Intimate Partner Violence in the United States: An Ecological Approach to Prevention and Treatment

Marcia A. Shobe* and Jacqueline Dienemann**

*University of Arkansas, School of Social Work E-mail: mshobe@uark.edu **University of North Carolina at Charlotte, School of Adult Health Nursing

Physical, sexual, verbal and economic abuse, also known as Intimate Partner Violence (IPV), comprise a major public health problem. IPV risk factors include poverty, stress, substance use, depression, and history of child maltreatment. Protective factors include human capital (functional health and work competencies/qualifications), social capital (formal/informal relationships and resources) and financial capital (income and assets). Traditional IPV initiatives focus on increasing social capital by changing the cognition and/or behaviour of victims or perpetrators and increasing legal sanctions and supportive resources. The proposed Asset Model of IPV Resolution extends the current model to include an ecological approach to the prevention and resolution of IPV. In addition to human and social capital development, the authors suggest financial capital development through Individual Development Accounts (IDAs) as one social policy initiative to support women at risk of or women who experience IPV.

Introduction

Intimate partner violence (IPV) is a major social policy issue that has the greatest impact on young, low-income women (Tjaden and Thoennes, 2000; Wenzel, Tucker, Elliott, Marshall and Williamson, 2004). IPV is commonly defined as physical, emotional, verbal or sexual abuse by an intimate partner (Saltzman, Fanslow, McMahon and Shelley, 1999). Many experts agree that IPV is repetitive, done with minimal provocation in the interest of coercive control and almost exclusively perpetrated by men against women (Dobash and Dobash, 1998). For this paper, the definition of IPV includes physical, emotional, sexual or economic abuse by an intimate partner.

IPV risk factors include poverty, stress, substance use, depression and history of child abuse (Bensley *et al.*, 2003). This paper focuses on the major protective factors of human, social and financial capital for vulnerable women. Financial capital may be the most salient for low-income minority women and includes income and assets (Sherraden, 1991). Human capital refers to workplace competencies and qualifications (Beverly and Sherraden, 1997). Social capital pertains to formal and informal relationships and resources (Grootaert *et al.*, 2004).

Traditional IPV interventions focus on increasing social capital through counseling, legal sanctions and shelter. Social work was the first discipline to look at the personsituation perspective (Laird, 1979). Using an ecological framework, we propose that human, social and financial capital all need to be developed to bolster protective factors

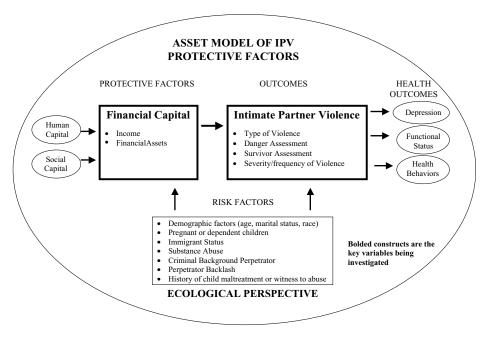


Figure 1.

for IPV as shown in the Asset Model of IPV Protective Factors (see Figure 1). Thus, IPV may be related in a complex way to systems connecting the individual to his/her environment.

Microenterprise growth in developing countries has shown success in the past 30 years by providing micro loans to poor women for creating self-employment, empowerment and homeownership. The Grameen Bank and its founder Dr Muhammad Yunus, were awarded the Nobel Peace Prize in 2006 for their social and economic development initiatives in underdeveloped countries and for influencing the empowerment of historically poor and oppressed women. Social work scholar Michael Sherraden (1991) suggested a similar initiative for the US called Individual Development Accounts (IDAs).

In the past decade, IDA initiatives have been instituted in the US, Canada, Taiwan and other developed countries as one policy strategy to help low-income individuals build (a) financial capital through investment in homeownership, small business development, or post-secondary education, (b) human capital through economic education and (c) social capital through group training and support. IDA participants set savings goals, receive economic education and receive matching funds upon reaching their goals. While IDAs have not yet specifically targeted IPV, we extend the current conceptualisation by suggesting that IDAs may serve as a protective factor for IPV.

Intimate partner violence

The ecological model of IPV suggests that violence comprises a complex network of individual, social and societal risk factors (World Health Organization, 2002). For

example, individual risk factors for violence include traits (e.g. impulsivity) and personal history (e.g. substance abuse, prior history of abuse or aggression). Social risk factors include relationships with informal (e.g. family and friends) and formal (e.g. schools, workplaces and neighbourhoods) networks. Finally, cultural norms, structures and attitudes that support violence against women place women and children at risk for abuse (Dahlberg and Krug, 2006).

Up to 35 per cent of all women in the US and as much as 63 per cent of low-income women are physically or sexually abused by a current or former partner at some point in their lives (Tjaden and Thoennes, 2000). While IPV occurs in all socioeconomic and racially diverse households, rates are higher for young, economically vulnerable couples living in densely populated urban areas (Dahlberg and Krug, 2006; Greenfeld *et al.*, 1998). Economic abuse is an IPV component that is universally acknowledged but has received relatively little empirical inquiry or intervention support; it includes incidents that exert power and control over a woman's salary, savings, debt, credit and employment through actions or threats (Sanders, 2004; VonDeLinde, 2002). Disparities in power over income in heterosexual relationships may place women at greater risk of IPV (Lyon, 2000).

Resolution of intimate partner violence

The transtheoretical model of change (Prochaska, 1979) has increasingly been applied to describe the different stages in the process of IPV resolution (Burke, Denison, Gielen, McDonnell and O'Campo, 2004; Cluss *et al.*, 2006; Dienemann, Campbell, Curry and Landenburger, 2002; Shurman and Rodriguez, 2006). This model recognises that change in a chronic problem such as IPV is complex, non-linear and evolves over time. Thus, a victim's action to end the IPV relationship is not a one-off event, but instead is a multifaceted process.

There is clear evidence that when a women reaches the stage where she decides to leave the abuser, the danger has not ended; in fact this stage of independence and empowerment is also a time of increased risk for serious injury (Campbell *et al.*, 2003; Menard, 2001). This stage may support the backlash hypothesis whereby increasing a woman's financial assets will increase violence. In other words, the IPV perpetrator may reassert control over a woman and her newly acquired assets as punishment for increase her equity in the relationship. This phenomena has been found when women increase their human capital through employment (Riger and Staggs, 2004).

The ecological model purports that IPV is complex and the ability to remain or leave an abusive relationship is dependent upon a number of environmental factors (Dahlberg and Krug, 2006). Frieze (2005) suggests that levels of human, social and financial capital are related to IPV; socialist feminists link them to inequities in social class and gender (Martin *et al.*, 2006). Anderson and colleagues (2003) found the most common reasons given by women who stayed in abusive relationships were lack of money, shelter and police support.

Income and asset poverty

Twenty eight per cent of female-headed households experienced poverty in 2004 compared with 13 per cent of male-headed households (US Census Bureau, 2005). One

contributing factor is household composition; over 10 million single women compared with 2.2 million single men maintain households with children in 2000 (US Census Bureau, 2003). Another factor is related to inequitable wages; women in developed countries earn, on average, 77 cents for every dollar earned by a male (Global Policy Forum, 2005). However, this figure includes only 50 per cent of women and 85 per cent of men who work full-time over a 50-week period. Rose and Hartmann (2004) calculated wages for all women and men over a 15-year period and found that each year women earn approximately 57 cents on each dollar men earn. Some reasons for inequities include gender segregation in the labour market, part-time employment and labour market irregularities due to child rearing. Income disparities by race and ethnicity are also pronounced, with approximately 8.6 per cent of non-Hispanic white households living in poverty compared with 24.7 per cent of African-American and 21.9 per cent of Latino households (US Census Bureau, 2005).

Financial assets, such as home ownership and savings, provide economic stability, a means to buffer financial crises and appreciated wealth over time (Caner and Wolff, 2002). Almost 20 per cent of US households hold zero net worth and low-income female heads of households hold only 40 per cent of the net worth held by males (Woo *et al.*, 2005). Excluding home equity, the disparity in assets among racial and ethnic groups is massive, with the median net worth of white households (\$22,566) eclipsing Hispanic (\$1,850) and African-American households (\$1,166) (Orzechowski and Sepielli, 2003).

Household economic resources and IPV

Recent findings indicate a significant interaction between household income, locality and intimate partner violence, with low-income women living in disadvantaged neighbourhoods twice as likely to be victims of abuse (Benson and Fox, 2004). Incidences of economic abuse play an important role in IPV experiences. For example, a study of over 350 male–female domestic abuse cases in Quincy, MA, found that nearly 60 per cent of women reported some type of abusive control over their money by their partners (Buzawa *et al.*, 2000).

Couples who report extensive economic strain are three times more likely to experience violence than couples with low levels of economic strain. In addition, widening race and ethnicity differences in rates of IPV seem to begin at the midincome level and increase as economic strain increases (Benson and Fox, 2004). For example, when controlling for economic strain, researchers found the differences for IPV among mid-income African-Americans and non-Hispanic white people disappear or are dramatically diminished (Mahoney *et al.*, 2001; Schollenberger *et al.*, 2003).

The effects of IPV on the economic well-being of women who exit abusive relationships are daunting, often resulting in homelessness and severe economic strain. Recognising that income and asset poverty are important barriers to or consequences of leaving an abusive relationship for many women (Sanders, 2004), some IPV programs are now including financial education and economic advocacy as interventions (Correia and Von De Linde, 2002). Thus, the development of an ecological framework for IPV prevention and treatment may help address the risk and protective factors of IPV for women.

Human capital

The concept of human capital can be attributed to economists such as Schultz (1975), Becker (1964) and Mincer (1974) and is defined as individual skills and competencies used for future privilege. Researchers have focused on educational attainment as a proxy measure since it is highly associated with higher earnings, benefits and advancement opportunities (Beverly and Sherraden, 1997; Filmer, 2003). Conversely, individuals without a high school education are more likely to be unemployed, receive welfare benefits and experience substance abuse and incarceration (Kirsch, Jungeblut, Jenkins and Kolstad, 1993).

Socialist feminists view gender and class as compounding factors contributing to male violence (Bailey, 1999; Escholtz and Vieraitis, 2004; Whaley, 2001). In a city-level study of rape, Martin *et al.* (2006) found support for the socialist feminist view. They note that rape rates were lower in cities where women's absolute status (educational level, income and managerial position levels) was higher. Rape rates were higher in cities where inequity was greatest, thereby supporting the backlash hypothesis.

Alternately, there is empirical support for increased employment opportunities for women serving as a buffer for IPV (Farmer and Tiefenthaler, 1997). Women with higher earned income and a comparable educational level to their partners are less likely to be abused than women with low-incomes and lower educational attainment (Lambert and Firestone, 2000). Women with economic resources also are more able to end an abusive relationship and less likely to enter an abusive relationship (Campbell, Rose, Kub and Nedd, 1998).

However, IPV also serves as a barrier to employment, with many IPV victims' jobs being sabotaged by perpetrators (Raphael, 2000; Riger and Staggs, 2004). In terms of financial costs, IPV results in over \$18 million in lost earnings for women annually and nearly \$1.8 billion in lost productivity (CDC, 2003; Greenfeld *et al.*, 1998). In addition, high turnover rates result in fewer benefits that are associated with work tenure (Moe and Bell, 2004).

Social capital

Social capital is a multidimensional concept that has initiated extensive debate among political scientists, economists, ecologists and organisational researchers. Social capital is the intensity and extent of involvement in informal networks and formal community organisations that needs support over time or it will diminish (Adler and Kwon, 2000; Grootaert *et al.*, 2004). People experiencing poverty are more reliant on informal networks to meet daily needs and unstable employment reduces social connections that lead to promotions or other avenues to the middle class (Nurius *et al.*, 2003).

Abusers have been found to isolate women from informal and formal social networks to increase control (Waldrop and Resisk, 2004). For low-income women, this also reduces their opportunities to barter for necessities such as childcare, food, small loans, or transportation. Isolation becomes even more problematic during times of financial, health, or other crises (World Bank, 2002). Most IPV interventions depend on women using their social capital for information and support from informal and formal sources such as health care providers, hotlines or websites (Sullivan and Gillum, 2001). While social support can serve as a protective factor against reabuse (Burke *et al.*, 2004; Goodman *et al.*, 2005),

women ending abusive relationships often relocate for safety, thereby leaving friends and family behind (Wilcox, 2000).

Financial capital

Financial capital is defined as savings and other interest-bearing bank accounts, investments and property assets that generate increased value (Sherraden, 1991). A certain level of economic prosperity is needed to meet basic needs such as food, clothing, shelter, and health care (Hancock, 2001). While income provides a cash flow, assets can help reduce IPV by providing individuals with economic protection, a safer neighbourhood and future investment opportunities (Caner and Wolff, 2002; Raphael, 2001). Petersen (1980), Schuler and Hashemi (1994) and Levinson (1989) found a negative relationship between assets and marital abuse in independent studies both nationally and internationally.

Given the low home ownership rate of women and the limited availability of affordable or government subsidised housing in the US, many women leaving abusive relationships must access homeless shelters or become homeless. One study reports that 38 per cent of women became homeless immediately after leaving their partners; housing problems were still prevalent for 25 per cent to 50 per cent of women one year after they left. Even if they access housing, formerly abused women may lose shelter due to perpetrators damaging property or threatening landlords or other tenants (Baker, Cook and Norris, 2003; Menard, 2001).

Economic strain occurs when there is insufficient income to meet basic needs. Some long-term consequences of economic strain may include homelessness, malnutrition, illness and loss of reliable transportation. A financial crisis may quickly become dire if there are no assets to provide an 'economic safety net'. Low-income IPV victims are often economically dependent upon their perpetrators and are not in a position to acquire or control financial assets (Lambert and Firestone, 2000). Thus, economic dependency is an important factor women consider when deciding whether to leave an abusive relationship (Anderson *et al.*, 2003; Sanders, 2004).

Social policy strategy

Individual development accounts

One approach to moving people out of poverty is by supporting asset development policy initiatives. Historical examples in the US include the Homestead Act for home ownership, the G.I. Bill for veterans to seek post-secondary education and home ownership and, most recently, Individual Development Accounts (IDAs). IDAs provide dedicated savings accounts for low-income individuals to obtain homeownership, post secondary education or small business development (Sherraden, 1991). Eligible IDA participants set savings goals, receive economic education and are provided with matching funds for a specified asset purchase. Welfare recipients are also eligible, through special policy arrangements in the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 that removed traditional penalties, to accumulate assets (Edwards, 2005).

The success of IDA programs offsets common misconceptions that people experiencing poverty lack the motivation to save, delay gratification, accrue too many bills, or suffer from 'rampant consumerism' (Conley, 1999). In the past ten years over

500 IDA programs, totaling 20,000 IDA accounts, have been instituted in 49 states (Edwards and Mason, 2003). IDAs have been used with populations experiencing significant markers of disadvantage, including poverty, mental illness, homelessness and immigration, with positive results.

Yet IDA programs have not been identified as an IPV prevention or intervention programme, nor have IPV data been collected for IDA participants. IDA programs may be ideal for women who have experienced domestic violence since they are known primarily as 'female-driven' initiatives; 75 per cent of non-Hispanic white and 85 per cent of African American IDA savers are female (Grinstein-Weiss and Sherraden, 2004). Zhan (2003) found that despite low wages, lack of child support and minimal public assistance benefits, single, low-income female IDA savers were able to successfully build assets over time.

While IDA programs do not target IPV victims, some do have social work case management supports for IDA participants. Sanders (2004) outlines an IDA program specifically designed to support IPV victims in St Louis, Missouri through economic education, IPV counseling and advocacy and community education. The Redevelopment Opportunities for Women's Economic Action Program (REAP) consists of 13 domestic violence and three homeless agencies serving IPV victims. Future empirical findings related to the REAP program can help educate future programs that address in whole or in part IPV.

IDAs and intimate partner violence

Many US communities offer IDA programs to assist low-income families build assets. Recent research indicates that IDAs increase specific measures of well being, including future orientation, additional asset development, self-efficacy, child well-being and decrease economic strain (Shobe and Boyd, 2005; Shobe and Christy-McMullin, 2005). We propose targeting widespread IDA programs for low-income women with a history or disclosure of IPV. IDAs are traditionally placed in the name of the IDA member alone, thus joint accounts are not generally initiated. This IDA program would be part of an existing comprehensive IPV program that addresses evidence-based risk factors and that provides social work case management services to address IPV-related issues.

The usual length of time for an IDA participant to reach their goal and have the down payment for a home, tuition for secondary education or capital for a small business is 1–3 years. Evaluation of the long-term well being of the IDA participants, drop outs and a control group of agency participants would include IPV status including reabuse of victims, employment stability, size and intensity of social supports, intensity of IPV service use and financial capital one and two years after completing the program.

Conclusion

There is preliminary evidence that financial capital may serve as a buffer against intimate partner violence. Such financial capital includes both sufficient income for basic needs and assets for a safety net when crises occur. This would support asset theory, first proposed by Sherraden (1991), whereby the presence of assets has positive effects on well-being, independent of income. In the past decade, individual development accounts initiatives

have been instituted nationwide based on this theory. So far, they have demonstrated the efficacy of low-income people to save and build assets. Longitudinal studies are needed to demonstrate stable movement into the middle class by participants.

This would also lend support to the ecological perspective. Given the high rates of poverty among young households and the hypothesised mediating factors of human, social and financial capital for decreasing rates of IPV, interventions should include activities to address all three areas. Since IDAs address financial capital deficits and support human and social capital gains, they may provide an effective addition to IPV-focused social policies and programs.

References

- Adler, P. S. and Kwon, S.-W. (2000), 'Social capital: the good, the bad, and the ugly', in E. Lesser (ed.), Knowledge and Social Capital: Foundations and Applications, Boston: Butterworth-Heinemann, pp. 89–115.
- Anderson, M. A., Gillig, P. M., Sitaker, M., McCloskey, K., Malloy, K. and Grigsby, N. (2003), ""Why doesn't she just leave?": a descriptive study of victim reported impediments to her safety', *Journal of Family Violence*, 18, 3, 151–155.
- Bailey, W. C. (1999), 'The socioeconomic staus of women and patterns of forcible rape for major US cities', *Sociological Focus*, 32, 43–63.
- Baker, C. K., Cook, S. L. and Norris, F. H. (2003), 'IPV and housing problems', Violence Against Women, 9, 7, 754–783.
- Becker, G. S. (1964), Human Capital, New York: Columbia University Press.
- Bensley, L., Van Eenwyk, J. and Wynkoop Simmons, K. (2003), 'Childhood family violence history and women's risk for intimate partner violence and poor health', *American Journal Preventive Medicine*, 25, 1, 38–44.
- Benson, M. L. and Fox, G. L. (2004), 'When violence hits home: how economics and neighborhood play a role', Research Brief, National Institute of Justice, Washington, DC.
- Beverly, S. and Sherraden, M. (1997), 'Human capital and social work', Working paper no. 97–2, Center for Social Development, Washington University in St Louis, St. Louis, MO.
- Burke, J. G., Denison, J. A., Gielen, A. C., McDonnell, K. A. and O'Campo, P. (2004), 'Ending intimate partner violence: an application of the transtheoretical model', *American Journal of Health Behavior*, 28, 2, 122–133.
- Buzawa, E., Hotaling, G. T., Klein, A. and Byrne, J. (2000), Response to Domestic Violence in a Pro-Active Court Setting – Final Report, Washington, DC: US Department of Justice.
- Campbell, J. C., Garza, M., Gielen, A. C., O'Campo, P., Kub, J., Dienemann, J., Jones, A. S., Jafar, E. and Modrow, P. (2003), 'Intimate partner violence and abuse among active duty military women', Violence Against Women, 9, 9, 1072–1092.
- Campbell, J. C., Rose, L. E., Kub, J. and Nedd, D. (1998), 'Voices of strength and resistance: a contextual and longitudinal analysis of women's responses to battering', *Journal of Interpersonal Violence*, 13, 743–762.
- Caner, A. and Wolff, E. N. (2002), 'Asset poverty in the United States, 1984–1999: evidence from the panel study of income dynamics', Working paper, Center for Social Development, Washington University in St Louis, St. Louis, MO.
- **CDC** (2003), 'Costs of intimate partner violence against women in the United States', Atlanta, GA, at http://www.cdc.gov/ncipc/pub-res/ipv_cost/ipv.htm.
- Cluss, P. A., Chang, J. C., Hawker, L., Scholle, S. H., Dado, D., Buranosky, R. and Goldstrohm, S. (2006), 'The process of change for victims of intimate partner violence', *Women's Health Issues*, 16, 262–274.

- **Conley, D.** (1999), Being Black, Living in the Red: Race, Wealth, and Social Policy in America, Berkeley, CA: University of California Press.
- Correia, A. and VonDeLinde, K. M. (2002), Integrating Anti-Poverty Work into IPV Advocacy: Iowa's Experience, Harrisburg, PA: National Resource Center on IPV.
- Dahlberg, L. L. and Krug, E. G. (2006), 'Violence a global public health problem', at www.scielo.br/scielo.php?script=sci_arttext&pid=S1413-1232006000200007&lng=en&nrm=iso
- Dienemann, J., Campbell, J., Curry, M. and Landenburger, K. (2002), 'IPV survivor assessment: a tool for counseling women in violent intimate partner relationships', *Patient Education and Counseling Journal*, 46, 3, 221–228.
- Dobash, R. E. and Dobash, R. P. (1998), *Rethinking Violence Against Women*, Thousand Oaks, CA: Sage Publications.
- Edwards, K. (2005), 'Temporary Assistance for Needy Families (TANF) and Individuals Development Accounts (IDAs): a good match?', CSD Policy Report 05-02, Center for Social Development, Washington University in St Louis, St. Louis, MO.
- Edwards, K. and Mason, L. M. (2003), 'State policy trends for Individual Development Accounts in the United States: 1993 – 2003', Policy Report, Center for Social Development, Washington University in St Louis, St. Louis, MO.
- Eschholz, S. and Vieraitis, L. (2004), 'Race-specific gender equality and rape: a further test of feminist hypotheses', *Critical Criminology*, 12, 195–219.
- Farmer, A. and Tiefenthaler, J. (1997), 'An economic analysis of IPV', *Review of Social Economy*, 55, 3, 337–358.
- Filmer, D. (2003), 'Determinants of health and education outcomes', Background Note for World Development Report 2004, The World Bank, Washington, DC.
- Frieze, I. H. (2005), Hurting the One You Love: Violence in Relationships, Belmont, CA: Thomson Wadsworth.
- **Global Policy Forum** (12) (October 2005), 'The promise of equality: gender equity, reproductive health and the millennium development goals', Press Summary, at: globalpolicy@globalpolicy.org
- Goodman, L., Dutton, M. A., Vankos, N. and Weinfurt, K. (2005), 'Women's resources and use of strategies as risk and protective factors for reabuse over time', *Violence Against Women*, 11, 3, 311–336.
- Greenfeld, L. A. et al. (1998), Violence by Intimates: Analysis of Data on Crimes by Current or Former Spouses, Boyfriends, and Girlfriends, Washington, DC: US Department of Justice.
- Grinstein-Weiss, M. and Sherraden, M. (2004), 'Racial differences in performance in a matched savings program', Working paper 04–04, Center for Social Development, Washington University in St Louis, St Louis, MO.
- Grootaert, C., Narayan, D., Jones, V. N. and Woolcock, M. (2004), 'Measuring social capital: an integrated questionnaire', World Bank Working paper no. 18, World Bank, Washington, DC.
- Hancock, T. (2001), 'People, partnerships and human progress: building community capital', *Health Promotion International*, 16, 3, 275–280.
- Kirsch, I., Jungeblut, A., Jenkins, L. and Kolstad, A. (1993), Adult Literacy in America: A First Look at the Results of the National Adult Literacy Survey, Washington, DC: Office of Educational Research and Improvement, National Center for Educational Statistics.
- Laird, J. (1979), 'An ecological approach to child welfare: issues of family identity and Continuity', in C.B. Germain (eds), Social Work Practice: People in Environments, New York: Columbia University Press, pp. 174–207.
- Lambert, L. C. and Firestone, J. M. (2000), 'Economic context and multiple abuse techniques', Violence Against Women, 6, 1, 49–67.
- Levinson, D. (1989), Family Violence in Cross-Cultural Perspective, Newbury Park, CA: Sage.
- Lyon, E. (2000), 'Welfare, poverty, and abused women: new research and its implications', National Resource Center on Domestic Violence, at www.vawnet.org/NRCDVPublications/BCSDV/ Papers

MacKinnon, C. A. (1989), Toward a Feminist Theory of Our State, Cambridge, MA: Harvard University Press.

Mahoney, P., Williams, L. M. and West, C. M. (2001), 'Violence against women by intimate relationship partners', in Claire M. Renzetti, Jeffrey L. Edleson, and Raquel Kennedy Bergen (eds), Sourcebook for Violence Against Women, Thousand Oaks, CA: Sage Publications, pp. 143–178.

Menard, A. (2001), 'IPV and housing', Violence Against Women, 7, 6, 707–720.

Martin, K., Vieraitis, L. M. and Britto, S. (2006), 'Gender equity and women's absolute status', Violence Against Women, 12, 4, 321–339.

Mincer, J. (1974), Schooling, Experience, and Earnings, New York: Columbia University Press.

Moe, A. M. and Bell, M. P. (2004), 'Abject economics', Violence Against Women, 10, 1, 29-55.

Nurius, P. S., Macy, R. J., Bhuyan, R., Holt, V. L., Kernic, M. A. and Rivara, F. P. (2003), 'Contextualizing depression and physical functioning in battered women: adding vulnerability to the analysis', *Journal* of *Interpersonal Violence*, 18, 12, 1411–1431.

Orzechowski, S. and Sepielli, P. (2003), Net Worth and Asset Ownership of Households: 1998 and 2000, Washington, DC: US Census Bureau.

Petersen, R. (1980), 'Social class, social learning, and wife abuse', Social Service Review, 54, 390-406.

Prochaska, J. O. (1979), Systems of Psychotherapy: A Transtheoretical Analysis, Pacific, CA: Brooks-Cole.

Raphael, J. (2001), 'Public housing and IPV', Violence Against Women, 7, 6, 699–706.

Raphael, J. (2000), 'Stiffed at the citadel', Violence Against Women, 6, 12, 1403–1416.

- Riger, S. and Scaggs, S. (2004), 'The impact of intimate partner violence on women's labor force participation', Document Number 207143, US Department of Justice, at www.ncjrs.gov/pdffiles1/nij/grants/207143.pdf [accessed 26 December 2006].
- Rose, S. J. and Hartmann, H. I. (2004), Still a Man's Labor Market: The Long-Term Earnings Gap, Washington, DC: Institute for Women's Policy Research.
- Saltzman, L. E., Fanslow, J. L., McMahon, P. M. and Shelley, G. (1999), 'Intimate partner violence surveillance: uniform definitions and recommended data elements', Version 1.0, Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Atlanta, GA.
- Sanders, C. K. (2004), 'Economic abuse in the lives of women abused by an intimate partner', Presented at the Society for Social Work and Research, New Orleans, LA.
- Schultz, T. (1975), 'The value of the ability to deal with disequilibria', *Journal of Economic Literature*, 13, 3, 827–846.
- Schollenberger, J., Campbell, J., Sharps, P. W., O'Campo, P., Gielen, A. C., Dienemann, J. and Kub, J. (2003), 'African American HMO Enrollees: their experiences with partner abuse and its effect on their health and use of medical services', *Violence Against Women*, 9, 5, 599–618.

Schuler, S. R. and Hashemi, S. M. (1994), 'Credit programs, women's empowerment, and contraceptive use in rural Bangladesh', *Studies in Family Planning*, 25, 65–76.

Sherraden, M. (1991), Assets and the Poor: A New American Welfare Policy, New York: E. Sharpe Inc.

Shobe, M. A. and Christy-McMullin, K. (2006), 'Joining an asset building program: te social and economic correlates', *Journal of Evidence-Based Social Work*, 3, 1, 61–78.

Shobe, M. A. and Boyd, A. S. (2005), 'Findings from an anti-poverty policy demonstration: relationships between assets and economic hardship', *Journal of Community Practice*, 13, 2, 21–44.

- Shurman, L. A. and Rodriguez, C. M. (2006), 'Cognitive-affective predictors of women's readiness to end domestic violence relationships', *Journal of Interpersonal Violence*, 21, 11, 1417–1439.
- Sullivan, C. M. and Gillum, T. (2001), 'Shelters and community based services for battered women and their children', in C. M. Renzetti, J. L. Edleson and R. Bergen (eds), *The Sourcebook on Violence Against Women*, Thousand Oaks, CA: Sage, pp. 247–260.
- Tjaden, P. and Thoennes, N. (2000), Extent, Nature, and Consequences of Intimate Partner Violence: Findings from the National Violence Against Women Survey, Washington, DC: Department of Justice.
 US Consume Program (2005), Provide Violence Against Women Survey, Washington, DC: Department of Justice.
- US Census Bureau (2005), Poverty: 2004 Highlights, Washington, DC.
- US Census Bureau (2003), Annual social and economic supplement: 2003 Current Population Survey, Current Population Reports (Series P20–553), Washington, DC: Author.

- VonDeLinde, K. M. C. (2002), 'How are domestic violence programs meeting the economic needs of battered women in Iowa? An assessment and recommendations', at http://www.vawnet.org/NRCDVPublications/BCSDV/Papers
- Waldrop, A. E. and Resick, P.A. (2004), 'Coping among adult female victims of domestic violence', *Journal of Family Violence*, 19, 5, 291–302.
- Wenzel, S. L., Tucker, J. S., Elliott, M. N., Marshall, G. N. and Williamson, S. L. (2004), 'Physical violence against impoverished women: a longitudinal analysis of risk and protective factors', *Women's Health Issues*, 14, 144–154.
- Whaley, R. B. (2001), 'The paradoxical relationship between gender inequity and rape', Gender and Society, 15, 531–555.
- Wilcox, P. (2000), 'Lone motherhood: the impact on living standards of leaving a violent relationship', *Social Policy and Administration*, 34, 2, 176–190.
- Woo, L. G., Thomas, J., Buchholz, D. and Uher, J. (2005), 'Measuring homeownership in America', Center for Social Development, Washington, DC.
- **World Bank** (2002), 'Social capital in poverty reduction and economic development: the role of social networks in economic action', at www.worldbank.org/poverty/scapital/topic/pov1.htm.
- World Health Organization (2002), World Report on Violence and Health, Geneva, Switzerland: World Health Organization.
- Zhan, M. (2003), 'Savings outcomes of single mothers in Individual Development Accounts', Working paper no. 03–07, Center for Social Development, Washington University in St Louis, St Louis, MO.