, T. R., Anderson, M., Thompson, M. P., Crosby, A. E., Shelley, G., & Sacks, J. J. (2001). Attitudinal acceptance of intimate partner violence among US adults. *Violence and Victims*, 16(2), 115–126.
- 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 and Violent Behavior*, 10(1), 65–98.
- Straus, M. A. (1979). Measuring intrafamily conflict and violence: The conflict tactics (CT) scales. *Journal of Marriage and the Family*, 41, 75–88.
- Stromquist, A. M., Merchant, J. A., Zwerling, C., Burmeister, L. F., Sanderson, W. T., & Kelly, K. M. (2009). Challenges of conducting a large rural prospective population-based cohort study: The Keokuk County rural health study. *Journal of Agromedicine*, 14(2), 142–149.
- United States Census Bureau. (2012). 2010 Census urban and rural classification and urban area criteria. Retrieved from <http://www.census.gov/geo/www/ua/2010urbanruralclass.html>.
- United States Census Bureau. (2016). Current estimates data. Retrieved from <https://www.census.gov/popest/data/>.
- Wang, L. (2016). Factors influencing attitude toward intimate partner violence. *Aggression and Violent Behavior*. doi:10.1016/j.avb.2016.06.005.
- Whitaker, D.J., Murphy, C.M., Eckhardt, C.I., Hodges, A.E., & Cowart, M. (2013) Effectiveness of primary prevention efforts for intimate partner violence. *Partner Abuse*, 4(2):175-195
- Witte, T. H., & Mulla, M. M. (2013). Social norms for intimate partner violence. *Violence and Victims*, 28(6), 959–967.