ABSTRACT

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DOES GOVERNMENT AID MODERATES THE EFFECT OF LIVING IN POVERTY ON INTIMATE PARTENR VIOLENCE?

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This study examines the relationship between the government aid and intimate partner violence. Agnew's General Strain Theory (GST) is used to explain the relationship between poverty and intimate partner violence. Using the individual level data of 8,000 women, this study examines whether the government aid moderates the effect of living in poverty on intimate partner violence. Using the data from the survey questions, a logistic regression analysis is conducted. Results reveal that the relationship between living in poverty and likelihood of intimate partner violence was supported. However, this study does not support the relationship between government aid and intimate partner violence. Thus, further research needed with more accurate data and different method.

DOES GOVERNMENT AID MODERATES THE EFFECT OF LIVING IN
POVERTY ON INTIMATE PARTNER VIOLENCE?

by

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Chapter 1: Introduction

Intimate Partner Violence (IPV) is a serious problem in the United States. , According to the National Crime Victimization Survey, between 1992 and 1996 an average of 18,000 people were assaulted by an intimate partner at work each year (Warchol, 1998). In addition, statistically, about 1 million violence crimes are committed against persons by their current or former spouses, boyfriends, or girlfriends every year (Rennison, 2001). Considering that unreported IPV is excluded from these figures, it is clear that IPV is one of the major problems in the United States.

IPV brings about adverse consequences to victims that ultimately affect their physical and psychological health. These include fear, anxiety, self-esteem problems, sexually transmitted diseases (STDs), and sexual dysfunction (Koss, 1993). Bonomi et al. (2006) state that women who experience physical and/or sexual IPV show lower social functioning, and severe depressive symptoms than women who have never experienced abuse in this lives. IPV also accounts for a significant proportion of injuries and emergency room visits for women, making this a leading cause of female homicides (Coker, 2000; Frye, 2001; McLeer et al., 1989). To suppress their emotional trauma, victims often turn to drugs and alcohol to self-medicate; this, however, is a short-term remedy that causes other health problems (Schafran, 1996).

Anyone can be subjected to IPV. However, many researchers argue that a person's social circumstance, such as financial status, could be a risk factor to being victimized (Benson et al., 2003; Coker et al., 2000; Pazzani, 2007). There are many possible reasons why couples living in poverty experience more violence than their wealthier counterparts. One is that couples experiencing economic distress may become violent because they argue more over money matters, and the stress or frustration caused by their arguments can lead one or both to violent behavior (Benson et al., 2003). Another possibility is that men who have a lower socioeconomic status (SES) are exposed to greater social stress, but it is the fact that they possess fewer resources such as economic security to cope with the stress that leads domestic violence (Babcock et al., 1993). Finally, spousal violence against women could reflect efforts to dominate and control women in marital relationships (Macmillan & Gartner, 1999). Therefore, women with few economic resources cannot easily leave their partner, leading to higher rates of IPV. As evidenced by the above-mentioned studies (Babcock et al., 1993; Benson et al., 2003; Bonomi et al., 2006; Macmillan & Gartner, 1999), poverty might, thus, present a higher risk of intimate partner violence. Thus, it also indicates that women in poor families will have higher rates of IPV compared with economically empowered women in stable families. In addition, this has severe implications for the United States, given its recent economic downturn, as more women will become vulnerable to IPV.

If it is true that as more people are becoming poor and this poverty increases in the United States, more women will become vulnerable to IPV, then things are getting worse. The U.S. Census Bureau defines poverty as follows: "[I]f a family's gross income is less than that family's threshold, then that family and every individual in it are

considered to live in poverty" (U.S. Census Bureau,

http://www.census.gov/hhes/www/poverty/methods/definitions.html). Therefore, the poverty

rate shows the proportion of people with income below the appropriate poverty threshold.

There were 43.6 million people living in poverty in the United States in 2009. Moreover,

this poverty rate increased between 2008 and 2009. The official poverty rate in 2009 was

14.3 %, up from 13.2 % in 2008, and was the highest poverty rate since 1994. In addition,

the earnings of women who worked full- time, year-round were only 77% of what the

corresponding men earned (DeNavas-Walt et al., 2010). Appendix A presents the Census

Bureau Poverty Thresholds from 1993 to 2010. The estimated thresholds for 2010 reflect

Consumer Price Index (CPI-U) increases of 2.5% over 2009.

If increasing financial resources reduces IPV, the government might be able to

play a role in solving the problem by establishing proper policy to address this issue.

According to the Congressional Research Service, more than 80 benefit programs provide

cash and noncash forms of aid to persons with limited income (Burke, 2003). The amount

per person spent on these programs grew at an annual rate of 5.4% between 1968 and

2004. However, the proportion of cash welfare spent per person has fallen (Burke, 2003).

In 1935, the Aid to Dependent Children program was created by the Social Security Act

as a way to protect children against poverty. Benefits were provided to needy children

who were unable to receive support due to death, incapacity, or absence of a parent

(Hoynes, 1996). The name of the program changed at mid-century to Aid to Families

with Dependent Children (AFDC), and the number of recipients increased dramatically

from the mid-1960s to the mid-1970s after major program changes from the war on

poverty and the civil rights movement (Danziger, 2010). In 1935, the primary reason for

the absence of a father was death, but this was to change in later years as that absence was more a result of divorce or out-of-wedlock childbearing. The standards of eligibility also changed. The original program was created on the premise that mothers with young children should not be expected to work. However, this changed in the later years so that eligibility also required families to have income and assets below specified levels (Moffitt, 2003).

Under the AFDC program, federal and state governments shared the responsibility. States especially had a large role in the program, including not only creating and administering their own AFDC programs but also setting the level of basic benefits. States subsequently picked very different benefit levels, with benefits suggesting increasing from decreasing. Thus, the states ended up being primarily responsible for the level of benefits (Moffitt, 2003). Therefore, under AFDC, all applicants who met a state's minimum income and had minor-aged children were entitled to receive cash assistance. Appendix B shows the differences of AFDC benefit level by state for 1996.

In 1996, the average number of AFDC recipients was 13 million, and the total annual expenditure on the program was $18 billion (Johnson et al, 1999). However, in 1996, welfare reform meant the end of the entitlement to cash assistance. President Clinton signed a Republican bill, and AFDC was replaced with the Temporary Assistance for Needy Families (TANF) program. Current welfare policy allows each state to decide who receives assistance, subject only to a requirement that they receive "fair and equitable treatment" (Danziger & Danziger, 2009).

By applying Agnew's (1992) general strain theory, the relationship between poverty and crime can be explained. In 1992, Agnew extended Merton's theory by presenting a general strain theory of crime and delinquency (Agnew, 1992). In this general strain theory, Agnew (1992) introduced three major types of strain:

(1) Strain as the actual or anticipated failure to achieve positively valued goals

(2) Strain as the actual or anticipated removal of positively valued stimuli

(3) Strain as the actual or anticipated presentation of negatively valued stimuli

The general strain theory explains why women in poverty have a higher possibility of suffering from IPV than women living in more stable conditions. A woman who has low economic resources could be controlled by her intimate partner who is under considerable strain or pressure from living in poverty, and this controlling power might lead to violence towards her. Thus, the strain theory would predict that poor women who live in states that offer more benefits would be less likely to be victims of IPV compared with those who live in states that offer fewer benefits. Based on the strain theory, this study therefore hypothesizes that Intimate Partner Violence is more prevalent for women who living in poverty and government aid might moderate the effect of living in poverty on Intimate Partner Violence by reducing people's considerable strain or economic pressure. This study expands the literature on IPV beyond individual predictors by examining how different amounts of government aid for women living in poverty influence women's vulnerability to IPV. By understanding how government aid moderates the effect of living in poverty on IPV, this study might help researchers and policy makers develop targeted interventions to decrease IPV.

This study analyzed information from 8,000 women aged 18 years and above, residing in households throughout the United States, who responded to a survey aimed at understanding violence against women and men. The survey was carried out on behalf of the National Institute of Justice (NIJ), the National Center for Injury Prevention and Control (NCIPC), and the Centers for Disease Control and Prevention (CDC), jointly sponsored by the National Violence against Women (NVAW) office in 2000, and was aimed at exploring women's and men's fear and physical and psychological experiences of the crime (Tjaden & Thoennes, 2000). This survey was administrated from November 1995 to May 1996. Because President Clinton signed into law the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) on August 22, 1996, which replaced the AFDC program, this survey represents the final years of AFDC dispersions. With these data, the thesis seeks, most importantly, to estimate the relationship between government aid and IPV.

Chapter 2: Literature Review

Theoretical Perspectives

Many studies have been conducted in order to estimate how considerable strain or pressure relates to crime. These studies suggest that there must be an underlying reason that such strain would affect crime. Agnew's (1992) general strain theory presents a much broader version of Merton's (1938) strain theory. He attempts to measure strain by asking individuals how satisfied they are with their financial situation. By asking this question, criminality would be predicted, with the more dissatisfied being more criminal. Agnew suggests that strain increases the likelihood of crime because it causes negative emotions such as anger and frustration, thus creating pressure for corrective action, namely, crime. According to Agnew, failure to achieve valued goals is only one of several types of strain. As mentioned earlier, Agnew described three major types of strain, which refer to different types of negative relationships with others. The first strain is "prevent one from achieving positively valued goals" (p.51). He defines this kind of strain as the disjunction between expectation and actual achievement. He regards expectation as not only focused on income expectations but also on all manners of positive stimuli. Thus, he states that the failure to achieve such expectations may lead to such emotions as anger, rage, and disappointment; and these emotions are eventually associated with strain in criminology. The second strain he described is "strain as the removal of positive valued stimuli from the individual" (p. 57). So, for example, if an individual experiences loss of something/someone that gives positively valued stimuli, it

is regarded as a stressful life event. This stressful life event may lead to crime, as the individual tries to retrieve the lost stimuli or obtain substitute stimuli, or seek revenge against those responsible for the loss. The last strain he described is "strain as the presentation of negative stimuli" (p. 58). The presentation of negative stimuli is generally focused on aggression, meaning that while an individual presents one's negative stimuli, it creates aggression that might lead to crime.

Agnew (1992) suggests that strains are most likely to cause crime if they are greater in magnitude or size, recent, happened of long duration, and clustered in time. For example, magnitude refers to the perceived size or amount that was lost. The exact definition is different from person to person depending on how they standardize their losses. Moreover, he argues that in recent data, chronic stressors and events closely clustered in time have a greater effect on negative outcomes such as crime. In addition, Agnew argues that unjust strains are more likely to lead to crime because it makes individuals angrier. For example, when people believe that the strain they have experienced is undeserved, they get angrier, which may lead them to commit crime. Finally, the general strain theory suggests that these strains increase the likelihood of experiencing negative emotions, including anger, frustration, depression, and fear. Among negative emotions, he insists that anger typically creates a desire to take corrective steps; thus, it is the most conducive to crime. Therefore, these negative emotions ultimately increase the likelihood of crime because they create pressure for corrective action (i.e., crime) as a means of reducing or escaping these strains.

In the thesis, analyzing partner's income supports the first types of strain, and it eventually supports the hypothesis that IPV is more prevalent for women who are living in poverty. If a respondent's partner is currently receiving low income, it might mean that the partner is exposed to negative stimuli. Thus, exposure to negative stimuli may lead to emotions such as anger and rage, and these emotions are eventually associated with strain. In addition, a partner's unemployment status can be used to measure the same types of strain as income; as presentation of negatively valued stimuli. Such exposure to negative stimuli causes stress and leads to strain.

As mentioned earlier, the strain increases the likelihood of experiencing negative emotions. Thus, in order to alleviating these strains, the unemployed partner or the partner with low income is more likely to commit IPV than a partner who is employed or who receives more income. In 2006, Agnew identifies specific types of strain: objective and subjective. Objective strain is defined as an event or condition that most individuals would perceive as negative. Subjective strain "refers to an event or condition that is disliked by the particular person or persons being examined" (Agnew, 2006, p.10). For example, most people consider the death of partner is a bigger problem than losing a job. It is called Objective strain in Agnew's general strain theory. However, someone might consider that losing a job is a bigger problem than death of partner. It is called Subjective strain.

To measure its magnitude, Agnew (1992) explains that magnitude refers to the amount of pain or discomfort inflicted with respect to the exposure to negative stimuli. He also explains that magnitude ratings are sometimes used to weight the events in scale.

However, this study does not have a good indicator of magnitude. Therefore, the study assumes that people living different life might feel strain differently. In other words, employment status or income makes people feel different kinds of strain. Thus, this study interpreted these different levels of strain s as magnitude. Therefore, to measure if the low income/or unemployment status is more influential, examining magnitude, which is level of income/or employment can be used. For strain caused exposure to negative stimuli, the size of the gap between one's goals and reality can be used as magnitude. In other words, comparing IPV prevalence of level of each partner's income such as low income and medium income or high income represents its magnitude. Because there is no indicator of perpetrator's goals in the survey, I assume that their one of the goals is having money, so that they do not have worry about living life. In addition, comparing IPV prevalence of each employment status such as unemployment and part-time or full-time employment also represents its magnitude. Therefore, these comparing level of income/employment eventually telling us which income/employment status are more likely to cause strain than the other. With this, the study figures out the fact that the strain leads to violence.

However, there are limitations to measure general strain theory in the thesis. The presentation of negative stimuli; the third types of strain Agnew suggested, cannot be measured using the available data. In addition, other measurement except magnitude which are recency, duration, and clustering, cannot be measured in the thesis. Because the study is not longitudinal and the data do not mention how long they are unemployed, there is difficult to measure recency, duration, and clustering of strain. This limitation will be mentioned again later.

There might be an alternative explanations explaining relationship between poverty and IPV. The theory of assortative mating suggests that experiencing IPV might just be a result of assortative mating where people pick partners who are violent because of their own tendency to be violent. According to Vanyukov et al. (1996), the theory of assortative mating suggests that individuals enter into romantic relationships with others who share their characteristics and preferences. In other words, people tend to become romantically involved with others who are like them and who engage in similar activities, namely, assortative mating suggests that people choose their partner who share same characteristic such as low self-control or impulsive, and these characteristics leads them to poverty because of their characteristics, and it also leads them in to IPV. Therefore, in order to check whether assortative mating leads to being poor and being a victim of IPV, their personal characteristic such as low self-control need to be measured. If the couple's same personal characteristics do not affect their poverty and IPV and strain does then, the general strain theory would predict more strongly explaining how strain supports relationship between living in poverty and IPV.

Empirical Findings related to poverty and IPV

There have been mixed findings regarding relationship between economic distress and IPV. For example, Benson et al. (2003) found a positive relationship between economic distress and domestic violence. They view economic distress as two aspects, employment and income, which are objective and subjective. Objective economic distress means economic problems such as unemployment or insufficient income, which can

negatively affect the needs of one's family. On the other hand, subjective economic distress indicates feelings of anxiety or worry about money, or worry about losing one's job. Benson et al. investigated the effects of individual economic distress on intimate violence against women and revealed the fact that male unemployment rates and the likelihood of violence are significantly related. In addition, they found that male-to-female violence occurs more frequently among couples that report greater financial strain than among those who feel less strain. Therefore, they concluded that in the case of objective distress, which represents employment instability, unemployment makes men's sense of self-worth vulnerable and men become sensitive to affronts to their authority. In addition, subjective distress, or dissatisfaction of economic status, also presents great risk of intimate violence; and this financial strain increases the likelihood of domestic violence (Benson et al., 2003).

Similarly, Babcock et al. (1993) argue that men who batter their wives were more likely to have lower income levels and lower occupational statuses than nonviolent men. They view domestic violence as a power-related problem. Thus, a man who doesn't have power, such as economic status, may regain some power through the use of physical dominance. Finally, they conclude that individuals who are deficient in resources, such as economic ones, may have to rely on their physical resources, such as physical threat and violence, to promote their interests. Additionally, Macmillan and Gartner (1999) analyzed the relationship between employment and risk of marital violence against women as symbolic. They found that women's risks of spousal abuse decreases when their male partners are also employed; but when their male partners are unemployed, the

risks of spousal violence increases. Therefore, they suggest that domestic violence reflects men's attempt to dominate and control their women in marital relationships.

Much of the feminist literature has the same views on domestic violence about its effects of relative economic status between the women and their partner in relationship. The feminist literature states that the most important contribution has been to emphasize that the primary cause of domestic violence is the gendered nature of power and control in intimate partner relationships; thus, violence against wives is a behavior that has a goal of maintaining male dominance of the social climate (Hamby, 2000). In 1996, Hamby suggested a new conceptualization of dominance, "disparagement," which further explicates the links between dominance and partner violence. He explains that disparagement occurs when one partner fails to equally value the other partner and has an overall negative appraisal of his or her partner's worth. He finds out that disparagement is related to decision-making power through a survey of 131male and female undergraduates attending one of two colleges in the northeast (Hamby, 1996). Thus, it might explain the reason why women place themselves more at risk when they take a job, or acquire their own assets, at least in the short term, and why many domestic violence cases involve disproportionately high number of low-income men (Bachman & Lindae, 1995; Hirschel et al, 1992). According to Atkinso et al. (2005), when husbands held traditional gender ideologies, women who earned more than their partners were at increased risk of violence. They suggest that when men defines masculinity as in terms of being the breadwinner, and their partners earn a significant portion of household income, intimate violence might be used to compensate for the symbolic loss of male authority (Atkinso et al., 2005). Similarly, Horning et al (1981) also analyzed the relationship

between IPV and occupational and educational incompatibilities. They found that couples in which a woman's occupational status was higher than her husband's status show higher rates of violence than their counterpart. Likewise, many other literatures state that if men define income or educational status as a power and when they feel that the power is lacking, the men will be more likely to rely on violence to achieve greater power within the relationship (Goode, 1971); in addition, the more a wife's resources exceed those of her husband, the more likely husband perpetrates of domestic violence (Allen & Straus, 1980).

Overall, feminist literatures suggest that a man's lower relative status compared with his wife is associated with higher levels of violence. As mentioned earlier, because lower-class men may have difficulty achieving greater educational or occupational status than their partner, when they feel their masculinity is challenged because of the incompatibilities of income, they commit violence toward their partner as a means to exert dominance and control (Campbell, 1993). Anderson (1997) suggests that because domestic violence is affected by social processes that support men's cultural support for couplings in which men have greater resources than their female partners, men who have few resources such as earning lower income compared with their partner may engage in domestic violence as a means to gain power within the relationship. In order to measure if the women who have greater resources than their partner are more likely to be victims of IPV, employment status of both women and their partner is used.

Conversely, unlike in the feminist literature, economists suggests different hypothesis about the effects of relative economic status between the men and women in

relationship based on the bargaining theory (Farmer & Tiefenthaler, 1997; Gibson-Davis et al., 2005; Lundberg & Pollak, 1996; Tauchen et al., 1991). Women's property status or employment status shows a significant predictor of long-term physical and psychological violence. Statistically, women who own both a house and land are 20 times less likely to becoming victims of domestic violence than women who own neither (Agarwal & Panda, 2007). In addition, decreases in the wage gap witnessed over the past 13 years can explain the 9% reduction in domestic violence against women (Aizer, 2010). These suggest that women's independent ownership of property or reduces of the male-female wage gap could reduce her risk of domestic violence.

Several studies suggest that when women's economic status equals or exceeds that of their partner, levels of domestic violence decrease (Gibson-Davis et al, 2005; Tauchen et al., 1991). Tauchen et al. (1991) were the first to suggest domestic violence within an economic framework. They state that violence serves both an expressive and an instrumental purpose, meaning that violence enters the husband's utility directly as well as indirectly through the wife's behavior. Thus, men "purchase" violence from women with income transfer, so that the level of resources controlled by each partner and whether the reservation utility constraint is associated with determination of level of violence in equilibrium (Tauchen et al, 1991). Using a sample of 125 women from shelters and other advocates for battered women, they used panel data on victims of domestic violence to examine the impact of changes in women's income. They assumed that the assailant in the relationship makes his choices in order to maximize his expected utility and found out that negative correlation exists between domestic violence and women's income for a subset of low-and middle- income couples in their sample.

Similarly, Gibson-Davis et al (2005) also examine the effect of employment on domestic abuse among low-income single mother. By analyzing two randomized evaluations of welfare program, they found that increased maternal employment decreases subsequent reports of domestic violence in both studies.

Economists emphasize how partners use their power over resources to bargain in order to estimate the effects of employment on domestic violence. In their theoretical perspective, increasing women's economic resources such as employment empowers her to bargain for a better situation for herself within the relationship, leading to reductions in women's risk of domestic violence. Bowlus and Seit (2006) found that men married to women aged 15 to 29 are significantly more likely to commit domestic violence if their wives are not working. They also found out that among women aged 30 years above, the effect of the wife's employment on her spouse's abuse propensity is positive but insignificant, thus concluding that men are more likely to abuse nonworking wives in their sample. This result suggests that men do not use domestic violence as a means of keeping their partners out of the workforce, and men are less likely to abuse their partner who have better outside opportunities. These economists' hypotheses about the effects of relative economic status between the men and women in the relationship are consistent with the hypothesis of this thesis. In addition, economist's theory of bargaining can be used for prediction of AFDC for women who are married.

If economic distress affects IPV, and if resolving the conflicts caused by economic distress may prevent IPV victimization, government aid programs might help to control the rate of IPV. Often, battered women experience a lack of support resources,

such as alternative housing, money, and employment (Sullivan et al., 1992). By providing

these government aids, women could reduce their reliance on violent partners and

possibly escape the relationship. For example, opportunity for employment provided by

government aid can have a protective effect for women. It not only provides important

financial resources but it also raises a woman's self-esteem, which enhances her

resources to cope with an abusive relationship. In fact, one in five women who reported

unwanted or forced sexual relationships said that going to work lessened the abuse

(Brush, 2003). Various studies have established a relationship between government aid

and intimate violence. In 1992, Sullivan et al. hypothesize that social support such as

women's shelter would increase their level of life satisfaction and decrease their risk of

further abuse, and found that all participants reported a decrease in abuse, fear, and

depression. In addition, they found that for post-shelter social support, 42% of

participants reported no depression at all. Campbell et al. (1995) also examined

depression reported by women who had used a domestic violence shelter and found that

many women were no longer physically abused by their intimate partner 10 weeks post

shelter and at 6-month follow-up. In addition, they found that women who were happier

with the quality of social support in their lives reported less depression. Moreover, Bybee

and Sullivan (2002) focused on the advocacy intervention program for meditation process

preventing re-victimization of domestic violence based on a prior experimental

evaluation of advocacy program for victim of intimate partner violence (Sullivan &

Bybee, 1999). The sample was drawn from a Midwest shelter program for women with

abusive partners. If women spent at least one night in the shelter, and planned to stay in

the general vicinity for the first 3 months post-shelter, the women were eligible for the

study. This was longitudinal study, followed up for 2 years. They offered specific intervention activities to women and analyze how this intervention affect intimate partner violence. The specific intervention activities includes assessing women's needs and strengths with them, obtaining and sharing information about community resources with women as needed. Moreover, advocates intervention accompanied women as they kept appointments with government, and accompanied women through the court process. At 24 month follow-up interviews, the group of women who receive advocacy intervention services reported less physical assault by their partner, better access to community resources, and improved quality of life and social support compared with women who did not receive advocacy intervention services.

Their study is limited in its generalizability because the research participants were recruited from a battered women's shelter located in a medium-sized city in the Midwest. Even though they gathered samples in a restricted area, their study pointed out the importance of social support. Similarly, Rodriguez et al. (2008) studied IPV and its relationship with social support among pregnant Latina women. They interviewed 210 pregnant Latinas attending prenatal clinics located in Los Angeles, California. The samples consisted of women who did and did not have histories of IPV. In their study, social support was measured with both instrumental support (e.g., receiving transportation favors) and emotional support (e.g., having someone to talk to) from formal and informal sources. Finally, they found that social support was significantly lower among women who experienced IPV, thus concluding that pregnant Latinas who experienced IPV had more than twice the odds of reporting social undermining, and stress with less social support than women who experienced no IPV. Lastly, in 2003,

Dugan et al. used AFDC benefit level to assess the relationship between benefit levels and intimate partner homicide levels. They found the strongest effect for African American unmarried men—as AFDC benefits decline, more men are killed by their partners, suggesting that their partners have fewer alternatives to protect them from violence. This thesis also uses AFDC benefit level to assess the relationship between government aid and IPV. This thesis links the AFDC benefits level available to each woman and assesses its effects on IPV for low- income women.

Hypothesis

So far, the problems of IPV in the United States and its severe consequences were presented. According to Thomson et al. (2000), partner violence can reduce perceived social support, which is related to increased distress and greater psychological distress. As it was mentioned earlier, strain theory would predict that more government aid will reduce the IPV of those living in poverty, whereas lower government aid will cause people living in poverty to have more general distress, which will possibly lead to IPV. In other words, for victims, reducing economic dependency on their partner empower them to bargain for a better situation for themselves or to leave abusive relationships which will eventually lead to lower prevalence of IPV (Vyas & Watts, 2009). Numerous researchers have demonstrated the relationship between social support and IPV. However, most typically focus on whether or not the social support has any effect on reducing IPV using sample gathered from a limited area, such as a specific district or state. This thesis investigates the relationship between government aid and IPV in a representative sample

of women across the states using the data collected. The government aid is represented by AFDC benefit level in this thesis. If this thesis finds a relationship between government aid and IPV, it further informs officials on how to better administer government aid programs. Therefore, I propose the following two hypotheses:

1) *IPV is more prevalent for women who are living in poverty.*

2) *Among women who are living in poverty, those who live in states with higher government benefits will be less likely to be victims of IPV than women who live in states with lower benefits.[1]*

Chapter 3: Data and Method

Overview

The data for this study come from the state identified "Full Report of the Prevalence, Incidence, and Consequences of Violence Against Women," available at ICPSR. Patricia Tjaden and Nancy Thoennes studied the prevalence, incidence and consequences of violence against women using these data (Tjaden and Thoennes, 2000). This study

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[1] Since I do not know whether the woman is receiving government benefit, I assume that a woman receives government benefit if the woman has income below the poverty line .

randomly selected 8,000 women who were 18 years of age or older residing in

households through the United States, and using a national, random-digit dialing sample

of telephone households in the United States from November 1995 to May 1996. The

female respondents were asked about the psychological or physical assault they had

experienced as children by adult caretakers, and the psychological or physical assault

they had experienced as adults, including emotional abuse, forcible rape or stalking by

any type of perpetrator. Since the topic in this survey is sensitive, all interviewers were

female. The questionnaires asked about the specific characteristics of the assailant and

any consequences the victim experienced from the incident, as well as respondent

characteristics such as income, race, and age at the time of the incident.

The data on Aid to Families with Dependent Children (AFDC) benefits by state,

which represents the amount of government benefits, comes from the annual versions of

the "green book" compiled by the House Ways and Means Committee (1996). Data from

1995 on the average monthly payment per family, presents State-specific information on

benefit payments under the AFDC Single Parent and Unemployed Parent Programs.[2]

Variables

The following variables have been selected for inclusion in the model. The

descriptive statistics of variables are summarized in Appendix C.

Dependent Variable

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[2] The data are drawn from the Administration for Children and Families, U.S. Department of Health and Human Service

The dependent variable is constructed from the survey questions. This study ultimately tries to reveal whether the prevalence of intimate partner violence victimization depends on poverty and AFDC benefit level. Thus, I first needed to figure out whether respondents who are currently in relationship with their partner were victims of intimate partner violence within the past year. According to the Centers for Disease Control and Prevention (CDC), intimate partner violence is defined as 'actual or threatened physical, sexual, psychological, or stalking violence by current or former intimate partners' (Thompson, 2006). Therefore, I used the survey questions asking for the respondent's experience of emotional, physical or sexual abuse within the past year.

Because the questions included different types of intimate partner violence, this study provided a dependent variable that combines variables from these questions to express respondents' experiences of intimate partner violence as dummy variable. (1= experienced IPV, 0= didn't experience IPV). In other words, if the respondent answered yes to any of these questions, she is marked as having been a victim of intimate partner violence. Respondents who answered 'don't know', but answered yes to any of the related types of intimate partner violence questions are marked as having been a victim of intimate partner violence.

Table1 shows the timetable indicating the year survey was conducted and the years that violence happened. For more precise results, this study used samples that had experienced IPV at the year of survey, meaning the IPV should have happened after 1994. However, because the data for the specified year when the emotional abuse happened was lacking, emotional abuse data used the most recent experience of intimate partner

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violence for each respondent. In other words, emotional abuse was considered as each

respondent's experience of intimate partner violence by their last partner. For this, the

data used two survey questions which asked 1) the number of partners that respondent

have had and 2) which partner is the one that emotionally abused respondent.

Table 1. The Timetable of Variables

	Survey Conducted	Variables			
		Emotional abuse	Threatening	Physical Abuse	Rape
Year	1995 to 1996	Any Time in the Past	After 1994.	After 1994	After 1994

Because emotional abuse was not restricted to the previous year, two dependent

variables are made which are purely physical violence/ and physical and emotional

violence.   Purely physical violence includes IPV variables without emotional abuse

victimization data, and physical and emotional IPV includes all IPV variables. By doing

this, outcome variable will be more accurate than if there was just one dependent variable.

Emotional Abuse Victimization

Emotional abuse victimization variable is coded 1 if the respondent experienced

emotional abuse in the previous year. Otherwise, it is coded 0. The specific survey

questions for emotional abuse are listed in Appendix D-1. If the respondent answered yes to any of these questions, and the partner's behavior frightens her, she is marked as having been a victim of emotional abuse violence.

Threat Victimization

Threatening variable victimization is coded 1 if the women were threatened harm or kill her by her partner in the previous year. Otherwise, it is coded 0.

Physical Abuse Victimization

Physical abuse victimization variable is coded 1 if the respondent were physically abused in the previous year. Otherwise, it is coded 0. The specific survey questions for physical abuse are listed in Appendix D-2.

Rape Victimization

Rape victimization variable is coded 1 if the respondent were raped in the previous year. Otherwise, it is coded 0. The specific survey questions for rape victimization are listed in Appendix D-3.

Finally, as mentioned above, I made two dependent variables represent both purely physical violence/and physical and emotional violence. The purely physical violence variable is coded 1 if the respondent experienced a rape, threatened, or physically abused by her intimate partner in the previous year. Otherwise, it is coded 0. In the case of physical and emotional violence, it is coded 1 if the respondent experienced

an emotional abuse, rape, threatening or physical abuse by her partner in the previous

year. Otherwise, it is coded 0.

Primary Independent Variables for the First Hypothesis

Poverty

Because the first hypothesis of this study is that IPV is more prevalent for women

who are living in poverty, this study used income to construct one of the primary

independent variables. In the survey, respondents were asked how much income they

received. Therefore, the poverty variable is a dummy variable to indicate whether the

respondent lives below the poverty line. Table 2 presents the poverty thresholds for 1995

by size of family and number of related children under 18 years from the Census Bureau

(Baugher & Lamison-White, 1996). Basically, it shows that families or individuals with

income below their appropriate poverty thresholds are classified as poor (Baugher &

Lamison-White, 1996). For example, if a family comprises two people, including one

child and the income is equal or less than $10,504, the family is assumed poor. This study

established the standard of family income considered to be living in poverty by size of

the family based on Table1 and matched the income to the size of the household in order

to identify the poverty thresholds by size of family. Table 3 represents the family income

considered living in poverty. Thus, this study coded families with three people, with one

or two children, as poor if their income is equal or less than $15,000.

Measurement of General Strain Theory (GST)

  As mentioned earlier, the employment status of respondent's partner and partner's low income used to measure how the magnitude (=level of employment status/or level of income) affect strain, leading to IPV. For employment status of respondent's partner, I created a dummy variable, 'unemployment.' Unemployment is coded 1 if respondent's partner is currently unemployed and coded 0 if otherwise (i.e., employed part-time or employed full-time). In addition, in order to measure level of partner's income, I created a dummy variable, 'low-income partner' which coded 1 if the income of respondent's partner is less than $20,000. Otherwise, it is coded 0. Because employment status of partner is related to the income of household, it also helps to explain the first hypothesis that there is a higher prevalence of IPV for women who are living in poverty.

Table 2. Poverty Thresholds for 1995 by Size of Family and Number of Related Children Under 18 Years

Size of family unit	Weighted average thresholds	Related children under 18 years					
		None	One	Two	Three	Four	Five
One person	7,763						
Under 65 years	7,929	7,929					
65 years and over	7,309	7,309					
Two Persons	9,933						
Household under 65 years	10,259	10,205	10,504				
Household 65 years and over	9,219	9,212	19,465				
Three persons	12,158	11,921	12,267	12,278			
Four persons	15,569	15,719	15,976	15,455	15,509		
Five person	18,408	18,956	19,232	18,643	18,187		

Source: . Washington, DC: U.S. Department of Commerce, Bureau of the Census

Table 3. The Primary Independent Variable- Poverty

Size of Family Living in Poverty*	Family Income Considered Living in Poverty
One person	Equal or less than $ 10,000
Two persons	Equal or less than $10,000
Three persons	Equal or less than $15,000
Four persons	Equal or less than $15,000
Five persons	Equal or less than $20,000
Six persons	Equal or less than $20,000
Seven persons	Equal or less than $20,000

*Note: * Size of family includes the number of related children under 18 years.*

Low Self-control

As mentioned earlier, the theory of assortative mating could be an alternative explaining of IPV. In order to measure this explanation, low self-control variables for both women and their partner are created. Gottfredson and Hirschi's (1990) general theory of crime asserts that the propensity to engage in criminal behavior in the presence of opportunity, is caused by a personality trait they call low self-control. They also explain that low self control is not only "crime involves the pursuit of immediate, certain, easy benefits," but also other seminal acts can be seen as analogous to crime, and research examining these noncriminal events "can help elucidate the nature of crime and criminality" (Gottfredson & Hirschi, 1990 P.42). Thus, this study uses drug usage as measurement of low self-control. Because drug makes people depressed, stimulated, or

hallucinated, it could be one of the factors to help elucidate the nature of crime and criminality as Gottfredson and Hirschi explained. In this study, low self-control is indicated by a person's experiences of illegal drugs (e.g., marijuana, crack, heroin or angel dust). I assumed that if each respondent or their intimate partner used illegal drugs in the past month, the respondent or intimate partner has low self-control. After creating each low self-control variable, I created low self-control for couple coded 1 if respondent and her partner have used illegal drugs in the past month. Otherwise, it is coded 0. However, the method of measuring low self-control can be the limitations of the study. According to Gottfredson and Hirschi (1990), effective parenting is the major cause of self-control of children. They assert that effective parenting leads to a general orientation that increase the probability of restrained or socially appropriate responses throughout life. Thus, lots of literatures use parent's reports to measure their children's low self-control. In this study, however, the measurement of low self-control is based entirely on the woman's report. Even if the women can know their partner's usage of illegal drugs, it is not as much as parent's know their children's low self-control. Moreover, because the women only take this survey, there is possibility that the women answer untruth about their partner's behavior. Therefore, measuring low self-control based entirely on the women's report which has possibility of falsehood is one of the limitations of this study.

High Income Women compared to their Partner

Feminist literatures assume that men who earn lower income compared with their partner may engage in domestic violence as a means to gain power within the relationship

(Anderson, 1997). In order to measure the argument of feminist literatures, the comparison of income for respondent and intimate partner is used. Thus, comparison of income coded is coded 1 if respondent received higher or equal income than their partner. If respondent's income is less than their partner, it is coded 0.

Primary Independent Variables for the Second Hypothesis

Government aid (AFDC benefit level)

This study used the data "Average Monthly Number of AFDC Family and Recipients, Total Benefit Payments and Administrative Costs, and Average Payment per Family and Recipient, Fiscal Year 1995," available at the Administration for Children and Families. The data were used to construct one of the primary independent variables because the second hypothesis of this study is that women who live in states that offer low government benefits will be more likely to be victim of IPV. In this study, the AFDC benefit level represents government benefit. Because every state has a different population, this study used average monthly payment of AFDC benefit per family in Appendix E. In order to make it easy to present the AFDC benefit level, the AFDC benefit levels in 100s (e.g., 148=1.48) was used.

Poverty

Because only women who are eligible for AFDC should be sensitive to its level of benefits, the study used income again to construct one of the primary independent variables. The method to create poverty variable for the second hypothesis is the same as the poverty variable used in the first hypothesis in independent variable above.

Poverty_afdc100

In order to allow the effects of AFDC to differ for those who are living below and above the poverty line, the study constructed an interaction variable between AFDC benefit level and living in poverty. The study expects this variable to have no relationship between AFDC and victimization for women living above the poverty line.

Control Variables

In order to reduce the bias due to omitted variables, this study included three control variables that other researchers have already mentioned, which could affect IPV. These control variables are racial background of respondent, alcohol consumption of both, respondent and intimate partner, and education of both respondent and intimate partner

Race Background of Women

Respondents were asked about their racial background during the interview. Because African Americans show higher rates of crime as well as poverty, omitting this variable could affect the estimate of government aid on victimization. Race is coded 1 if the respondent is Black or African-American. Otherwise, it is coded 0.

Age of Women

Respondents were asked how old they are. Because young people show higher rates of crime then old people, age can be a good control variable. Age is a continuous variable that ranged 1 to 96 which is actual age of respondents at the time of survey.

Alcohol Consumption of Both Respondent and Intimate Partner

Alcohol consumption of both respondent and intimate partner was also included as a control variable. In the survey, respondents were asked how often their intimate partners drank alcohol. According to Zablotska et al. (2009), both physical violence and sexual coercion are more likely when alcohol was used before sex by at least one of the partners. Therefore, alcohol consumption might be a good control variable to estimate the relationship between government aid on victimization. Because alcohol consumption might be relevant to women and intimate partner, two variables are created for alcohol consumption. Alcohol consumption of both respondent and intimate partner is coded 1 if

respondent or intimate partner answered yes to drink of alcoholic beverages every day or nearly every day. Otherwise, it is coded 0.

Education of Both Respondent and Intimate Partner

Education for both respondent and intimate partners was added as control variable. Respondent's education can be an empowerment to protect against intimate partner violence (Jewkes, 2002). This also means that women who have low educational attainment have a higher possibility to be a victim of intimate partner violence. Education for intimate partners can also be a control variable. Because low levels of education may also be an indicator of poor communication skills, which can be a possible cause of domestic violence, lower levels of education for men are also associated with an increased risk of intimate partner violence (Kyriacou, 1999). According to Lipsky et al.'s (2004) study of police-reported intimate partner violence during pregnancy, women reporting any intimate partner violence during pregnancy significantly have a lower education level than women who had no reported intimate partner violence. The educational level of violent father of infants was also significantly lower than non-violent father of infants. Education for both respondent and her intimate partner is coded 1 if the highest level of education for respondent or her intimate partner is no schooling, 1st to 8th grade, some high school. If the highest level of education for respondent or her intimate partner is high school graduate, some college, four- year college degree (BA/BS), or postgraduate, it is coded 0.

Method

In order to make clear the relationship between government aid and IPV, diagrams are added using the variables mentioned above. Figure 1-1 shows the first hypothesis that how the relationship between poverty and IPV. Each Employment status, low self-control, and low income partner were added to measure magnitude (=level of employment) of strain, assortative mating, and argument of feminist theory which are mentioned above. Figure 1-2 shows the second hypothesis that how government benefits affect IPV. If women are not poor, AFDC benefit will not affect. However, If women are living in poverty, AFDC benefit will affect, and those who live in states with higher AFDC benefits will show less likely to be victims of IPV than women who live in states with lower benefits.

The dependent variable in the regression models measures whether or not the respondents have experienced IPV (i.e., it is a binary variable with values of 0 and 1), which requires analysis using a nonlinear model. In the study, STATA 11's logit procedure was used to run the appropriate logistic regression on the data.

Figure 1-1. Diagram for the First Hypothesis.

Poverty	Employment Status & Partner's Low Income	Low Self-Control	Income Comparison

+   +   +   −

Intimate Partner Violence
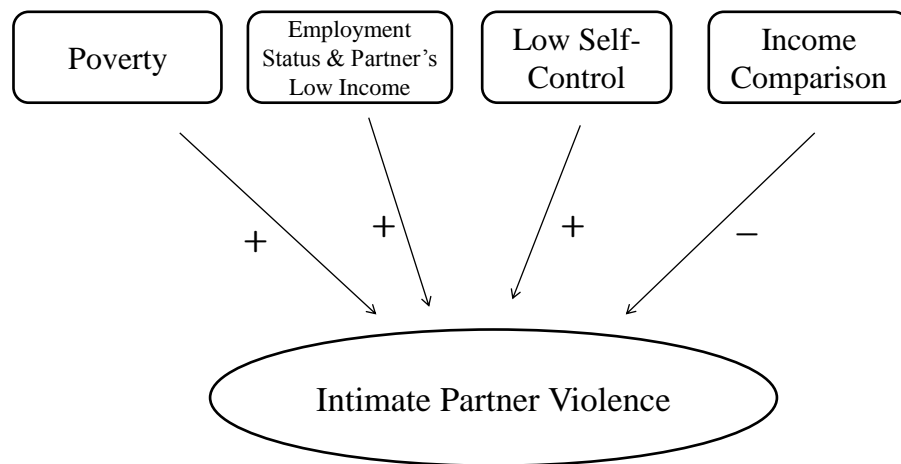
Figure1-2. Diagram for the Second Hypothesis.

IPV

Living in
Poverty=0

Living in
Poverty=1

AFDC
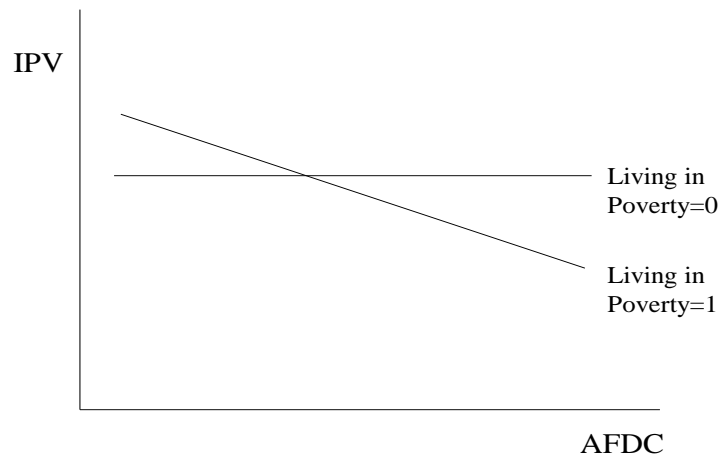
Chapter 4: Results

Description of Variables

Table 4 shows the description of dependent and primary independent variables. It shows that almost 21 percent of women experienced physical and emotional violence, and 0.5 percent of women experienced purely physical violence in the previous year. Comparing the percent of purely physical violence/ and physical and emotional violence, purely physical violence has much smaller proportion than physical and emotional violence. The table4 also indicates that 11 percent of women are living in poverty, and the average amount of AFDC benefit level is $346. The specific descriptions of variables are listed in Appendix C.

Table 4. Descriptive Statistics of Dependent and Primary Independent Variable

Variable Name	N	Range	Mean	SD
Dependent Variable				
Physical and Emotional Violence	7999	0 – 1	.2093	.04068
Purely Physical Violence.	7999	0 - 1	.0050	.0705
Primary Independent Variables				
Poverty	8000	0 - 1	.117	.3214
AFDC100	8000	1 - 7.21	3.4654	1.3534

The following is the regressions assessed in the study. The first logistic regression assesses the effect of living in poverty on IPV which is the first hypothesis of this study. The second logistic regression assesses how government aid moderates the effect of living in poverty on intimate partner violence.

The first logistic regression: the effect of living in poverty on IPV

Because the study contains two independent variables which are IPV and IPV excluding emotional abuse, there are two equations exists to measure the first hypothesis. The first equation, examine the output of IPV including emotional abuse is following:

$$\Lambda^{-1}[P(\text{phsyical and emotional violence} = 1)] = \beta_0 + \beta_1 \text{Poverty} + \beta_2 \text{GST variables} +$$

$$\beta_3 \text{Low Self Control} + \beta_4 \text{Income Comparison} + \beta_5 \text{Control Variables}$$

P phsyical and emotional violence $=1) =$

$$\frac{\exp(\beta_0+\beta_1 \text{Poverty}+\beta_2 \text{GST variables}+\beta_3 \text{Low Self Control}}{1+\exp(\beta_0+\beta_1 \text{Poverty}+\beta_2 \text{GST variables}+\beta_3 \text{Low Self Control}}$$

$$\frac{+\beta_4 \text{ Income Comparison} + \beta_5 \text{Control Variables}}{+\beta_4 \text{ Income Comparison} + \beta_5 \text{Control Variables}}$$

The second equation, examine the output of IPV excluding emotional abuse is following:

$$\Lambda^{-1}[P(\text{purely physical violence} = 1)]$$

$$= \beta_0 + \beta_1 \text{Poverty} + \beta_2 \text{GST variables} + \beta_3 \text{Low Self Control}$$

$$+ \beta_4 \text{Income Comparison} + \beta_5 \text{Control Variables}$$

P (purely physical violence $=1) =$

$$\frac{\exp(\beta_0+\beta_1 \text{Poverty}+\beta_2 \text{GST variables}+\beta_3 \text{Low Self Control}}{1+\exp(\beta_0+\beta_1 \text{Poverty}+\beta_2 \text{Employment Status}+\beta_3 \text{Low Self Control}}$$

$$\frac{+\beta_4 \text{ Income Comparison} + \beta_5 \text{Control Variables}}{+\beta_4 \text{ Income Comparison} + \beta_5 \text{Control Variables}}$$

Table 5 shows the results from the logistic regression of factors cause IPV. As mentioned earlier, this result contains the variables which have probability to cause IPV. The two columns show how poverty, employment status, low self-control, and income comparison between couple affect physical and emotional violence or purely physical violence controlling for race, education for both women and partner, and alcohol consumption for both women and partner.

Poverty

Living in poverty (β= .31) positively and significantly influence IPV at p<0.01 when physical and emotional violence is measured. This result supports the first hypothesis of this study that IPV is more prevalent for women who are living in poverty. However, when analyzing the data with purely physical violence, it shows different result. In this result, poverty (β= -.46) shows negative direction, but, not significantly related to IPV

Table 5. The Effect of Living in Poverty on IPV.

Variable Name	Physical and Emotional Violence (N=7999)		Purely Physical Violence (N=7999)	
	β(SE)	Odds Ratio	β(SE)	Odds Ratio
Poverty	.31*** (.11)	1.39	.-.46 (.82)	0.63
Testing GST				
Unemployment	.039***(.014)	1.04	(omitted)	(omitted)
Low Income Partner	.21*** (.08)	1.24	.56 (.53)	1.74
Low Self Control				
Couple's History of Drug	1.43*** (.19)	4.16	1.60*** (.63)	4.96
Income Comparison	.27 (.07)	1.32	-.40 (.50)	.68

Control Variables

Minor Race	-.07 (.13)	.93	-1.32***	.27
			(.58)	
Low Education (women)	.08(.21)	1.08	(omitted)	(omitted)
Low Education (partner)	.21 (.16)	1.23	.34 (1.07)	1.40
Alcohol Consumption (women)	-.11 (.17)	.89	.51 (1.16)	166
Alcohol Consumption (partner)	.46*** (.10)	1.60	-.02 (.85)	.98
Age	-.006***	.99	-.066***	.94
	(.002)		(.02)	

Note: In purely physical violence, unemployment was dropped in which there is no variation on purely physical violence.
*p<0.1 **p<0.05 ***p<0.01

Measurement of General Strain Theory

Both unemployment status of partner (β= .039) and partner's low income (β= .21) positively and significantly influence on physical and emotional violence at p<0.01. These results are enough to supports the general strain theory that the unemployment status, or low income causes more strain to partner than counterparts, leading higher

likelihood of IPV. When purely physical violence is measured, partner's low income (β= .56) still shows positive, but insignificantly influences on IPV. Whether the partner is unemployed is not measured in purely physical violence because it predicts failure perfectly.

Low Self Control

Low self control variable is used to measure the alternative explaining of IPV which is the theory of assortative mating. In the result, a couple has low self-control (β= 1.43) shows positively and significantly influence on physical and emotional violence at $p<0.01$. Moreover, low self-control (β= 1.60) also positively and significantly influences on purely physical violence at $p<0.01$.

Income Comparison

Income comparison between respondents and their partner used to measure argument of feminist literatures that men who earn lower income compare with their partner may engage more likely in IPV. The result shows that income comparison between couples is not significantly influences on both physical and emotional violence (β= .27) / and purely physical violence (β= .40) at $p<0.01$. Thus, feminist literatures cannot assume that IPV is more prevalent for women who earn higher income compared with their partner with this data.

Control Variables

All control variables except partner's alcohol consumption shows insignificant impact on physical and emotional violence. Partner's alcohol consumption (β= .46) significantly influenced on the likelihood of physical and emotional violence at p<0.01. However, when purely physical violence is measured, partner's alcohol consumption no longer becomes significant. The race of respondent (β= -1.32) also shows its significance on purely physical violence. However, it shows negative relationship which is the opposite direction I expected. In addition, age (β= -.006) negative and significantly influenced on the likelihood of both physical and emotional violence, and purely physical violence. It indicates that young women more likely be victimized physically and emotionally by their intimate partner than old women

The second logistic regression: how government aid moderates the effect of living in poverty on IPV.

This logistic regression assesses the second hypothesis of this study. Same as the first logistic regression, there are two equations exists to measure the second hypothesis because of two dependent variables. The first equation, examine the output of IPV including emotional abuse is following:

$$\Lambda^{-1}[\text{P(Physical and emotional violence} = 1)]$$
$$= \beta_0 + \beta_1 \text{AFDC100} + \beta_2 \text{Poverty} + \beta_3 \text{AFDC100} * \text{Poverty}$$
$$+ \beta_4 \text{ Control Variables}$$

P (Physical and emotional violence $=1$) $=$

$$\frac{\exp(\beta_0+\beta_1\text{AFDC100}+\beta_2\text{Poverty}+\beta_3\text{AFDC100}*\text{Poverty}+\beta_4\text{ Control Variables})}{1+\exp(\beta_0+\beta_1\text{AFDC100}+\beta_2\text{Poverty}+\beta_3\text{AFDC100}*\text{Poverty}+\beta_4\text{ Control Variables})}$$

The second equation, examine the output of IPV excluding emotional abuse is following:

$$\Lambda^{-1}[\text{P(Purely physical violence} = 1)]$$
$$= \beta_0 + \beta_1\text{AFDC100} + \beta_2\text{Poverty} + \beta_3\text{AFDC100} * \text{Poverty}$$
$$+ \beta_4\text{ Control Variables}$$

P (Purely physical violence$=1$) $=$

$$\frac{\exp(\beta_0+\beta_1\text{AFDC100}+\beta_2\text{Poverty}+\beta_3\text{AFDC100}*\text{Poverty}+\beta_4\text{ Control Variables})}{1+\exp(\beta_0+\beta_1\text{AFDC100}+\beta_2\text{Poverty}+\beta_3\text{AFDC100}*\text{Poverty}+\beta_4\text{ Control Variables})}$$

Table 6 shows the results from the logistic regression of relationship between government benefits and IPV. The two columns show how government aid moderates living in poverty on physical and emotional violence or purely physical violence, controlling for race, education for both women and partner, and alcohol consumption for both women and partner. In order to allow the effects of AFDC benefits to differ for those who are living below and above the poverty line, an interaction variable between AFDC benefit level and poverty were included.

When physical and emotional violence is measured, government aid ($\beta= -.004$) shows negative, but not significantly influence on the prevalence of IPV at $p<0.1$. However, poverty ($\beta= 1.14$) significantly increased the likelihood of IPV at $p<0.01$. The

interaction between poverty and government aid (β= -.55) also shows negative, but not

significantly influence on the prevalence of IPV. When purely physical violence is

measured, the government aid (β= -.05) also shows negative, but not significantly

influences on the prevalence of IPV. Figure 2 is a graph shows how poverty affects the

relationship between government aid and prevalence of IPV.

In figure2, the x-axis represents AFDC benefit level and y-axis is the likelihood of

IPV. Even if the result shows that government benefit is not significantly related to IPV,

the graph tells us that government aid, at least, moderates the likelihood of IPV. As I

expected earlier, this graph shows that government aid does not affect women who are

not living in poverty. However, it shows that the likelihood of IPV decreases for those

who live in states with higher government benefit level among women living in poverty

Table 6. Government Aid Moderates the Effect of Living in Poverty on IPV

Variable Name	Physical and Emotional Violence (N=7999)		Purely Physical Violence (N=7999)	
	β(SE)	Odds Ratio	β(SE)	Odds Ratio
AFDC100	-.004 (.03)	1.00	-.05 (.22)	.95
Poverty	1.14*** (.23)	3.14	-1.04 (2.10)	.24
Poverty_AFDC100	-.55 (.27)	.94	.26(.50)	1.30
Control Variables				
Unemployment	.04*** (.01)	1.04	(omitted)	(omitted)
Low Income Partner	.21*** (.08)	1.24	.56 (.53)	1.75

Couple's History of Drug	1.42*** (1.89)	4.17	1.62** (.65)	5.05
Income Comparison	.28*** (.07)	1.32	-.38 (.50)	.68
Age	.08 (.06)	.08	1.53*** (.57)	4.60
Minor Race	-.07 (.14)	0.93	-1.30** (.59)	.27
Low Education (women)	.08 (.21)	1.08	(omitted)	(omitted)
Low Education (partner)	.21 (.16)	1.24	.29 (1.08)	1.34
Alcohol Consumption (women)	-.11*** (.17)	.89	.48 (1.16)	1.62
Alcohol Consumption (partner)	.46*** (.10)	1.59	.008(.84)	1.00

Note: In purely physical violence, unemployment was dropped in which there is no variation on purely physical violence, low education for women was dropped in which there is no variation on purely physical violence.
*p<0.1 **p<0.05 ***p<0.01

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Figure2. The Relationship between Government Aid and Physical and emotional violence
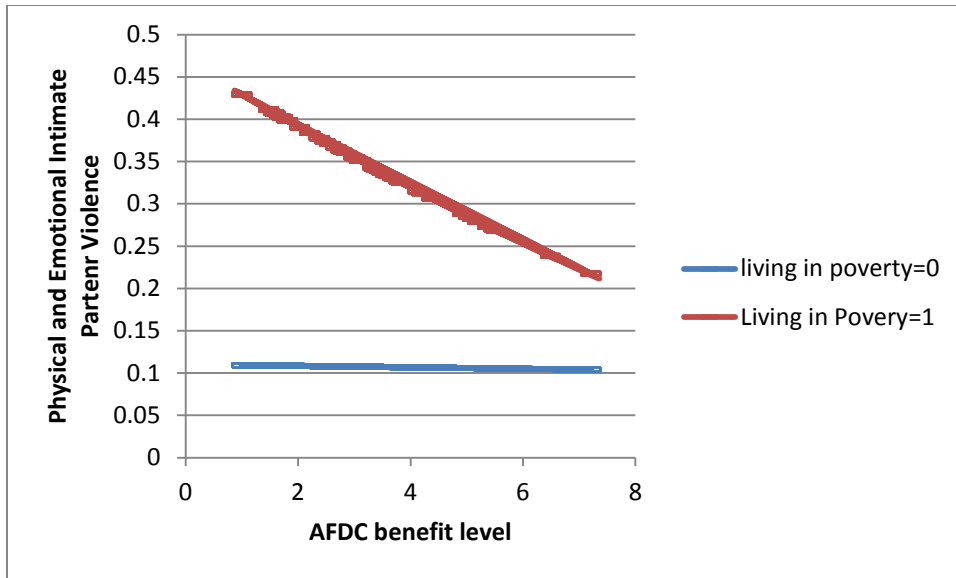
Chapter 5: Discussion and Limitation

This study estimated the relationship between the amounts of government aid provided and IPV, while controlling for other relevant factors. Logistic regression was applied to likelihood of IPV and tested two hypotheses. My first hypothesis was supported by identifying that living in poverty positively and significantly influences on IPV. Finally, this study found out that living in poverty is 1.39 times more likely be victims of IPV such as emotional abuse, threaten, physical abuse, and rape. However,

when IPV is measured without emotional abuse, living in poverty was no longer significantly influences on IPV and even shows negative relationship. It indicates that living in poverty is not enough to significantly predict IPV when there is a severe IPV occurs. The notable result from this study is that couple's history of drug which represents measurement of assortative mating shows bigger magnitude when IPV becomes more severe. Therefore, if living in poverty was not significantly related to IPV, the theory of assortative mating could be an alternative explanation of this study.

General strain theory was identified by measuring the relationship between unemployment status of partner/and partner's income and likelihood of IPV. In fact, likelihood of IPV was 1.04 times higher for women who have unemployed partner than women who have partner employed part-time or full-time. Moreover, respondents who have partner receiving low income are 1.24 times more likely to be victims of IPV than women who have partner receiving median or high income. As mentioned earlier, these factors cause strain, increasing the likelihood of experiencing negative emotions. Thus, these results support the argument of general strain theory that the partner who has low income or unemployed is more likely to commit IPV than a partner who is employed or receives higher income to alleviating these strains.

As mentioned earlier, much of the feminist literature claims that women are more likely be a victim of IPV when they earn more money than their partner. The feminist literature views that intimate violence might be used to compensate for the symbolic loss of male authority if women earn a significant portion of household income (Atkinso et al., 2005). Conversely, economists suggest that IPV will decrease if women's economic

status equals or exceeds that of their partner which is consistent with my hypothesis. By identifying the income comparison between women and their partner, this study found out that women's income which is higher than their partner is not significantly related to prevalence of IPV.

When analyzing AFDC benefits level which represents government benefit, it becomes insignificant. Hence, my second hypothesis that likelihood of IPV will be lower for those who live in states with higher government benefits was not supported. As seen in figure 2, the direction of variable, at least tells us that government aid somewhat moderates the likelihood of IPV for women who live in states with higher government benefits than women who live in states with lower benefits. However, the magnitude was small. The AFDC benefits level may not be enough to measure the effect on the IPV. However, it could be a because of the issue with selection bias of samples

Limitation

The large sample size should provide sufficient statistical power to detect any relationship between government aid and intimate partner violence. However, because the survey was administrated by telephones, the sample only includes the population who has telephones, reducing the generalization to only the experiences of women living with telephones. This may essentially be a problem since extremely poor women are most

likely to not have telephones. Thus, failure to reach populations without phones could

results to demographic selection bias.

As mentioned earlier, there is also limitation to measure one of types of strain.

Strain as failure to achieve positively valued goals and strain as actual or anticipated

removal of positively valued stimuli cannot be measured in the study. Moreover, recency,

duration, and clustering which are measurement factors of strain cannot be measured.

Implication and conclusion

In this study, the relationship between living in poverty and likelihood of IPV was

supported. This implies that women who living in poverty have to be focused in order to

prevent the prevalence of IPV. Even though the government aid was not significantly

related to IPV, solving the problem of poverty might be a government's role by

establishing proper policy.

As mentioned earlier, feminist literature explains that IPV will occurs as a means

to exert dominance and control when lower-class men feel their masculinity is challenged

because of incompatibilities of income (Campbell, 1993). However, this study does not

support the feminist literature, meaning that income comparison between men and

women do not increase IPV. Thus, feminist literature needs more developed research

method to measure the relationship between economic comparison and IPV. If the

research is developed, and the results of study tells that government aid decrease IPV,

government, government should offer various aids which increase women's economic resources empowers them to bargain for better situation for themselves or to leave abusive relationship. This government implication makes women to get rid of economic dependency on their partner, eventually leading to lower IPV rates. The government aid indicates not only give them money, but also offer more jobs to them. Offering more jobs to women might be better than just give them money, because women can increase chance to experience with society, eventually makes them more empowered with society. For example, in table5, income comparison between men and women positively related to IPV. Thus, creating job will not only offer experience with society which can learn the way to cooperate with their partner, but also gives women more money, leading decreased income comparison.

For the future research, government benefits level is worth studying, but should be re-evaluated with better data. If the future research uses the sample who are actually receives government aid, the results will be more accurate. Moreover, because this study analyzed only women who have a telephone, there might not have been enough variation to pick up a finding. Therefore, in order to develop the study, future research should use other methods which might pick up an effect. With these accurate data, the future study will provide information on how officials can manage and monitor IPV and its victims on a daily basis by allowing them to better target resources. The issue of IPV not only severely harms victims at the time of the violation. It might also affect their whole life through prolonged trauma. Thus, future study will help officials stem the problem of IPV at the root through a preventative rather than reactionary policy of instituting reforms when the damage has already been done.

Appendix A

Census Bureau Poverty Thresholds, 1993-2010

Family Size	1993	1994	1995	1996	1997	1998	1999	2000	2001
1	$7,363	$7,547	$7,763	$7,995	$8,183	$8,316	$8,501	$8,794	$9,039
2	$9,414	$9,661	$9,933	$10,233	$10,473	$10,634	$10,869	$11,239	$11,569
3	$11,522	$11,821	$12,158	$12,516	$12,802	$13,003	$13,290	$13,738	$14,128
4	$14,763	$15,141	$15,569	$16,036	$16,400	$16,660	$17,029	$17,603	$18,104
5	$17,449	$17,900	$18,408	$18,952	$19,380	$19,680	$20,127	$20,819	$21,405
6	$19,718	$20,235	$20,804	$21,389	$21,886	$22,228	$22,727	$23,528	$24,195
7	422,383	$22,923	$23,552	$24,268	$24,802	$25,257	$25,912	$26,754	$27,517
8	$24,838	$25,427	$26,237	$27,091	$27,593	$28,166	$28,967	$29,701	$30,627

Family Size	2002	2003	2004	2005	2006	2007	2008	2009	2010
1	49,183	$9,393	$9,645	$9,973	$10,294	$10,590	$10,997	$11,074	$11,351
2	$11,756	$12,015	$12,334	$12,755	$13,167	$13,540	$14,060	$14,158	$14,512
3	$14,348	$14,680	$15,067	$15,577	$16,079	$16,530	$17,165	$17,285	$17,717
4	$18,392	$18,810	$19,307	$19,971	$20,614	$21,203	$22,017	$22,171	$22,725
5	$21,744	$22,245	$22,831	$23,613	$24,382	$25,080	$26,043	$26,225	$26,881
6	$24,576	$25,122	$25,788	$26,683	$27,560	$28,323	$29,410	$29,616	$30,356
7	$28,001	$28,544	$29,236	$30,249	$31,205	$32,233	$33,471	$33,705	$34,548
8	$30,907	$31,589	$32,641	$33,610	$34,774	$35,816	$37,191	$37,451	$38,388

Appendix B

Gross Income Limit, Need Standard, and Maximum Monthly Potential, AFDC, One-Parent Family of Three Persons, January 1996.

State	Gross income limit (185 % of "need" standard)	100 % of "need" (need standard)	Payment standard	Maximum AFDC grant	AFDC benefits as a percent of 1996 poverty guidelines
Alabama	$1,245	$673	$164	$164	15
Alaska	1,902	1,028	1,028	923	68
Arizona	1,783	964	347	347	32
Arkansas	1,304	705	204	204	19
California	1,351	730	730	607	56
Colorado	779	421	421	421	39
Connecticut	1,613	872	872	636	59
Delaware	625	338	338	338	31
District of Columbia	1,317	712	420	420	39
Florida	1,943	1,050	303	303	
Georgia	784	424	424	280	26
Guam	611	330	330	330	31

Gross Income Limit, Need Standard, and Maximum Monthly Potential, AFDC, One-Parent Family of Three Person, January 1996. (cont'd)

State	Gross income limit (185 % of "need" standard)	100 % of "need" (need standard)	Payment standard	Maximum AFDC grant	AFDC benefits as a percent of 1996 poverty guidelines
Hawaii	2,109	1,140	712	712	57
Idaho	1,833	991	377	377	29
Illinois	1,782	963	377	377	35
Indiana	592	320	288	288	27
Iowa	1,571	849	426	426	39
Kansas	794	429	429	429	40
Kentucky	973	526	526	262	24
Louisiana	1,217	658	190	190	18
Maine	1,023	553	553	418	39
Maryland	956	517	373	373	34
Massachusetts	1,045	565	565	565	52
Michigan: (Washtenaw Co.)	1,086	587	489	489	45

Gross Income Limit, Need Standard, and Maximum Monthly Potential, AFDC, One-Parent Family of Three Person, January 1996. (cont'd)

State	Gross income limit (185 % of "need" standard)	100 % of "need" (need standard)	Payment standard	Maximum AFDC grant	AFDC benefits as a percent of 1996 poverty guidelines
(Wane Co.)	1,019	551	459	459	42
Minnesota	984	532	532	532	49
Mississippi	681	368	368	120	11
Missouri	1,565	846	292	292	27
Montana	1,001	541	541	425	932
Nebraska	673	364	364	364	34
New Hampshire	3,763	2,034	550	550	51
New Jersey	1,822	985	443	424	39
New Mexico	720	389	389	389	36
New York:					
(New York city)	1,067	577	577	577	53
(Suffolk Co.)	1,301	703	703	703	65
North Carolina	1,006	544	577	577	25

Gross Income Limit, Need Standard, and Maximum Monthly Potential, AFDC, One-Parent Family of Three Persons, January 1996. (cont'd)

State	Gross income limit (185 % of "need" standard)	100 % of "need" (need standard)	Payment standard	Maximum AFDC grant	AFDC benefits as a percent of 1996 poverty guidelines
North Dakota	797	431	431	431	40
Ohio	1,709	924	341	341	32
Oklahoma	1,193	645	307	307	28
Oregon	851	460	460	460	43
Pennsylvania	1,136	614	421	421	39
Puerto Rico	666	360	180	180	17
Rhode Island	1,025	554	554	554	51
South Carolina	969	524	200	200	18
South Dakota	938	507	200	200	40
Tennessee	1,079	583	583	185	17
Texas	1,389	751	188	188	17
Utah	1,051	568	568	426	39
Vermont	2,124	1,148	650	650	60

Gross Income Limit, Need Standard, and Maximum Monthly Potential, AFDC, One-Parent Family of Three Person, January 1996[3] (cont'd)

State	Gross income limit (185 % of "need" standard)	100 % of "need" (need standard)	Payment standard	Maximum AFDC grant[4]	AFDC benefits as a percent of 1996 poverty guidelines[5]
Virgin Island	727	300	354	354	22
Virginia	555	393	240	240	33
Washington	2,316	1,252	546	546	50
West Virginia	1,833	991	253	253	23
Wisconsin	1,197	647	517	517	48
Wyoming	1,247	674	590	360	33
Median AFDC state	720	389		389	36

[3] In most States these benefit amount apply also to two-parent families (where the second parent is incapacitated or unemployed). Some, however, increase benefits for such families

[4] In state with area differentials, figure shown is for area with highest benefit

[5] This column is based on the 1996 poverty guideline for a family of three persons in the 48 contiguous States, $12,980, converted to a monthly rate of $1,082. For Alaska, the guideline is $16,220; for Hawaii, $14,930.

Source: Table prepared by Congressional Research Service from information provided by a telephone survey of the states.

Appendix C

Descriptive Statistics of the Variables.

Variable Name	N	Mean	Standard Deviation	Minimum	Maximum
Dependent Variable					
Physical and Emotional Violence	7999	.2093	.04068	0	1
Purely Physical Violence	7999	.0050	.0705	0	1
Independent Variables					
Government benefits					
AFDC100	8000	3.4654	1.3534	1	7.21
Living in poverty					
Poverty	8000	.117	.3214	0	1
Poverty_afdc100	8000	.3973	1.19	0	7.21
Measurement of GST					
Unemployment	7999	.2612	1.6751	0	1
Partner's Low Income	7999	.2151	.4109	0	1
Low Self-Control					
History of Drug (women)	7999	.0145	.1195	0	1
History of Drug (partner)	7999	.02	.1400	0	1
Income Comparison					
High Income Women	7999	.0829	.2757	0	1
Control Variables					
Minor Race	7999	.944	.2299	0	1
Alcohol Consumption for Women	7999	.0335	.1800	0	1

Appendix C

Descriptive Statistics of the Variables (cont.)

Variable Name	N	Mean	Standard Deviation	Minimum	Maximum
Control Variables					
Alcohol Consumption for Partner	7999	.0675	.2509	0	1
Low Education for Women	7999	.1070	.3091	0	1
Low Education for Partner	7999	.1050	.3065	0	1

Appendix D

D-1: The Specific Survey Question for Emotional Abuse Victimization happened within

the past year

- Does your partner call you names or put you down in front of others?

- Does your partner shout or swear at you?

- Does your partner prevent you from knowing about, or having access to the family income even when you ask?

- Does your partner prevent you from working outside the home?

- Does your partner insist on changing residences even when you don't need or want to?

- Does this behavior frighten you?

D-2: The specific survey question for Physical abuse victimization happened within the

past year

- Does your partner throw something at you that could hurt you?

- Does your partner push, grab or shove you?

- Does your partner pull your hair?

- Does your partner slap or hit you?

- Does your partner kick or bite you?

- Does your partner choke or attempt to drown you?

- Does your partner hit you with some object?

- Does your partner beat you up?

- Does your partner threaten you with a gun?

- Does your partner threaten you with a knife or other weapon besides a gun?

- Does your partner use a gun on you?

- Does your partner use a knife or other weapon on you besides a gun?

Appendix D

D-3: The Specific Survey Question for Rape Victimization happened within the past year

- Does your partner made you have sex with him by using force or threatening to harm you? Just so there is no mistake, by sex we mean putting a penis in your vagina

- Does your partner made you have oral sex by using force or threat of harm? Just so there is no mistake, by oral sex we mean that a man or a boy puts his penis in your mouth, or penetrates your vagina or anus with their mouth or tongue

- Does your partner made you have anal sex with him by using force or threat of harm? Just so there is no mistake, by anal sex we mean that a man or a boy puts his penis in your anus

- Does your partner put fingers or objects in your vagina or anus against your will by using force or threats?

Appendix E

Average Monthly Number of AFDC Families and Recipients, Total Benefit Payments and Administrative Costs, and Average Payment per Family and Recipient, Fiscal Year 1995

State	Total Assistance Payment (mill.)	Average Monthly Recipients (thous.)	Average Monthly Payment per Family	Average Monthly Payment per Recipient	Total Admin. Cost	Admin. Cost per AFDC Family
Alabama	$82.6	118	$148	$58	$22.4	$482
Alaska	107.3	37	721	241	9.9	798
Arizona	251.2	190	299	110	43.9	626
Arkansas	48.8	63	168	64	12.7	525
California	6,145.4	2,678	555	191	587.5	639
Colorado	142.8	109	305	109	24.9	638
Connecticut	383.1	170	521	187	32.7	533
Delaware	36.4	25	268	119	7.5	664
D.C	124.1	73	379	141	24.1	883
Florida	763.8	618	277	103	153.0	667
Georgia	414.4	382	248	90	58.1	417
Guam	13.7	8	544	141	2.0	952
Hawaii	172.8	66	649	218	11.2	505
Idaho	31.6	24	286	108	8.8	957
Illinois	882.1	696	311	106	119.4	506
Indiana	196.6	189	248	87	36.5	553

Average Monthly Number of AFDC Families and Recipients, Total Benefit Payments and Administrative Coasts, and Average Payment per Family and Recipient, Fiscal Year 1995 (cont.)

State	Total Assistance Payment (mill.)	Average Monthly Recipients (thous.)	Average Monthly Payment per Family	Average Monthly Payment per Recipient	Total Admin. Cost	Admin. Cost per AFDC Family
Iowa	149.4	100	342	124	27.9	766
Kensas	113.6	80	336	118	11.1	394
Kentucky	182.6	188	203	81	32.5	433
Louisiana	151.1	251	157	50	19.2	240
Maine	101.1	60	380	140	6.9	311
Maryland	307.9	223	345	115	121.7	1,638
Massachusetts	646.1	271	537	199	88.5	882
Michigan	999.8	597	414	140	166.2	826
Minnesota	356.0	167	520	177	63.8	1,117
Mississippi	75.1	143	120	44	14.6	280
Missouri	275.6	254	257	90	30.3	340
Montana	48.3	33	350	121	11.9	1,035
Nebraska	56.7	41	309	114	25.0	1,634
Nevada	51.6	41	267	106	15.3	950
New Hampshire	56.9	28	420	167	10.9	965
New Jersey	509.8	316	356	134	170.0	1,424

Average Monthly Number of AFDC Families and Recipients, Total Benefit Payments and Administrative Costs, and Average Payment per Family and Recipient, Fiscal Year 1995 (cont.)

State	Total Assistance Payment (mill.)	Average Monthly Recipients (thous.)	Average Monthly Payment per		Total Admin. Cost (mill.)	Admin. Cost per AFDC Family
			Family	Recipient		
New Mexico	154.1	104	372	123	25.3	733
New York	3,042.3	1,255	554	202	587.2	1,284
North Carolina	334.4	313	221	89	75.8	602
North Dakota	22.6	14	362	131	8.3	1,596
Ohio	849.1	612	310	116	92.0	403
Oklahoma	152.0	123	280	103	36.3	803
Oregon	180.8	104	383	145	64.2	1,634
Pennsylvania	904.7	596	368	126	125.4	611
Puerto Rico	68.3	168	103	34	13.6	246
Rhode Island	133.6	61	504	182	12.2	552
South Carolina	107.1	128	181	70	20.0	407
South Dakota	22.7	17	300	111	4.4	698
Tennessee	198.7	255	172	65	38.0	394
Texas	519.8	742	159	58	202.3	742
Utah	69.7	46	340	126	17.6	1,029
Vermont	61.9	27	511	190	6.1	604

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