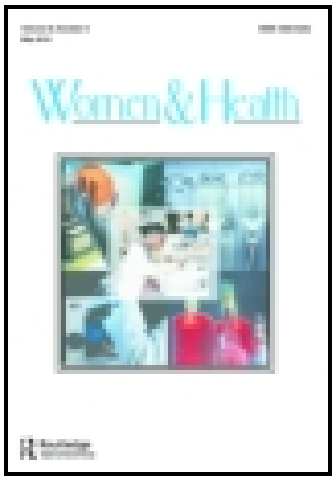

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Severity of Intimate Partner Abuse Indicators as Perceived by Women in Mexico and the United States

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Severity of Intimate Partner Abuse Indicators as Perceived by Women in Mexico and the United States

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SUMMARY. Objective: Women in Cuernavaca, Mexico and Los Angeles, California were surveyed to examine differences in their perceptions of the severity of domestic violence indicators.

Methods: One hundred twenty women in each country rated the severity of 26 domestic violence indicators which were part of an abuse screen used for an ongoing study of the prevalence of abuse. Rasch analysis was

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conducted to determine the linear relationship in the perceptions of the severity of each event between the two countries.

Results: The Rasch calibrated logit values show that women in the US rated 24 of the 26 events as more severe than women in Mexico. However, items were ranked in similar order and a clear linear pattern was established. In both countries, being shot with a gun was the most severe event and a partner becoming jealous was the least severe.

Conclusion: The country of origin did not dictate which events were most severe but did influence how severe these events were perceived.

KEYWORDS. Domestic violence, psychology, ethnology

INTRODUCTION

Violence against women is a major public health problem garnering increased recognition in many different cultures and countries (ACOG, 1995; Bash, 1994; Campbell et al., 1995). Declarations made at the International Conference on Population and Development in Cairo (1994) and the IV World Conference on Women in Beijing (1995) clearly established the need to better understand and reduce this problem (Duarte, 1994). Violence against women, especially violence perpetrated against a woman by an intimate partner, was recognized to have many ethnic and cultural contexts. The recent National Conference on Violence and Reproductive Health: Science, Prevention and Action identified as a central theme the need to better understand the perspectives of women involved in violent intimate relationships in order to improve screening, prevention, and services (Spitz and Marks, 2000; Campbell et al., 2000).

In countries that collect violence-related data, intimate partner violence has been found to occur at all income levels and among all occupations, social classes, and ethnic and cultural groups (Straus and Smith, 1990; Torres, 1991; Wilt and Olson, 1996), although perceptions of what constitutes abuse may differ (Torres, 1991). Cultural differences are an important predictor of perceptions and reactions to abuse, and are especially important when designing intervention policies and practices (Straus and Smith, 1990; Ghazal and Hoyt, 1993;

Perilla et al., 1994; Torres, 1987). While some research has focused on differences among racial groups, limited research has examined ethnic or cultural differences (Kaufman et al., 1994; Sorenson and Telles, 1991). These differences may be particularly crucial when adapting to a new cultural environment, which can occur in many situations such as immigration or intra-culture marriage. The role of cultural perceptions of partner abuse is especially important in Southern California, which has one of the largest immigrant populations in the world. Southern California is home to the largest Mexican-American population, and because of proximity and economic ties, remains closely related to Mexican culture and customs.

Prevalence estimates of partner abuse in the United States range from 11% to 65% of women and in Mexico range from 33% to 61% of women (Arbuckle et al., 1995; Abbot et al., 1996; Diaz-Olavarrieta and Sotelo, 1996). In both countries, intimate partners are the most common perpetrators of female homicide. Reasons for the variance in prevalence estimates have not yet been adequately explained, and thus differences in the prevalence and risk factors for abuse in different populations of women are largely unknown. Research into the prevalence of abusive events has been challenged by a lack of definition regarding what constitutes abuse and how this perception differs among groups of women (Spitz and Marks, 2000; Campbell et al., 2000). This lack of knowledge may lead to underestimates of abusive relationships among certain groups because of either a lack of trust in divulging experiences or the perception that certain events are not abusive within certain cultures.

Research in Southern California found that Mexican-born Latinas had a lower lifetime prevalence of partner abuse than American-born Latinas and Anglos (Sorenson and Telles, 1991), but may also have differing perceptions about what constitutes abuse. Further research found that Anglo-American women perceived more behaviors to be abusive than did Mexican-American women (Wilt and Olson, 1996). Specifically, emotional abuse, such as failure to provide adequate food and shelter, was perceived as abusive by a larger proportion of Anglo-American women than Mexican-American women (Wilt and Olson, 1996). Cumulative research findings indicate that cultural and social factors, including stressors associated with acculturation and migration, may be important predictors of intimate partner abuse for the Mexican woman. Acculturation has been related to risk factors in partner abuse including social support structure, access to extended family networks, substance use, socioeconomic status, and access of medical care (Griffith and d'Villacencio, 1985; Caetano and Medina Mora, 1988; Holck

et al., 1984; Rodriguez, 1999). Acculturation is a particularly vulnerable period because tensions in gender relations may occur with stresses of moving and adapting to a new cultural environment, especially when gender relations in the country of origin were patriarchal or asymmetrical (Dasgupta and Warrier, 1996). However, the relationship between partner abuse and cultural competence is complicated, and could lead to either an increase or decrease in abuse (Dasgupta and Warrier, 1996).

A more complete understanding of attitudes about what constitutes an abusive event and how perceptions of the severity of these events vary will enable health care providers to better identify and assist women suffering abuse and will also help researchers better describe cultural differences in risk. The purpose of this research was to examine differences in the perceptions of intimate partner abuse indicators among women in the United States and in Mexico to determine if systematic differences in the perception of abusive events is present. This perception survey was conducted as part of a larger study examining the prevalence of abuse in the two countries.

METHODS

The sample population was drawn from women in Los Angeles County, California, United States and the cities of Cuernavaca and Cuautla, Morelos, Mexico. Respondents were asked to assign a level of perceived severity to 26 indicators of intimate partner abuse. The 26 indicators were from a screen used in the Domestic Violence in Mexican and Mexican American Women study (DVMMAW) to assess the frequency and severity of intimate partner abuse during pregnancy. The abuse screen was adapted from the Conflict Tactics Scale by researchers in Mexico (Castro) for use in both countries (Straus et al., 1996). The 26 questions on the survey represent physical, sexual, and emotional abuse, and range from less severe events (being insulted) to very severe events (being shot with a firearm). The responses from this perception survey will be used as weights to derive an index of abuse severity among women participating in the DVMMAW. For this analysis, differences in perceived severity as reported by women from each country will be examined.

The sample included 120 women from five groups in each country: 20 professional level researchers, 20 clerical workers, 20 graduate students, 20 undergraduate students, and 40 women recruited from health clinics participating in the DVMMAW study. Respondents in the first

four groups were identified at large universities in each country. The sample was not randomly drawn, but the study protocol was duplicated exactly in each country. Thus, although the sample is small and non-random, groups in the two countries are comparable.

The mean age of women sampled in the US was 29.2 years, which was significantly younger than the mean age of 33.2 years in Mexico. Educational levels were similar for women in the professional, graduate, and undergraduate student groups, but among clerical workers and clinic patients a higher proportion of women in the US reported having a college education than women in Mexico. Women in the US were more likely to report being single than women in Mexico for all groups sampled. There were no differences based on occupational status.

Women were approached by a study researcher and asked to participate in a written survey about attitudes towards intimate partner violence. Women were not asked about their experiences with abuse. Participation was voluntary and anonymous in both countries, and no incentives were provided. Women were invited to participate without regard to race/ethnicity. Among the US sample, 81% were born in the US and 91% were raised in the US.

Participants were instructed to report their perceptions about the relative severity of each of the 26 events. Table 3 lists these events in the order they were presented to respondents, which represents a randomly-drawn ordering. Respondents were instructed to read the 26 items and identify the item they felt to be the least severe. This item was assigned a severity level of one. On a scale from one to 100, women were then instructed to assign a severity score to each of the other items in relation to the item scored as one. Women could chose the same severity level for multiple events. This protocol was chosen after several pilot tests which explored multiplicative scales with and without lower and upper boundaries. This method was the only protocol found to yield comparable, calibrated responses.

The mean severity score rank order was determined for each of the 26 items and for each group of women sampled. When analyzing women by respondent group, items were categorized into physical, sexual, and emotional abuse. The overall mean of items in each category was calculated as the severity index for each type of abuse. Student's t-tests were used to test statistical significance of differences between women in the US and Mexico by item.

Rasch analysis, a psychometric analytic technique developed explicitly to interpret this type of survey, was used to determine the internal consistency of respondents and to form a calibrated scale representing

perceptions of severity (Rasch, 1996; Wright, 1979). The Rasch method follows the principle that each respondent should have consistent responses based on their individual attitudes and opinions, even if respondents disagree with one another (Thorndike, 1904; Guttman, 1944). Thus, a respondent who views abuse as severe will be more likely to assign higher weights to each item, despite the protocol which encouraged respondents to use the entire range of 1 to 100. Similarly, the most severe event in the 26-item index will have a correspondingly higher probability of receiving a higher weight than less severe events.

In mathematical terms, two parameters govern the calibrated weight of each item. The first, B_n, is the perception of severity of respondent n. The second, D_b, is the overall weight of item I relative to other weights. The simplest equation denoting the probability of responses using B and D is:

$$\Pr\{X = x\} = \theta(B_n, D_i)$$

where theta (θ) is a probability function that allows the parameters B and D to be estimated from observed data (Andrich, 1988). A linear solution for the probability function is:

$$\Pr\{x = 1|\beta n, \delta_i\} = \exp(\beta_n - \delta_i)/[1 + \exp(\beta_n - \delta_i)]$$

in which β_n and δ_i are the logarithms of B_n (respondents) and D_i (items), respectively. This equation generalizes to the entire matrix of N respondents and I items, and enables the items to be calibrated, i.e., placed on a continuum using the logit scale (Tucker, 1953). The resulting model provides logit scores that represent a linear calibration scale with a midpoint of zero. In the model for this study, larger negative values indicate an increasing perception of severity. Rasch analysis was applied to the survey responses to determine ranking and weights by item, country, and respondent group. This study was analyzed using FACETS software (Linacre, 1989).

RESULTS

The calibrated logit, which presents severity scores on a logit scale, indicates that the US women rated the overall severity of all events on the index to be twice as severe as women in Mexico (Table 1). The error

reported for each sample was low, and the reliability was very high at 0.98. On an average scale of 1 to 100, women in the US assigned an average severity of 76.1 per item, which was significantly higher than the average of 66.4 for women in Mexico (Table 2).

Responses by Sampling Group and Type of Violence. Table 2 shows the average of the severity scores by sampling group and type of violence. For each sampled group, physical violence was ranked as most severe, followed by sexual and then emotional violence. US women in every group rated each type of violence as more severe than women in Mexico. Differences were greatest for physical violence and smallest for emotional violence, but most of these differences were not signifi-

TABLE 1. Rasch Logit Results for Country, and Group

	Overall Calibrated Score	Calibrated Logit	Error	Mean Square Error	Reliability
Country					
Mexico	21746	0.06	.01		
US	24432	−0.06	.01		
				.01	.98
Group					
Professional	7199	0.05	.02		
Graduate	7939	0.00	.02		
Undergrad	8094	−0.02	.02		
Clerical	7543	0.06	.02		
Clinic	15403	−0.10	.01		
				.02	0.92

TABLE 2. Average of Severity Rankings by Sample Group and Type of Violence

	Physical	Sexual	Emotional	Overall
United States				
Professional	88.1	78.0	67.1	75.1
Graduate	89.4[1]	86.5[1]	69.7[1]	77.7[1]
Undergrad	86.2	82.7	64.6	73.8
Clerical	89.8[1]	77.5	71.4[1]	77.6[1]
Clinic	88.4[1]	81.5	68.1	76.1[1]
Total	88.4[1]	81.3	68.2	76.1[1]
Mexico				
Professional	83.6	66.3	61.9	69.8
Graduate	76.2	67.5	55.6	64.0
Undergrad	80.4	77.5	63.6	70.3
Clerical	74.9	72.9	54.9	63.8
Clinic	73.7	73.4	59.8	65.3
Total	77.1	71.8	59.3	66.4

1p < 0.05 comparing US to Mexico

cant. Graduate students in the US, however, rated each type of violence as significantly more severe than graduate students in Mexico. Women in clerical positions in the US rated physical and emotional violence as significantly more severe than their counterparts in Mexico, and women in the participating clinics in the US rated physical violence as significantly more severe than women in participating clinics in Mexico.

Overall, group ratings within each country were similar. In the US, graduate students and clerical workers had the highest severity ratings, followed by clinic patients, professionals, and undergraduates. Women in clerical positions had the highest severity scores for both physical and emotional violence, but the lowest scores of all groups for sexual violence. Undergraduates had the lowest severity scores for physical and emotional violence, but had the second highest severity scores for sexual violence. However, the only within-country contrast that reached statistical significance was a higher rating for sexual violence among graduate compared to professional women ($p = .047$).

In Mexico, undergraduates had the highest severity ratings, followed by professionals, clinic patients, graduate students, then clerical workers. This pattern is almost directly opposite to the pattern in the US. Undergraduates had the highest ratings for sexual and emotional violence and the second highest ratings for physical violence. Only two contrasts reached statistical significance: undergraduates rated sexual violence as significantly higher than graduates ($p = 0.05$); and professionals rated physical violence as more severe than clinic patients ($p = 0.04$).

Responses to Individual Items. Table 3 summarizes for each item the mean severity score on a scale of one to 100, the calibrated logit value, and each item's rank with one indicating the item ranked as most severe by the Rasch model. For the calibrated logit values, increasing negative values indicate increasing severity. Women in the US assigned a higher average severity score than women in Mexico to 23 of the 26 domestic abuse indicators, and among these 23 items 20 of the differences were statistically significant. When adjusted by the Rasch model, calibrated logit scores indicate that US women rated 24 of the 26 items as more severe than women in Mexico. Differences in comparisons between average and logit values occur because the calibrated values control for respondent consistency. The logit values thus remove error due to aberrant or highly influential responses.

Women from both the US and Mexico ranked being shot with a gun as the most severe event, although US women assigned this event a higher severity value (US logit = -3.1; Mexico logit = -1.20). Being attacked with a switchblade, knife, or machete was ranked as the second

TABLE 3. Rasch Analysis of Domestic Violence Indicators

Rank the severity of the event if your partner:	Mean Score			Calibrated Logit			Rank Order		
	United States	Mexico	Countries Combined	United States	Mexico	Countries Combined	United States	Mexico	Countries Combined
1. Throws an object at you[1,p]	70.7	55.4	63.1	−0.44	−0.07	−0.22	18	20	18
2. Twists your arm[1,p]	76.0	57.6	66.8	−0.60	−0.14	−0.31	16	16	16
3. Threatens to hit you[1,e]	67.7	52.1	59.9	−0.38	−0.05	−0.18	19	21	19
4. Destroys your things[2,e]	62.1	54.9	58.5	−0.24	−0.10	−0.16	21	19	21
5. Uses physical force to have sex with you against your will[1,e]	95.1	87.1	91.1	−1.68	−0.69	−0.99	4	9	5
6. Humiliates or scorns you[3,e]	59.8	59.8	59.8	−0.19	−0.13	−0.16	23	17	20
7. Becomes jealous or suspicious of your friends[3,e]	37.6	33.9	34.8	0.29	0.24	0.25	26	26	26
8. Insults you[3,e]	50.2	50.6	50.4	0.01	−0.01	−0.01	25	22	24
9. Purposely pushes you[1,p]	73.7	58.5	66.1	−0.52	−0.12	−0.28	17	18	17
10. Attacks you with a switchblade, knife or machete[1,p]	98.0	90.7	94.4	−2.59	−0.89	−1.30	2	2	2
11. Makes you feel frightened of him/her[1,e]	77.5	66.4	72.0	−0.63	−0.29	−0.42	15	15	15
12. Hits you with a stick, belt, or a domestic object[1,p]	94.3	86.2	90.3	−1.59	−0.68	−0.96	5	10	9
13. Tries to choke you[1,p]	95.4	89.5	92.5	−1.74	−0.85	−1.14	3	4	3
14. Threatens to have sex with other partners if you do not consent to have sex[1,s]	65.7	44.1	54.9	−0.32	0.01	−0.12	20	23	22
15. Threatens with killing you or killing himself/herself[1,e]	92.0	83.1	87.6	−1.32	−0.77	−0.97	10	6	6
16. Hits you with a hand or fist[1,p]	92.6	81.5	87.1	−1.37	−0.62	−0.87	9	11	10

TABLE 3 (continued)

Rank the severity of the event if your partner:	Mean Score			Calibrated Logit			Rank Order		
	United States	Mexico	Countries Combined	United States	Mexico	Countries Combined	United States	Mexico	Countries Combined
17. Demands sex when you are not willing[3,s]	83.1	84.3	83.7	−0.82	−0.71	−0.74	14	8	13
18. Kicks you[2,p]	90.9	86.2	88.6	−1.20	−0.81	−0.96	12	5	8
19. Threatens you with a switchblade, knife or machete[1,e]	92.7	84.5	88.6	−1.41	−0.72	−0.96	7	7	7
20. Hits you in the abdomen[1,p]	94.1	81.8	88.0	−1.53	−0.56	−0.85	6	12	11
21. Shakes, jerks or pulls you[1,p]	83.6	67.0	75.3	−0.84	−0.30	−0.49	13	14	14
22. Shoots at you with a gun or rifle[1,p]	99.9	93.3	96.6	−3.1	−1.2	−1.89	1	1	1
23. Tells you that you are unattractive or ugly[1,e]	56.6	43.0	49.8	−0.13	0.09	−0.01	24	24	23
24. Attacks you with an object[1,p]	91.4	76.7	84.1	−1.25	−0.50	−0.74	11	13	12
25. Hits or kicks the wall or a piece of furniture[1,e]	60.9	36.3	48.6	−0.21	0.17	0.01	22	25	25
26. Threatens you with a gun or rifle[1,e]	92.5	87.6	90.1	−1.39	−0.87	−1.06	8	3	4

1: $p < 0.05$
2: $0.06 < p < 0.067$
3: $p > 0.45$
p: Physical violence indicator
e: Emotional violence indicator
s: Sexual violence indicator

most severe event in both countries, and US women again assigned a higher severity value (US logit = −2.59; Mexico logit = −0.89). The item with the third highest ranking among US women was being choked (logit = −1.74) and among Mexican women was being threatened with a gun (logit = −0.87).

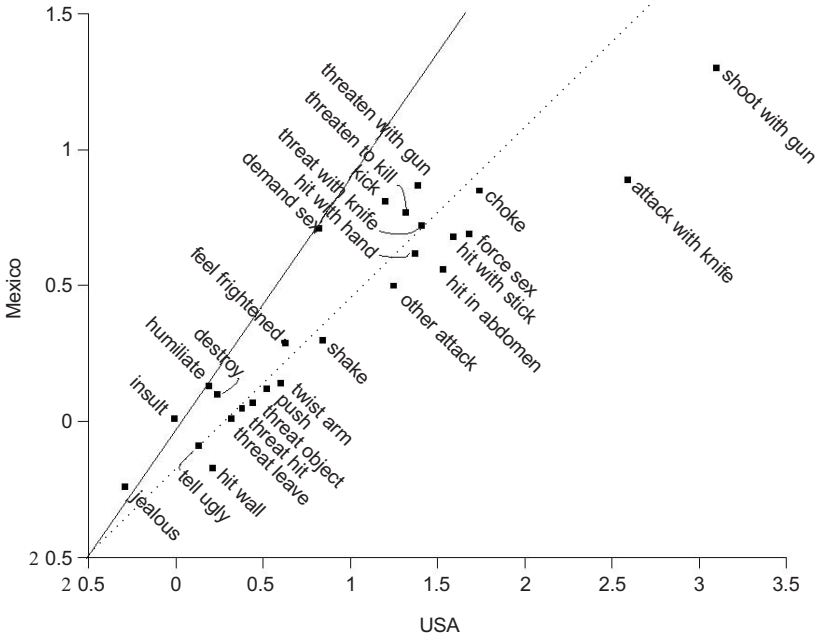
A partner becoming jealous or suspicious of friends was ranked as the least severe item by women in both countries, but this was one of only two items with a higher severity value among women in Mexico (US logit = 0.29; Mexico logit = 0.24). Being insulted by a partner was ranked as the second least severe event among US women and was the only other event to receive a higher severity value among women in Mexico (US logit = 0.01; Mexico logit = −0.01). Mexican women ranked a partner hitting a wall or furniture as the second least severe event.

Being kicked by a partner led to the greatest difference in ranking. Although this event was ranked as 5th most severe among Mexican women but 12th most severe among US women, US women assigned a higher severity value (US logit = −1.20; Mexico logit = −0.81). Items with rank order differences of five or greater that were ranked as more severe by Mexican than US women include being humiliated or scorned (US rank = 23; Mexico rank = 17) and a partner demanding sex against their partner's will (US rank = 14; Mexico rank = 8). Items with rank order differences of five or greater but assigned a higher rank by US than Mexican women include being hit in the abdomen (US rank = 6; Mexico rank = 12), being hit with a stick, belt, or domestic object (US rank = 6; Mexico rank = 10), and using physical force to have sex against their partner's will (US rank = 4; Mexico rank = 9). However, US women assigned a higher severity value for each of these items with differences in rank order of five or more.

Figure 1 shows the calibrated Rasch logit scores from the US plotted against those from Mexico. The solid diagonal line represents agreement in the severity value between the two countries. The calibrated values which lie in the bottom right half of the graph indicate a higher severity value among women in the US and those in the upper left indicate a higher severity value among women in Mexico. The figure clearly demonstrates that women in the US consistently assigned higher calibrated severity values to most of the items. The exceptions to this trend are a partner who becomes jealous or suspicious of friends and being insulted.

The responses show a distinct linear trend represented by the dotted line, which is a regression of the plotted values. This regression indi-

FIGURE 1



cates that there is agreement among women in both countries in the relative ranking of severity among the items, but that as the perceived severity increases, the calibrated value assigned by women in the US becomes proportionately higher than those assigned by women in Mexico.

DISCUSSION

This survey indicates that women in the US perceived intimate partner violence indicators as more severe than women in Mexico, although women in both countries generally ranked the items in similar patterns. In each country, physical violence was perceived as the most severe, followed by sexual and then emotional violence.

Overall, patterns of responses by the different groups of women were similar between the two countries. The exceptions to this were graduate students (in which US graduate students ranked each type of violence as more severe than Mexican graduate students) clerical workers (in which

US women rated physical and emotional violence as more severe), and clinic patients (in which US women rated physical violence as more severe). Comparisons of group responses within countries showed very few differences. These group patterns indicate that differences between countries are not driven by any specific group, although graduate students may have the strongest role in predicting differences, and that group responses within countries are consistent.

Intimate partner violence, as a public health issue, is not as widely discussed among the general public in Mexico as it is in the US (Diaz Olavarrieta and Sotelo, 1996: Ramirez Rodriguez and Patino Guerra, 1996). Investigators in Mexico have noted that the combination of a scarcity of information and lack of recognition on behalf of public institutions have created an environment with little or no social supports for victims (Bedregal et al., 1991; Duarte and Gonzaalez, 1994; Riiquer et al., 1996). This lack of information could account in part for the large variation in severity scores as well as lower perceptions of severity.

Los Angeles, with the largest Mexican population outside of Mexico City, is highly influenced by Mexican social and cultural norms. Yet these norms must mix with different public messages and a different structure of social and health services. Health care and service providers must take cultural beliefs and perceptions into account when assessing and treating victims of abuse (Campbell et al., 2000; Spitz and Marks, 2000). Screening surveys and tools that are used in multicultural settings should be adequately calibrated to be appropriate for a range of abuse perceptions. If one culture's general set of beliefs assigns lower severity to events indicating abuse, it is possible that health care providers may underestimate the actual level of abuse suffered by individuals. For example, this study indicates that women from Mexico may perceive events of abuse as less severe, and in turn may report them as less severe when responding to screening tools. One approach to sensitizing such tools would be to set a range of thresholds indicating abuse which can be adjusted according to known cultural perceptions of abuse.

Researchers and policymakers must also be aware of how cultural contexts may affect responses to abuse and access of services. Women from cultures that fail to recognize intimate partner violence as a public health issue or that have a high tolerance for abuse against women may be less likely to seek services. Providers should work within cultural groups to find appropriate avenues to introduce interventions in these populations, and information about the perceptions of abuse within cultural groups will aid in this process (Rodriguez, 1999).

This study includes a small sample of women from both sampled areas and cannot be generalized to all women. The sample was not randomly drawn, which further weakens the ability to extrapolate to larger populations. These data do not represent regional variations within each country. Although the sample is limited, this is the first systematic examination of differences in the perception of abuse among women. The methodologic approach is appropriate for such a sample, and the Rasch model indicates a high degree of internal validity and consistency within the responses.

These findings indicate that there are differences in the overall perception of severity of abuse in the sample included in this study. Future research within the Mexican and Mexican-American population, as well as research including other cultural groups, would be valuable to further describe the relationship between culture and perceptions of abuse. Studies examining the relationship between acculturation, victimization, and perceptions of abuse could further clarify the role of culture in intimate partner violence.

REFERENCES

Abbott J., Johnson R., Koziol-McLain J., Lowenstein S.R. 1995. Domestic violence against women. Incidence and prevalence in an emergency department population. JAMA 273(22):1763-1767.

American College of Obstetricians and Gynecologists. 1995. Domestic violence. ACOG Technical Bulletin 209. Int J Gyn & Obstet, 51:161-170.

Andrich D. Rasch Models for Measurement. 1988. Newbury Park, CA: Sage.

Arbuckle J., Olson L., Howard M., Brillman J., Anctil C., Sklar D. 1996. Safe at home? Domestic violence and other homicides among women in New Mexico. Annals of Em Med 27(2):210-215.

Bash K.L., Jones F. 1994. Domestic violence in American. NCMJ, 55(9): 400-403.

Bedregal X., Saucedo I., Ríquer F. 1991. Hilos, nudos y colores en la lucha contra la violencia hacia las mujeres. Mexico City: Ediciones CICAM.

Caetano R., Medina Mora M.E. 1988. Acculturation and drinking among people of Mexican descent in Mexico and the United States. Journal of Studies on Alcohol 49(5):462-471.

Campbell J.C., Harris M.J., Lee R.K. 1995. Violence Research: An Overview. Scholarly Inquiry for Nursing Practice 9 (2): 105-127.

Campbell J.C., Moracco K.E., Saltzman L.E. 2000. Future directions for violence against women and reproductive health: Science, prevention and action. Maternal and Child Health Journal 4(2):149-154.

Dasgupta S.D., Warrier S. 1996. In the footsteps of "Arundhati." Violence Against Women 2(3):238-259.

Diaz Olavarrieta C., Sotelo J. 1996. Letter from Mexico City: Domestic violence in Mexico. JAMA 275 (24): 1937-1941.
Duarte P., González G. 1994. La lucha contra la violencia de género en México. De Nairobi a Beijing 1985-1995. Mexico City: COVAC.
Ghazal M., Hoyt S. 1993. Domestic violence: An inner-city perspective. Rhode Island Medicine 76: 201-204.
Griffith J., Villavicencio S. 1985. Relationships among acculturation, sociodemographic characteristics and social supports in Mexican American adults. Hispanic Journal of Behavioral Sciences 7(1):75-92.
Guttman L. 1944. A basis for scaling qualitative data. Amer Sociological Rev 9:139-150.
Holck S.E., Warren C.W., Smith J.C., Rochat R.W. 1984. Alcohol consumption among Mexican American and Anglo women: Results of a survey along the U.S.-Mexico border. Journal of Studies on Alcohol 45(2):149-154.
Kaufman Kantor G., Jasinski J.L., Aldarondo E. 1994. Sociocultural status and incidence of marital violence in Hispanic families. Violence and Victims 9(3):207-222.
Masters G.M. 1982. A Rasch model for partial credit scoring. Psychometrika 47: 149-174.
Linacre J.M. 1989. FACETS computer program for many-faceted Rasch measurement. [computer program]. Chicago: University of Chicago.
Perilla J.L., Bakeman R., Norris F.H. 1994. Culture and domestic violence: The ecology of abused Latinas. Violence and Victims 9 (4): 325-339.
Ramirez Rodriguez J.C., Patino Guerra M.C. 1996. Women from Guadalajara and domestic violence: A pilot study. Cad. Saude Publica 12(3): 405-409.
Rasch G. Probabilistic Models for Some Intelligence and Attainment Tests. 1960 (reprinted 1980). Chicago: University of Chicago Press.
Ríquer F., Saucedo I., Bedolla P. 1996. Violencia hacia la mujer: un asunto de salud pública. In: Langer, Ana (ed). La salud de la mujer mexicana. Mexico City: The Population Council. pp. 316-328.
Rodriguez R. 1999. The power of the collective: Battered migrant farmworker women creating safe spaces. Health Care for Women International 20:417-426.
Sorenson S., Telles C.A. 1991. Self-reports of spousal violence in a Mexican-American and non-Hispanic White population. Violence and Victims 6(1): 3-15.
Spitz A.M., Marks J.S. 2000. Violence and reproductive health. Maternal and Child Health Journal 4(2):77-78.
Straus M.A., Smith C. 1990. Violence in Hispanic Families in the United States: Incidence Rates and Structural Interpretations. In Straus M.A. & Gelles R.J. (eds): Physical Violence in American Families. New Brunswick, NJ: Transaction Publishers, pp. 341-367.
Straus M.A., Hamby S.L., Boney-McCoy S., Sugarman D.B. 1996. The revised Conflict Tactics Scale (CTS2). Journal of Family Issues 17(3):283-316.
Thorndike E.L. 1904. An Introduction to the Theory of Mental and Social Measurements. New York: Science Press.
Torres S. 1987. Hispanic-American battered women: Why consider cultural differences? Response. Nursing Network on Violence Against Women 10(3):20-21.
Torres S. 1991. A comparison of wife abuse between two cultures: Perceptions, attitudes, nature, and extent. Issues in Mental Health Nursing 12:113-131.

Tucker L.R. 1953. Scales minimizing the importance of reference groups. In Proceedings of the 1952 Invitational Conference on Testing Problems. Princeton, NJ: Educational Testing Service.
Wilt S., Olson S. 1996. Prevalence of domestic violence in the United States. JAMA 51(3): 77- 82.
Wright B.D., Stone M.H. 1979. Best Test Design. Chicago: MESA Press.
Wright B.D., Masters G.N. 1982. Rating Scale Analysis. Chicago: MESA Press.