INTIMATE PARTNER VIOLENCE TYPOLOGIES: A CROSS-NATIONAL COMPARISON

by

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Abstract

Family violence theory and *feminist theory* represent sociological explanations of violence against women. The former proposes that violence in intimate partner relationships is gender symmetric with minor violence routinely precipitating. Alternatively feminist theory suggests that women are subject to patriarchal control and severe violence by male partners. Johnson (1995) suggests that due to methodological differences, both explanatory models are possible, respectively supporting two intimate partner violence typologies: situational couple violence and intimate terrorism.

Using Yllö's (1983) model, the current study proposes that regional status of women may be used to explain Johnson's (1995) intimate partner violence typologies. Yllö (1983) reports that as regions become more egalitarian a curvilinear pattern for male perpetration becomes evident, while female perpetration is best described as a direct relationship. Building on these results this study proposes that regions ranked as patriarchal will have higher rates of intimate terrorism, a gender asymmetric typology. Contrarily, egalitarian regions are hypothesized to have higher rates of the gender symmetric distinction situational couple violence.

Combining International Dating Violence Study data with United Nations, Statistics Canada and Institute for Women's Policy Research data, study hypotheses were tested using a cross-national comparison. The Conflict Tactics Scales and Personal and Relationships Profile offered measures of interpersonal violence and control. Status of women measures developed in the current study focused on women's political, educational and economic representation compared to men as well as reproductive control. Twenty-nine regions were analyzed, representing over 9,000 individual responses. Data analysis involved OLS regression with per capita gross domestic product included as a control.

Regional status of women successfully explains Johnson's (1995) typologies. The current study provides support for feminist theory, demonstrating that regions characterized as patriarchal are associated with men's use of control tactics and severe violence against women. Use of family violence theory to explain violence in egalitarian regions is also supported. Additionally, the current study sheds light upon the backlash hypothesis suggesting that future initiatives distinguish between patriarchal, transitioning and transitioned regions. It is suggested that future projects build upon the current results by studying the impact feminist and anti-feminist movements have upon men's and women's use of violence in intimate relationships.

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Researchers have debated the causes of intimate partner violence from a multitude of perspectives, from the micro to the macro, the psychological to the sociological. No matter the perspective used, one of the most heated debates regarding intimate partner violence surrounds its gender symmetric nature. A question often asked is do men and women possess similar motivations for using violence in relationships?

In the present study, two popular sociological explanations of intimate partner violence are investigated. The first, the family violence theory, explains that altercations between intimate partners may be attributed to factors unique to the organization of families. The interplay between these factors along with a source of situational conflict occasionally results in a type of intimate partner violence termed situational couple violence (Johnson, 1995). The violence against women framework on the other hand supports the notion that intimate partner violence exists due to men's desire to control women. Altercations in which the motivation may be linked to patriarchal control of women are termed intimate terrorism (Johnson, 1995).

Working with a comparative methodology, the current study examines the association between status of women and rates of situational couple violence and intimate terrorism. Comparing 29 regions, the current study tests assumptions of the violence against women paradigm, specifically, whether intimate terrorism manifests more in patriarchal regions.

Intimate Partner Violence Perspectives

As previously stated, sociologists have constructed a number of theories to aid in the explanation of intimate partner violence. According to Johnson (1995) the two main perspectives are the family violence and the violence against women[1] theories. In the

[1] In most literature reviews the *violence against women* perspective is termed the *feminist perspective* (Johnson, 1995; Kurz, 1989). In the current study, the titles have been altered as family violence researchers may also identify as feminists. By renaming the two ideological views, focus is directed upon the phenomenon and

following sections, a summary of each perspective's framework, including methodology preferences and study results will be discussed. For more detailed accounts of these two perspectives, the reader is referred to overviews provided by Breines and Gordon (1983), Johnson (1995), and Kurz (1989).

Family Violence Perspective

In the late 1970s, researchers at the New Hampshire Family Research Laboratory proposed family violence theory to explain violent interactions present in all family associations, including sibling relationships, parent-child relationships and spousal relationships (Straus, Gelles & Steinmetz, 1980). Unlike the violence against women framework, family violence theory does not focus solely on intimate partner violence. Instead, the theory views the causes of intimate partner violence to be similar to causes of other family relationship violence. Specifically, it is the unique characteristics of the family when compared to other social organizations that make families prone to violent interactions more than any other arrangement (Hotaling & Straus, 1980). These factors include, "time at risk... range of activities and interests... intensity of involvement... infringing activities... right to influence... age and sex discrepancies... ascribed roles... family privacy... involuntary membership... high levels of stress... [and] knowledge of social biographies" (Hotaling & Straus, pp.15-18).

Family violence theory also accounts for influence the surrounding culture has on dyadic behavior. It is understood that behaviors or styles of interaction (violent or otherwise) are socially learned and socially patterned (Hotaling & Straus, 1980). According to family violence theory, individuals first experience violence within the family in childhood. This,

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affected victims, away from a researcher's mindset. However, Johnson (1995) reminds the reader the importance of identifying a researcher's paradigm. Paradigms often implicate the use of certain methodological tools, potentially lending to different study outcomes.

combined with reinforcement from the surrounding culture, contributes to a mindset that violence is a necessary part of family interactions and a viable tool for settling disputes within the home. For example, North American culture widely accepts corporal punishment. From these violent interactions individuals learn that certain levels of violence are normal within the family and it is acceptable for loved ones to act violently towards one another (Straus, 1980; Straus et al., 1980). The belief that violent interactions between spouses is acceptable has been demonstrated empirically (Straus, 1980). Couples have reported that such behaviors are warranted if a partner is doing something wrong, if the event is serious enough or if a partner won't listen to reason (Straus, 1980).

Since violent interactions are felt to be pervasive in the family, family violence researchers often collect data using large, random surveys. Unlike the violence against women perspective, which is generally limited to studying cases once an altercation has been made public (i.e., refuge women, police reports), survey research emerged as a complementary source of information offering insight into altercations that remain within the private sphere of the domestic home (Johnson, 1998). Family violence research often uses standardized scales such as the Conflict Tactics Scales (CTS). Since violence is assumed to occur chronically, family violence researchers often limit investigations to the past year. This of course fits with the theory - since violent interactions are patterned and consistent, a timeframe of one year may be used to approximate the level of violence for any other year.

Study Results. Studies relying upon close-ended scales and randomized sampling often produce results supporting a gender symmetric depiction of intimate partner violence (Johnson, 1998). These results influence family violence researchers to ascribe gender-neutral titles to intimate partner violence, such as spousal abuse or family violence (Bograd, 1990). The majority of studies applying family violence theory to study intimate partner

violence have been published by researchers at the University of New Hampshire (Straus, 1977-78; Straus, 1980; Straus & Gelles, 1986; Straus et al., 1980).

Gender symmetry supports the idea that women are just as likely as men to perpetrate violent acts in an intimate relationship. For example, when 2,143 couples completed the Conflict Resolution Techniques (predecessor to the CTS), 4.6% of couples reported husbands perpetrating severe violence against wives, while 3.8% of couples reported similar behavior by wives against husbands (Straus, 1977-78). Combining minor and severe items, 12.1% of couples experienced violence directed against wives, while 11.6% of couples experienced violence directed against husbands (Straus, 1977-78; Straus et al., 1980). When 325 of these couples were interviewed in depth, violence perpetration maintained its gender symmetric pattern (Straus, 1980). Further, when a complementary study to the 1975 study was conducted a decade later, reports from 3,520 couples revealed that violence perpetration is indeed gender symmetric (Straus & Gelles, 1986).

Despite the overwhelming evidence for a gender-neutral interpretation of intimate partner violence, the researchers did acknowledge incongruent observations. For example, Straus et al. (1980) and Straus and Gelles (1986) comment that men when compared to women often perpetrate the more severe acts. For example, men are more likely to beat up their partner and use a firearm whereas women are more likely to throw objects, slap, kick, bite and hit (Straus & Gelles, 1986). Also, when there is a sole perpetrator in a violent altercation, husbands tend to repeat actions more often compared to women. Finally, family violence theorists acknowledge a gender difference with respect to the motives behind perpetration. When compared to men, women more often act violently on account of fear and self-defense (Straus et al., 1980).

Violence Against Women Perspective

The second camp of thought integral to this study is the violence against women perspective. Unlike the family violence theory, the violence against women perspective was born out of a political movement in the early 1970s, namely the second-wave feminist movement. Violence against women was akin to this movement. Spousal violence perpetrated by men sparked political reform, including the creation of women's shelters and refuges. Although many areas of the world experienced change during this time, the United States and England had more heavily documented movements. Thus, reference to ideologies will stem from resources from these two countries.

The violence against women perspective claims that due to the combined pressures of the Industrial Revolution and increasing influence of the Protestant faith, kinship or feudal family systems were abolished giving rise to the nuclear family (Dobash & Dobash, 1979). The nuclear family is characterized by women remaining in the home (private sphere) while men work outside the home (public sphere), privileged to come and go between the two domains. Eventually men as a class possessed societal power and anything related to a woman's role or situation was considered inferior. Thus, women's work (family work) was considered inferior to men's contributions, and women as a class were considered subordinate to men (Bograd, 1990; Dobash & Dobash, 1979).

Since the second-wave feminist movement, women have increasingly moved out of the home and into the public domain for employment and education opportunities. Although female representation in occupational, educational and political spheres has improved, power imbalances between the two sexes still exist – women are still dependent upon men for resources and status (Dobash & Dobash, 1979; Schechter, 1982; Stanko, 1985).

The violence against women perspective claims that because of society's creation and maintenance of a patriarchal structure, women are considered inferior, the property of men, to be controlled, dominated and managed (Dobash & Dobash, 1979; Martin, 1976; Schechter, 1982). Thus, altercations in the home are due to a husband's will to control his female partner. Dobash and Dobash offer the following:

> The seeds of wife beating lie in the subordination of females and in their subjection to male authority and control. This relationship between women and men has been institutionalized in the structure of the patriarchal family and is supported by the economic and political institutions and by a belief system, including a religious one, that makes such relationships seem natural, morally just, and sacred. (1979, pp. 33-34)

The violence against women perspective concentrates on accurately representing women subjected to violent relationships. Methodologically, violence against women researchers rely upon contextual methods, such as interview formats, and view most quantitative measures as incomplete. Presented with a choice between qualitative and quantitative methodologies, most violence against women researchers will rely upon the former as the latter is thought to decontextualize events (Yllö, 1990).

Since the violence against women perspective is closely tied with the second-wave feminist movement, much of the support for this perspective is borne out of the reports from refuge women. These narratives, along with official hospital, police and social work reports supply the data used to investigate intimate partner violence. Although the information generated from these reports is rich in detail, it is also incomplete in scope as only women who seek public assistance or disputes that have been called to the attention of authorities are available for analysis (Johnson, 1995).

Study Results. Studies that emphasize context when studying intimate partner violence often lend to results supporting a gender asymmetric depiction (Johnson, 1998). Results from these studies often portray violent encounters as perpetrated by the man, with

the woman acting in one of three ways: solely as a victim and not acting violently at all, acting violently out of retaliation or self-protection, acting violently to protect children. Studies that support these outcomes often use a blend of qualitative and quantitative methodologies and go beyond merely counting the number of violent attacks that occur in a relationship (Dobash & Dobash, 1979; Gaquin, 1977-78; Saunders, 1990). In this section a summary of research findings supporting the violence against women perspective are presented.

Perhaps the most acclaimed study reflecting the gender asymmetric nature of intimate partner violence is offered by Dobash and Dobash (1979). Interviewing 109 women from predominately working-class, Scottish backgrounds, results demonstrate the controlling and violent nature of male partners. The women's narratives confirm male use of control tactics found in other qualitative studies (Sev'er, 2002) such as financial control, abusive language, and limiting exposure to friends (Dobash & Dobash, 1979). This last tactic, isolation, was also supported quantitatively. Women become increasingly isolated after marriage, neither engaging with friends nor going out with spouses as much. Alternatively, husbands either socialized as much or more after marriage (Dobash & Dobash, 1979).

Further analysis of these relationships remarks on violence endured by the women. The most typical form of physical violence inflicted upon the women was punching the face or body. This act was also identified as the one that caused the most amount of injury and was usually the first act of violence experienced by the women. Additionally Dobash and Dobash (1979) analyzed approximately 1,040 domestic offence records investigated in 1974 by the Edinburgh and Glasgow police departments. Gender asymmetry is confirmed as 72.9% of these cases were classified as wife assaults compared to 1.2% as husband assaults.

Variations of the CTS have also been used to support the violence against women perspective. Instead of relying upon frequency scores of violent acts, Saunders (1990) and Langhinrichsen-Rohling, Neidig and Thorn (1995) added other contextual components to their studies. For example, Saunders administered the CTS to get a sense of how much violence battered women perpetrated in their relationships. Then Saunders interviewed the 52 women in the study to determine the women's motivations for using violence. Although results showed that 75% of the battered women in his sample had used minor violence and 73.1% had used severe violence in their relationships, by interviewing the women Saunders was able to add a contextual layer. The majority of women explained that they had used violence out of self-defense or fighting back, and only one woman admitted to initiating severe violence.

Langhinrichsen-Rohling et al. (1995) also used the CTS in semi-structured interviews, demonstrating that although women and men may appear symmetric in the use of violence (83% of the sample involved in mutual combat, 12% violent husband only, 3% violent wife only), outcomes of these actions and feelings associated with violence are not. That is, women are more likely to be injured and report being afraid during an altercation when compared to men (Langhinrichsen-Rohling et al.). These differences in men's and women's emotional responses to violence concur with Hamberger and Guse's (2002) findings which purport that men are more likely to laugh and be amused by their partners' violent attempts, whereas women report feeling angry, afraid and insulted. These differences in emotional reactions support the notion that men are afforded dominance in these situations, either due to greater strength and resources or patriarchal traditions of the culture (Hamberger & Guse, 2002).

Competing with the nationally representative studies that support gender symmetry, the National Violence Against Women study (NVAW) conducted in the United States in 2000 provides a gender asymmetric view of intimate partner violence. Although the NVAW uses objective measures including the CTS, instead of asking the 16,000 participants (8,000 men and 8,000 women) about perpetration of acts, the study questions focus on lifetime victimization frequencies. Interestingly, ratios of intimate partner victimization for women when compared to men range from 1:1 (threatened with a knife) to 9:1 (beat up by partner) (Tjaden & Thoennes, 2000). Overall, women are three times more likely to be victimized by a partner than men (Tjaden & Thoennes, 2000).

Intimate Partner Violence Typologies

For years incommensurability existed between family violence and violence against women researchers. In 1995, sociologist Michael Johnson proposed that due to different theoretical stances influencing respective research methodologies, the two seemingly opposed research groups tapped into different populations - thus two different intimate violence phenomena. Since family violence researchers approach spousal conflict as another form of family conflict, large-scale surveys relying on random sampling are viewed as appropriate tools in answering questions about intimate violence. Conversely, violence against women researchers suggest that women are victimized due to the patriarchal oppression of women in society. Therefore, answers to research questions are based upon hospital reports, social work and police reports, as well as contextual narratives from women seeking refuge in shelters. Johnson (1995) claims that due to these fundamental differences in

sampling, the two groups tap into different types of domestic violence: situational couple violence and intimate terrorism[2].

Situational Couple Violence

According to Johnson (1995), when family violence researchers use large, anonymous, national surveys to gather data, the intimate partner violence typology that is tapped into is situational couple violence. Described as gender symmetric, wives and husbands are as likely to perpetrate violence as they are to be victims (Johnson, 1995). Situational couple violence feuds seem to occur approximately every two months with the violence rarely escalating into a severe form (Johnson, 1995). Women are as likely to initiate the violence as men, and will reciprocate if perpetrated against (Johnson, 1995). Aligning with the family violence perspective, situational couple violence is felt to arise due to situational conflict. Unlike the violence against women perspective, spousal violence is not a result of one partner trying to control the other, rather a result of the structure of families, impact of living in a violent culture, as well as the effects of extraneous life stresses (Hotaling & Straus, 1980).

Intimate Terrorism

The intimate terrorism typology supports findings reported by violence against women researchers who rely upon shelter data and contextual approaches to reporting. Intimate terrorism is gender asymmetrical whereby men perpetrate the violence and women are victimized (Johnson, 1995). Males are estimated to initiate attacks more than once a week with female partners rarely fighting back. Also, violent encounters tend to escalate in frequency and severity as time progresses (Johnson, 1995). Upon finding such drastic

[2] In his debut article regarding these typologies, Johnson (1995) coined the terms *common-couple violence* and *patriarchal terrorism*. However, after criticism regarding vague and gendered language, he altered the typology titles to: *situational couple violence* and *intimate terrorism*.

differences in the data, Johnson agreed with violence against women theorists that intimate terrorism is due to men's adoption of patriarchal attitudes.

> [Intimate] terrorism, a product of patriarchal traditions of men's right to control "their" women, is a form of terroristic control of wives by their husbands that involves the systematic use of not only violence, but economic subordination, threats, isolation, and other control tactics. (1995, p.284)

The key difference between situational couple violence and intimate terrorism is motivation. Men categorized as intimate terrorists believe that women are meant to be controlled. These men will use control tactics as well as a range of violence tactics to achieve the desired effect, control over their partner. Johnson emphasizes that partnerships in which violence is absent yet control tactics by the man are present should also be classified as intimate terrorism (Leone, Johnson, Cohan & Lloyd, 2004; Johnson, 1995). It is this distinction, absence or presence of control tactics utilized in the relationship, that allows for a clear delineation between situational couple violence or intimate terrorism.

Testing the Intimate Partner Violence Typologies: A Literature Review

Upon publication of Johnson's (1995) distinctions, the intimate violence typologies have been tested by international teams (Graham-Kevan & Archer, 2003; Grandin & Lupri, 1997; Piispa, 2002; Stewart, 2000), American initiatives (Milardo, 1998; Olson, 2002; Swan & Snow, 2002), as well as projects headed by Johnson himself (Johnson, 2004; Leone et al., 2004). In the next section, a review of studies published by Johnson after 1995 as well as findings from studies conducted by other research teams will be discussed. Research findings are categorized from those offering little support to full support of Johnson's distinctions.

Additional Studies Conducted by Johnson

Johnson continued his study of intimate violence typologies using extant data and found conclusive support for his original distinctions (Johnson, 2004; Leone et al., 2004).

Additionally, two typologies were added to the model, violent resistance and mutual violent control. These two typologies, although beyond the scope of this paper, are important to note as Johnson (2004) claims they also play an integral part in understanding the myriad of intimate partner violence forms. Violent resistance, a gender asymmetric typology, is characterized by a female victim who acts violently against a male partner who has historically been violent and controlling (Johnson, 2004). On the other hand, mutual violent control is gender symmetric, characterized by both the man and woman acting violently and controlling towards the other (Johnson, 2004).

In each of Johnson's publications (1995; 2004; Leone et al., 2004), the research community is reminded of the importance of measuring control tactics. It is felt that measurement of control provides the clearest distinction between intimate violence typologies:

> The importance of categorizing types of violence, rather than viewing partner violence as a continuum of severity or frequency of physical violence, rests on the assumption that intimate terrorism and situational couple violence involve qualitatively different patterns of control rather than high or low levels of physical violence. (Leone et al., 2004, p. 473)

Non-support

Initiatives conducted by Grandin and Lupri (1997) and Milardo (1998)[3] purposed to study situational couple violence. Both sets of researchers used survey methods, which as Johnson (1995) stated is the most efficient way to access this typology. In both studies, women were found to be more violent than men (Grandin & Lupri, 1997; Milardo, 1998), results that contradict Johnson's (1995) conclusions about the gender symmetrical nature of situational couple violence.

[3] It should be noted that Milardo (1998) surveyed participants regarding hypothetical situations, situations where interpersonal violence *may* occur, not actual accounts of previous interpersonal violence. It may be argued that hypothetical situations are not equivocal to actual happenings and may solely reflect societal gender biases with respect to violence (i.e., it is more socially acceptable for a girl to smack a boy, than the reverse).

In 2004, Johnson published a paper refining the study of intimate violence typologies. Johnson (2004) warns that although surveys are the best way to study situational couple violence, the methodology is not impervious to cases of intimate terrorism. Using a secondary dataset Johnson calculated the frequency estimates for each typology. Johnson (2004) reports that approximately 11% of survey cases are in fact intimate terrorism couples. Since Grandin and Lupri (1997) and Milardo (1998) did not ask respondents about the use of control tactics in their relationships, intimate terrorism couples were identified as situational couple violence, most likely the cause for outcome confusion. Perplexed by their results, Grandin and Lupri commented, "[i]n the absence of longitudinal and qualitative data that detail the dynamic interpersonal processes of escalating coercive cycles of intimate violence, the high rate of severe violence reported by Canadian women is difficult to explain" (1997, p. 438).

Partial Support

There have been two studies to date that offer partial support for Johnson's model. The first, a Finnish study, surveyed women self-identified as having experienced a violent relationship (Piispa, 2002). Included in the study were measures of male perpetrated control tactics. Interestingly, Piispa (2002) did not confirm whether situational couple violence was identified or supported in this study. Instead, results and discussion center around support for the intimate terrorism typology. This study offers partial support for Johnson's (1995) distinctions.

The second study offering partial support for Johnson's (1995) model focuses on patterns emerging from domestic violence protection orders (DVPO) in Queensland, Australia (Stewart, 2000). When DVPO's are divided into those requested by male partners versus female partners, as well as along divisions based upon number of protection orders

sought against an individual, emerging trends offer support for Johnson's (1995) model. It appears that women are recipients of either single protection orders or cross-applications (both partners request a DVPO at the same time). Male recipients, on the other hand, are involved in the above two categories as well as multiple applications by the same applicant and multiple applications by different applicants (Stewart, 2000). Support for situational couple violence arises from the gender symmetric nature of cross-applications, while evidence for intimate terrorism precipitates from the gender asymmetric (male recipients only) nature of multiple applications by different applicants and multiple applications by single applicants (Stewart, 2000). In the end, this study only offers partial support for Johnson's (1995) study as it employs indirect measures and is speculative in nature.

Full Support

Similar to the studies mentioned above, Olson (2002) utilized a survey design with a convenience sample, in pursuit of solely studying the situational couple violence typology. However, unlike Grandin and Lupri (1997) and Milardo (1998), Olson (2002) incorporated measures of control tactics. Confusing to Olson (2002) at the time of publication, a portion of the sample reported behaviors similar to the intimate terrorism typology. Unfortunately, Johnson had not yet published the information about the ability to measure intimate terrorism with survey research (Johnson, 2004). Thus, Olson (2002) concluded that Johnson's (1995) distinctions were not adequate. In retrospect, Olson's (2002) study may be considered as support for Johnson's typologies.

Very few studies have been well designed and executed, offering concrete support for Johnson's (1995) intimate violence distinctions. Studies that do demonstrate support include research published by Graham-Kevan and Archer (2003) and Swan and Snow (2002). In the former study, Graham-Kevan and Archer selected four sample groups: students, non-violent

prisoners, criminally violent prisoners (convicted and admitting to using violence against women) and women who had sought refuge from a violent husband. Using the CTS and a measure of control, the Controlling Behaviors Scale, the four distinct groups were compared. As predicted, non-violent prisoners and students demonstrated situational couple violence characteristics when violence arose in interpersonal relationships, and refuge women reported being victims of controlling and severely violent actions by male partners, fitting the intimate terrorism typology. The criminally violent prisoners did not match the description of an intimate terrorism perpetrator, however the research team felt that these men were not reporting honestly (perhaps because some were up for parole), as many of their reports suggested that their female partners who they were convicted of assaulting were more violent and controlling than they (Graham-Kevan & Archer, 2003).

The latter study conducted by Swan and Snow (2002) surveyed women identified as having used physical violence against their husbands. Comparing the women's reports of self-perpetrated and partner-perpetrated actions of control and violence, the research team was able to group the study participants into situational couple violence and intimate terrorism groups. For example, some of the women were engaged in mutual combative behavior with low levels of control (situational couple violence), whereas some women used violence out of fear and retaliation against their partner's violent and controlling behaviors (violent resistance in response to intimate terrorism; Swan & Snow, 2002). In the end, both studies incorporated measures sensitive to detecting relationship control tactics as well as contextually sensitive analysis of the data providing support for Johnson's (1995) intimate violence typologies.

Status of Women and Intimate Partner Violence

Integral to the violence against women perspective is the connection between the patriarchal structure of society and men's treatment of women in intimate relationships. Since women are deemed inferior as a social class, in turn they are also considered inferior to men in the home. Violence against women is considered a means to an end – nothing more than a way to achieve control (Schechter, 1982; Stanko, 1985).

The connection between women's societal status and men's use of violence in relationships has been well documented. For example, Gaquin (1977-78) examined the relationship between a woman's career type and experienced rates of intimate partner violence. Results from this study support the notion that women with low status professions experience more intimate partner violence in their relationships. More specifically, women working as clerks, in operatives or as service workers are most likely to be assaulted (range between 20.1% and 37.1%), as compared to women occupying positions as professionals (5.0%), managers (2.2%), or administrators (2.2%) (Gaquin, 1977-78).

Another study that illustrates this pattern is offered by Yodanis (2004). Employing cross-national data, countries with lower status of women scores demonstrate higher rates of sexual violence against women (Yodanis, 2004). Further, even in pre-industrial societies, when women are considered inferior to men, a higher frequency of wife beating is noted (Lester, 1980). From these studies, it is clear that as women's status increases, men's use of violence in intimate relationships decreases. However, what of women's use of violence towards men? Does the status of women also affect how women behave in intimate relationships?

Yllö (1983) investigated how state-level status of women impacted the amount of intimate partner violence heterosexual men and women experienced in the United States.

Results from this study indicate that in more patriarchal states (low status of women), more male-perpetrated violence against women is evidenced. Working along a status of women continuum, as states are classified less patriarchal and more egalitarian, rates of male-perpetrated violence fall. However, in the most egalitarian states, rates of male-perpetrated violence increase again. Overall Yllö's (1983) findings demonstrate a curvilinear relationship between status of women and amount of male-perpetrated partner violence.

Similar to male-perpetrated violence, female-perpetrated violence is also found to change depending on status of women. However, instead of a curvilinear pattern, female-perpetrated violence may be described as a positive linear relationship (Yllö, 1983). In low status of women states women engage in very few acts of intimate partner violence. As status of women increases, intimate partner violence perpetrated by women increases, with women perpetrating the most in states with higher status of women scores.

Combining the male-perpetrated and female-perpetrated violence patterns, an intriguing combination emerges. In more patriarchal states, gender asymmetry exists whereby men perpetrate the majority of violent acts (6.2% male perpetration versus 2.9% female perpetration), while in more egalitarian states, perpetration of intimate violence is found to be more gender symmetric (5.1% male perpetrated versus 5.9% female perpetrated) (Yllö, 1983)[4].

Status of Women: An Explanation for Intimate Partner Violence Typologies

Interestingly, Yllö's (1983) gender-based analysis of intimate partner violence perpetration provides a confirmation for why two distinct intimate partner violence

[4] Yllö (1983) limited her analysis of intimate violence to couples solely engaging in severe violent acts. According to Johnson (1995) use of severe violence tends to be associated with *intimate terrorism*. Thus, Yllö was in fact studying the impact of status of women on intimate terrorism use. Although the change from gender asymmetric to gender symmetric use of severe violence is incongruent with Johnson's *intimate terrorism* distinction, the current study proposes Yllö's model for the relationship between status of women and use of intimate partner violence. An inspection into the impact *transitioning* versus *transitioned* states may have on study results (a concern of Yllö's), is presented in the discussion section of the current study.

typologies exist. Previously stated, intimate partner violence perpetration is characterized as gender symmetric in cases of situational couple violence whereas, intimate terrorism is typically male-perpetrated, or gender asymmetric (Johnson, 1995). Yllö (1983) purports that male-perpetrated violence is more likely to exist in more patriarchal states, whereas both genders tend to perpetrate in more egalitarian states. The current study offers the following proposal, building upon Yllö's (1983) study results, and Johnson's delineation of intimate terrorism and situational couple violence characteristics.

The current study proposes that intimate terrorism is expected to occur to a greater extent in patriarchal regions, and situational couple violence is expected to manifest more in egalitarian regions. By demonstrating this trend, the current study may be considered valuable as very little of the violence against women perspective is supported empirically.

Research Model

The model in Figure 1 illustrates the study question, are rates of intimate terrorism and situational couple violence related to the status of women for a given region? The variables considered in the current study along with an illustration of the proposed relationships between them are captured in Figure 1. The variables include: regional status of women, severity of violent acts and the use of male control tactics in intimate relationships.

As stated in previous sections, distinguishing situational couple violence from intimate terrorism may be done by demonstrating differences in severity of violent interactions and use of male control tactics. Due to limitations of available data, comparisons between individual male and female reports are not feasible. Instead, aggregate scores for frequency of minor and severe violence perpetration, and use of control tactics will be examined. These scores will be used to determine the extent to which couples engage in situational couple violence and intimate terrorism.

The intimate terrorism typology corresponds with the presence of the following: use of male severe violence and male control tactics (Johnson, 1995). Additionally, since women who experience intimate terrorism are often subjected to long-term physical violence by their male partners, it is felt that when women use violence for retaliation or self-protection it is often of a severe form (Straus, 1980). The current study expects men to perpetrate high levels of control tactics and severe violence and women to use high levels of severe violence in areas where regional status of women is low.

On the other hand, situational couple violence is characterized by men's and women's symmetrical use of minor violence combined with a paucity of control tactics (Johnson, 1995). The current study expects men to use minor violence no matter the regional status of women. Overall, status of women should not predict men's use of minor violence. Likewise, women's use of minor violence is felt to mirror men's. Fitting with the situational couple violence typology the current study proposes that women's minor violence perpetration will not vary regardless of regional status of women levels.

Hypotheses

The following hypotheses have been derived from Figure 1. First hypotheses specific to intimate terrorism will be discussed followed by hypotheses specific to situational couple violence.

Intimate terrorism hypotheses.

H1: Higher regional status of women scores are related to lower male use of control tactics in intimate relationships, while lower regional status of women scores are related to higher male use of control tactics in intimate relationships.

H2: Higher regional status of women scores are related to lower male use of severe violence in intimate relationships, while lower regional status of women scores are related to higher male use of severe violence in intimate relationships.

H3: Higher regional status of women scores are related to lower female use of severe violence in intimate relationships, while lower regional status of women scores are related to higher female use of severe violence in intimate relationships.

H4: Higher male use of control tactics will correlate with higher male use of severe violence and higher female use of severe violence.

Situational couple violence hypotheses.

H5: Regional status of women scores are not associated with male use of minor violence in intimate relationships.

H6: Regional status of women scores are not associated with female use of minor violence in intimate relationships.

Methods

To answer the proposed research questions, a dataset must be constructed which is sensitive to measuring intimate partner violence and control behaviors as well as regional status of women.

Data Sources

The International Dating Violence Study (IDVS), a study headed by Murray Straus and executed internationally by a research consortium, focuses on the study of violence between partners in dating relationships. To date, researchers in 20 countries in the North, Central and South Americas, Asia, and Europe have data available for analysis. Questionnaires were administered to students over the age of 18 years in university classrooms predominately classified in the areas of social science and humanities.

Participants answered questions from the Revised Conflict Tactics Scales (CTS2; Straus, Hamby, Boney-McCoy & Sugarman, 1996) and Personal and Relationships Profile (Straus, Hamby, Boney-McCoy & Sugarman, 1999) (Straus, 2001). The research questions for the current study will be answered using two sections of the IDVS: the physical assault measures incorporated in the CTS2, as well as dominance items embedded in the Personal and Relationships Profile.

Additionally, the current study uses numerous sources of data to build regional status of women measures. National-level data is primarily provided by the Inter Parliamentary Union (IPU), International Labor Organization (ILO), United Nations Women's Indicators and Statistics Database (WISTAT), and World Bank while provincial and state-level data is predominately offered by Bureau of Labor Statistics, Canadian Library of Parliament, National Centre for Education Statistics (NCES), Statistics Canada, the Institute for Women's Policy Research (IWPR), and the United States Census. Table 1 outlines a complete list of data sources used by the current study to build the status of women dimensions.

Sample

Twenty-nine regions are available for comparative analysis. The number of cases available for analysis depends upon the availability of data from the aforementioned data sources. Overall 20 countries are represented: Australia, Belgium, Brazil, Canada, China, Germany, India, Israel, Lithuania, Mexico, Netherlands, New Zealand, Portugal, Republic of Korea, Russian Federation, Singapore, Sweden, Switzerland, United Kingdom and the United States. Aggregate scores for approximately 9,000 participant answers will be analyzed. Table 2 summarizes the sample descriptives for the current study.

Measures

Severity of Intimate Partner Violence

Severity of intimate partner violence will be measured using the aggregate scores from the minor and severe violence subscales of the CTS2, embedded in the International Dating Violence Survey (Straus, 2001)[5]. Interpersonal partner violence may be assessed with any number of tools, however the majority of the studies testing Johnson's (1995) study use either the original conflict tactics scales (CTS1; Graham-Kevan & Archer, 2003; Grandin & Lupri, 1997; Leone et al., 2004) or the revised conflict tactics scales (CTS2; Swan & Snow, 2002). Despite the many critiques of the CTS1, Johnson (2004) encourages the continued use of the scale as it offers a standardized approach to measuring violence. Important to this study, the CTS has proven itself an effective measure of interpersonal violence in different areas of the world, having been used in at least 20 countries since 1972 (Straus et al., 1996).

Although aggregate scores are employed in the current study, it is important to have an appreciation for how individuals were asked to report violence in dating relationships. In the CTS2, mild violence comprises five items and the severe violence dimension, seven items. Both mild and severe items are measured on a Likert-type scale that pertains to the number of times the violence construct occurred in the previous calendar year (Straus et al., 1996). Options for answers to the violence statements are, the act occurred: (1) Once in the past year, (2) Twice in the past year, (3) 3-5 times in the past year, (4) 6-10 times in the past year, (5) 11-20 times in the past year, (6) More than 20 times in the past year, (7) Not in the past year but it did happen before, (8) This has never happened. Participants who report *this*

[5] The International Dating Violence Survey provides minor and severe violence data in the form of self-reported behavior and partner-reported behavior (i.e., survey questions asked participants to report on violent actions initiated by oneself as well as one's partner). The current study decided to restrict data analysis to scores provided by the participant on his/her own behavior, as this parallels the PRP data which asks participants to only report self-initiated control behaviors.

has never happened for all of the violence items will be considered non-violent couples. The 12 items along with reporting instructions included in this study's measure of interpersonal violence are listed in Appendix 1. The CTS2 subscale possesses an overall reliability score of 0.86 (Straus et al., 1996).

Control Tactics

Distinctions between the intimate partner violence typologies rely upon the presence or absence of control tactics in the abusive relationship (Johnson, 1995; Leone et al., 2004). Control however is a relatively loose term and any number of differing scales and indexes have been developed and employed, claiming to measure the same entity (Dobash, Dobash, Cavanagh & Lewis, 1998; Graham-Kevan et al., 2003; Johnson, 2004; Leone et al.; Lloyd & Emery, 2000). In deciding how to measure control tactics, qualitative analyses of abusive relationships provide useful conceptual insight.

Perhaps the most influential qualitative explanation of control, and the one Johnson (2004) recommends, is offered by Pence and Paymar (1993). During focus groups with battered women and abusive men, eight main components of control were identified: coercion and threats; intimidation; emotional abuse; isolation; minimizing, denying and blaming; using the children; using male privilege; economic abuse (Pence & Paymar, 1993). Although other qualitative analyses may attribute different names to these eight constructs, the above concepts have been confirmed as important in the measurement of control tactics used by men (Frieze & Browne, 1989; Ptacek, 1997; Sev'er, 2002). Some researchers go one step further exploring why men may want to establish such control over their partners, uncovering reasons such as: domination of an argument, domination of the woman and the relationship; keeping the woman in a relationship and ownership and possessiveness (Lloyd & Emery, 2000).

In the current study, control will be captured by aggregate scores of three dimensions: authority; disparagement; and restrictiveness (see Appendix 2). These dimensions will be obtained from the dominance subscale which originates with the Personal and Relationships Profile (Straus et al., 1999), and is incorporated in the International Dating Violence Study (Straus, 2001)[6]. Upon inspection of the individual items comprising the three control dimensions, it may be argued that the current study's measure of control captures three of the eight dimensions of control that are outlined in the Duluth model (Pence & Paymar, 1993). Captured dimensions are: use of male privilege (authority); using isolation (restrictiveness); and using emotional abuse (disparagement). Although a significant portion of the control measure from the Pence and Paymar model is not included in this study it may be argued that the most critical component is use of male privilege. The concept of male privilege is measured in part with the item *my partner and I generally have equal say about decisions*, embedded in the authority dimension (Straus et al., 1999). Gender asymmetry relating to decision-making is argued to be the most important indicator of a power imbalance in a relationship (Frieze & Browne, 1989; Schechter, 1982).

Although aggregate scores are being used in the current study, it is important to comprehend how individuals were asked to report impressions about control in dating relationships. Each control dimension is comprised of three items that are answered using a Likert-type scale (Straus & Mouradian, 1999). Options for answers to the control tactic statements are: (1) Strongly disagree, (2) Disagree, (3) Agree, (4) Strongly agree. The Personal and Relationships Profile's reliability and validity has been tested using both student and offender samples (Straus & Mouradian, 1999). Average alphas achieved were .74

[6] The International Dating Violence Survey provides control data in two forms: as a mean number of control items with which respondents agree or strongly agree and as a mean of all items. Both variations of the data were analyzed in the current study, demonstrating comparable results. In the end, the current study chose to represent men's use of control tactics with the latter data convention.

(student) and .69 (offender). The nine items included in this study's measure of control along with reporting instructions made available to respondents are listed in Appendix 2.

Regional Status of Women

Insight into status of women measurement may be gained through the study of both projects examining its specific effects on intimate partner violence (Anderson, 1997; Straus, 1994; Sugarman & Straus, 1988; Vieraitis & Williams, 2002; Yllö, 1983; Yllö, 1984; Yllö & Straus, 1990; Yodanis, 2004), as well as initiatives that examine status of women from a more general standpoint (Bradley & Khor, 1993; Curtin, 1982; Dixon, 1976; Oppenheim Mason, 1986; Whyte, 1978).

Before status of women measures are decided upon, a distinction must be made regarding this study's intended meaning of status of women. The term, status of women, has been researched by academics from a multitude of disciplines, from anthropology (Sanday, 1981) to sociology (Oppenheim Mason, 1986; Sugarman & Straus, 1988), from political science (Caprioloi, 2003) to criminology (Vieraitis & Williams, 2002). Critically important is the realization that the same term, status of women, conceptually differs across fields and between individual studies. Oppenheim Mason (1986) explains that a woman's status differs from her gender equality. For example a woman may possess status in a society (belonging to an upper echelon), while simultaneously lacking equality when compared to men of the same social strata. Likewise, women may occupy a position of little societal recognition yet remain egalitarian to men of the same social class.

Using Oppenheim Mason's (1986) distinctions, the current study intends the term, status of women to represent *gender equality*. That is, no matter the societal class of men and women, women's status is determined by the difference between women's attainment of

societal privilege when compared to men's. Sugarman and Straus (1988) refer to this concept as *relative gender equality*, "to measure the attainments of women relative to men" (p.233).

Another consideration when studying status of women is to acknowledge its multidimensional nature (Oppenheim Mason, 1986). That is, women may possess gender equality on one status of women dimension while simultaneously occupying inequality on another. Dixon explains that gender inequality can exist in five major spheres of social life, all of which relate to division of labor: sexual relations; reproduction; homemaking and socialization of children; education and economic production; and political decision-making (Dixon, 1976). In order for gender equality to exist, both men and women must possess: equal representation in each sphere, equal opportunity to exercise rights and responsibilities in a given role, as well as receipt of equal benefits for executed efforts in a given role (Dixon, 1976).

Applying theory to measurement, potential dimensions have been suggested by a number of sources. The Institute for Women's Policy Research (http://www.iwpr.org, November 13, 2004) in the United States lists the following as important areas reflecting the status of women: political, employment/earnings, economic autonomy, reproductive rights, health and well-being. Bradley and Kohr (1993) determine that status of women may be categorized with economic, political and social spheres, all of which may be thought of as having private and public facets.

Turning to status of women measures specific to intimate partner violence outcomes, although very few studies emphasize the same collection of status of women dimensions, there is great overlap, especially regarding the inclusion of economic and political dimensions. Research published by either Yllö or Straus predominately rely upon a Status of Women Index created by Yllö in 1980, focusing on economic, educational, political and legal

dimensions (Yllö 1983; Yllö 1984; Yllö & Straus, 1990). Other studies by Straus alter slightly, dropping the education dimension and focusing solely on the political, legal and economic dimensions (Baron & Straus, 1989; Straus, 1994; Sugarman & Straus, 1988). Yodanis (2004) remarks on the dimensions of education, occupation and political status while Anderson (1997) highlights the importance of educational and income inequality on intimate partner violence outcomes.

Status of Women Dimensions

The status of women dimensions developed in this study are based upon the above theoretical guidance. Items included in each dimension were guided in part by those recommended by past studies, availability of data, as well as how well items factor loaded on individual dimensions. Due to the small number of cases available for analysis in this study, bivariate correlations were used in conjunction with factor analysis to guide the dimension creation process. Four dimensions – political, reproductive control, education and economic – were developed for the current study. In addition to creating the four dimensions, a general status of women index was considered and tested. Table 3 offers a list of the items considered for the individual status of women dimensions, along with a summary of how each was calculated.

To create the status of women items, data from the year 2000 was obtained from the data sources outlined in Table 1. If regional data for an indicator was missing, data from an earlier collection year was substituted. If regional data was not available altogether, national level data was substituted. If neither national nor earlier data was available, rather than dropping the case from overall analysis, a proxy score was substituted (a mean value calculated from the other regions). If a significant amount of data was missing for one item

(multiple regions are missing data), the item was dropped. A summary of data substitutions that were made during the creation of the status of women items are listed in Table 4.

Political Dimension. Two items were initially considered for the political dimension: representation of women in government, and number of years since women obtained the legal right to vote. Items were factor analyzed and both loaded with a score of 0.82 on a single component. A bivariate correlation was performed whereby the two items demonstrated a non-significant correlation.

Given the results of the bivariate correlation, the former item was favored over the latter as it was felt to provide greater face validity. Political representation of women in government is thought to be a better measure of women's equality in politics. Due to the two waves of the feminist movement, the year women received the right to vote may not represent a region's true desire to consider women on par with men, rather a response to political pressure from an international community. Also, women's active involvement in political decision-making has been theorized as key for change in other arenas where women may be considered inferior to men (Dobash & Dobash, 1979). Factor analysis and bivariate correlation scores relating to the construction of the political dimension may be found in Tables 5 and 7.

Reproductive Control Dimension. Initially three items were considered for this dimension: age-specific abortion rate, restrictions on abortion laws, and age-specific fertility rate. All three items were factor analyzed yielding loading scores no lower than 0.72 on a single dimension. Bivariate correlations were then carried out demonstrating a lack of a significant correlation between age-specific abortion rate and restrictions on abortion laws. A significant relationship was found for the correlations between age-specific fertility rate and the other two items. In the end, restrictions on abortion laws and age-specific fertility rate

were kept as indicators of reproductive control. It was felt that these two items offered greater validity to this dimension, as age-specific abortion rates only captures the number of reported abortions in a given region. In regions where more restrictive abortion laws are in practice, more women will partake in illegal abortions, for which data is not available.

The two items, restrictions on abortion laws, and age-specific fertility rate were factor analyzed again yielding a loading score on a single component of 0.84. Factor analysis and bivariate correlation scores relating to the construction of the reproductive control dimension may be found in Tables 5, 6 and 8.

Education Dimension. Only one education item was constructed for preliminary consideration. Due to a lack of comparable data across the 29 regions, construction of other items, such as women's and men's enrollment ratios into gender segregated fields was not possible. Therefore the present study poses the item, representation of women in tertiary education, as a measure of women's educational status.

Economic Dimension. Five items were initially considered for the economic dimension, wage disparity between men and women, women's economic activity rate, and gender segregation in the agriculture sector, industry sector and service sector. Since running a factor analysis with five items against 29 cases is not ideal, bivariate correlations were conducted. Significant relationships were found for pairings between wage disparity between men and women and women's economic activity rate ($p \leq 0.01$); women's economic activity rate and gender segregation in the industry sector ($p \leq 0.01$); gender segregation in the agriculture and industry sectors ($p \leq 0.05$) and gender segregation in the agriculture and service sectors ($p \leq 0.05$).

In the end, the three gender segregation variables were dropped from the economic dimension for two reasons. First, three of the 29 cases were missing data for the item, gender

segregation in the agriculture sector. This in part is due to the geographical makeup of some of the regions. For example, Hong Kong is a highly populated city that does not have an agriculture industry. The second reason for dropping the gender segregation variables was due to lower correlation values generated by these items compared to the correlation between wage disparity between men and women and women's economic activity rate, calculated as 0.54.

Wage disparity between men and women and women's economic activity rate were factor analyzed yielding a loading score on a single component of 0.88. Factor analysis and bivariate correlation scores relating to the construction of the economic dimension may be found in Tables 6 and 9.

Status of Women Index. Since the four dimensions represent six items in total, bivariate correlations were conducted to further investigate the possibility of creating an overall status of women index. Correlation tests reveal significant relationships between the economic dimension and the other three dimensions. The political, reproductive control and education dimensions did not correlate with each other. Reflecting on the literature, the likelihood of supporting a global status of women index is not expected. Past studies have commented on a global index's compromised predictive value due to the multidimensional nature of gender inequality (Sugarman and Straus, 1988; Whyte, 1978; Yllö, 1983). Even so, a strong correlation between the political and economic dimensions does reinforce the literature. Without political representation, women are not able to create change in other dimensions, thus political inequality co-varies with economic inequality representing a persistence of patriarchal institutions (Baron & Straus, 1989). Additionally without economic representation in more prestigious occupations, women are less likely to gain political representation (Baron & Straus, 1989).

Correlations between the economic dimension and the education and reproductive control dimensions will not be addressed, as the latter two are felt to be questionable representations of status of women. In depth discussion of these two dimensions are presented in the final section. That said, the reverse directionality of the reproductive control dimension is commented upon here. The opposite directionality for reproductive control may be attributed to the item "age-specific fertility rate". A higher age-specific fertility rate would in fact indicate a lower status of women. Worldwide the average desired number of children is approximately two children per woman (http://www.agi-usa.org/pubs/sharing.pdf). It is assumed that regions in which women are having more than the desired number of children, reflect regions where women have lower status of women scores, as they are unable to effectively regulate their fertility. Bivariate correlation scores relating to the construction of the global status of women index may be found in Table 10.

Per Capita Gross Domestic Product

The current study includes per capita gross domestic product (GDP) as a control variable. Examining the regions included in the current study, noticeable differences are evident with respect to economic wealth as well as development. Controlling for such variance is imperative. As stated in Straus (1994), stressful life events such as impoverishment may explain the outcome variables, men's and women's use of violence. Examining the 29 countries included in the current study, there is a great range when considering per capita GDP. Calculated by taking the number of US dollars grossed by a region divided by the region's population in 2000, the per capita GDP values range from $447 USD (India) to $36,000 USD (Switzerland). The sample mean per capita GDP value is $20,929 USD. Due to the wide economic differences between regions involved in this study, per capita GDP is included to control for such variation. Additionally by including per capita

GDP, theories relying upon structural economic factors to explain study relationships may be eliminated.

Data Analysis

To answer the research question, *does the intimate terrorism typology manifest more in patriarchal regions*, OLS multiple regression tests were used. Since the variables in this study are continuous in nature, multiple regressions serve as a legitimate test (Agresti & Finlay, 1997; Tabachnick & Fidell, 1996). For each of the regional status of women independent variables (political, reproductive control, education, and economic dimensions), men's and women's aggregate scores for the three outcome variables (men's control tactics, and men's and women's use of severe and minor violence) were plotted. This series of multiple regression tests determines whether men's and women's use of severe violence and men's use of control tactics are higher in areas deemed more patriarchal by the status of women scores. Regressions were also conducted to test the hypothesis that men's and women's use of minor violence is similar no matter the regional status of women.

Additionally bivariate correlations were performed between the variables, men's use of control tactics, men's use of severe violence and women's use of severe violence. Evidence of bivariate correlations between these three variables will lend support for the intimate terrorism typology.

Results

This section is divided into two parts. The first section is devoted to summarizing descriptive statistics generated during data analysis. The final portion is focused on the multiple regression results produced during hypotheses testing.

Descriptive Statistics

Regional trends for status of women items will first be examined, followed by a descriptive summary of men's use of control tactics and men's and women's use of severe and minor violence in intimate relationships.

Status of Women. A rank ordering of the regions by the four status of women dimensions are presented in Table 11. Since later sections show that only two dimensions, political and economic, are consistently related to outcome variables, inspection of ranking trends will be limited to these two dimensions. Sweden is listed as the most egalitarian region holding first position on both dimensions, while Republic of Korea and India represent more patriarchal regions. Although the Russian Federation and Lithuania may be deemed as more patriarchal on the political dimension, they represent fairly egalitarian countries with respect to women's economic status.

Table 12 lists the minimum, maximum and mean values for each of the status of women items. As previously stated, Sweden is considered the most egalitarian political region, and in Table 12 we can see that for every 100 men that hold political seats, 75 are filled by women. On average, women in the sample hold 27 seats for every 100 that men fill, with Republic of Korea representing the least female representation in politics with just 4 seats for every 100 held by men.

For the reproductive control measure, restrictions on abortion laws and age-specific fertility rate show a great range in regional statistics. For the former item, regions may range between no restrictions on abortion laws upwards to seven, representing the most restrictive regions. From Table 12, we can see that most regions have fairly liberal views of abortion, with few countries restricting abortions. Overall the average is one restriction out of seven, with Brazil and Mexico practicing the most restrictions (five restrictions out of seven). Other

countries that may be considered fairly restrictive on this item are Switzerland (four restrictions) and the Republic of Korea (three restrictions).

The second item of the reproductive control dimension is age-specific fertility rate. Table 12 demonstrates that on average for every 1000 women between the ages of 15-44 years, 63 babies are born. Contrasted against the minimum and maximum regions, age-specific fertility rates ranged from 30.4 to 129.4. The two countries that represent the polar ends of the ranking on this item as well as the overall measure of reproductive control are Hong Kong (most reproductive control) and India (least reproductive control).

In Table 11, Quebec is listed as the most educationally egalitarian region, and in Table 12 we can see that for every 100 men enrolled in post-secondary education, 310 women attend university or college. On average, women in the study sample hold 124 post-secondary placements for every 100 that men fill. Singapore represents the least female representation in education with just 40 seats for every 100 held by men. Since most nurses and teachers are women, careers that require tertiary-level education, the current study considers any region that has female enrollment as a smaller fraction than male enrollment as patriarchal. The regions that fit this description in order from least patriarchal to most are: Utah, Mexico, Germany, Hong Kong, Switzerland, India, Republic of Korea, and Singapore.

For the items of the economic dimension, wage disparity between men and women and women's economic activity rate show a great range in regional statistics. Once again Sweden is shown in Table 11 as the more egalitarian region on this dimension, followed by Australia and New Zealand. The more patriarchal regions are represented by Republic of Korea, India and Mexico. With respect to the item wage disparity between men and women, women on average earn 70% of what men earn, with Swedish women earning 95% of men's wages and Indian women earning 50% of men's earnings.

The second item of the economic dimension is women's economic activity rate. Table 12 demonstrates that on average for every 100 men employed out of the home, 77 women are similarly employed. Contrasted against the minimum and maximum scores, women's economic activity rate ranges from 47 employed women for every 100 employed men, to 95 employed women for every 100 employed men. The two countries that represent the ranking extremes for this item are Sweden (most egalitarian) and Mexico (most patriarchal).

Dependent Variables. A rank ordering of the regions by the five dependent variables are presented in Table 13. Three of the five variables are significantly related to at least one status of women dimension. For the most part, regions including Louisiana, Republic of Korea, India, Russian Federation consistently rank as more controlling and violent (men's greater use of control, men's and women's greater use of severe violence). Sweden consistently ranks in first or second position on men's control and men's and women's severe violence variables, representing the least controlling and violent region. Less consistency is seen for the minor violence variables, with the regions randomly scattered in the rankings. The regions that report more minor violence by men include Mexico, Netherlands and Germany with men in Australia, Mississippi and Portugal reporting the least engagement in minor violence behaviors. Women in Lithuania, Mexico and Russian Federation report using the most minor violence while women in Israel, Utah and Australia report the least.

Turning to Table 14, men on average report a score of 1.91 for use of control items, representing a tendency to disagree with the statements (a score of 2.00 represents disagreement while a 3.00 represents agreement statements). The region that reports the strongest disagreement with controlling questions is Quebec, where the men's aggregate score is 1.63. This is contrasted against the score of 2.38 from Russian Federation men. In the end, Quebec followed by Sweden represent regions where men report ascribing to the fewest

control traits, and Russian Federation followed by India represent regions where men align with the most control traits.

Minimum, maximum and mean values for men's and women's use of severe violence are also listed in Table 14. Complementing what is depicted in Table 13, Swedish men report the lowest frequency of severe violence use (1.20), while men from Louisiana report a score of 37.00. Overall men in the sample report using severe violence with a frequency score of 13.09. Although the range of women's reported frequency of severe violence use is not as large as men's the average is quite similar, 13.07. As was demonstrated in Table 13, Swedish women report using the least amount of severe violence (1.90) with women in India using the most (30.10).

Summarized in Tables 13 and 14, conclusions are difficult to make about the minor violence scores for men and women. Both men's and women's minor violence items lack a significant relationship to any of the predictor variables, and lack a clear pattern in the rank ordering. Overall men report a frequency score of 15.34 for minor violence while women on average report 20.41. Men's scores range from 3.80 (Australia) to 27.10 (Germany) while women range from 10.10 (Israel) to 36.30 (Russian Federation).

Test of Study Hypotheses

The hypotheses tested in the current study are guided by violence against women (feminist) theory. Referring to earlier sections, the following is a summary of predicted outcomes between independent and dependent variables: the higher women's regional status, lower men's use of control tactics, lower men's and women's use of severe violence, and both men's and women's use of minor violence should not associate with higher or lower status scores.

The following section is organized in the order the six hypotheses were proposed. Tables 15 through 20, along with Figures 2 through 5 summarize the results of the OLS multiple regression statistics. Specifically, Figures 2 and 3 illustrate the relationships between the independent and dependent variables while Figures 4 and 5 illustrate the same relationships controlling for per capita GDP. The regression analyses tables are also divided into two sections. Model 1 relates to statistics specific to the independent variable effects on the outcome variables whereas Model 2 considers the same relationships controlling for per capita GDP[7].

Hypothesis 1. OLS regression was performed between the four status of women dimensions and men's use of control tactics. In Table 15, Model 1 demonstrates that 46% of variance of men's use of control tactics may be explained by the political dimension, 25% by the economic dimension and 14% by the education dimension. The reproductive control dimension is not shown to be significant for this relationship. The beta, which demonstrates the strength of the relationship between regional status of women and men's use of control tactics in intimate relationships, ranges from -.38 to -.68, depending on which status of women dimension is used as a predictor. The political dimension has a beta of -.68 ($p \leq .001$), the education dimension has a beta of -.38 ($p \leq .05$), and the economic dimension, a beta of -.50 ($p \leq 0.01$). All three of the dimensions have a strong, negatively linear relationship with the outcome variable. That is, the higher women's status on political, education and economic dimensions, the lower men's use of control behaviors in intimate

[7] Also important to note are the data transformations that were performed prior to data analysis. Upon running histograms for each of the variables, and e-versus-y-hat plots for individual relationships, it was noted that each of the status of women dimensions along with men's use of control tactics were skewed. The economic dimension was negatively skewed while the other four were positively skewed. Each of the dimensions were transformed using $\log_{10}$ (for positive skew) and square functions (for negative skew). E-versus-y-hat plots were re-examined to check for peculiarities in the data. All plots were satisfactory upon data transformation. Since the regression analyses for transformed and non-transformed variables were similar it was decided that non-transformed values would be discussed in the results section.

relationships. From these statistics, it may be concluded that the political, education and economic dimensions support Hypothesis 1. Table 15 summarizes the key regression analysis statistics generated while testing Hypothesis 1.

Shifting our focus to Model 2, the strength of the relationships does not change substantially, despite controlling for per capita GDP. All three of the relationships that demonstrate significance in Model 1 remain significant in Model 2. It may be concluded that a region's overall economic situation has little impact on men's use of control tactics in intimate relations and that Hypothesis 1 continues to be supported.

Hypothesis 2. The relationship between male use of severe violence and the status of women dimensions was tested with OLS regression. Both models are represented in Table 16, illustrating the relationship between the variables as well as any changes to the strength or significance of the relationship when per capita GDP is controlled for. For Model 1, the beta, which signifies the strength of the relationship between regional status of women and men's use of severe violence in intimate relationships, ranges from .01 to -.41. Both the education and reproductive control dimensions lack significance in their relationships with men's use of severe violence. The political dimension which has a significant beta of -.41 ($p<.05$) also explains 17% of the variance of men's use of severe violence. The economic dimension explains a similar amount of variance for the outcome variable, 14%, and has a significant beta score of -.37 ($p \leq .05$). From these scores it may be concluded that there is an association between high political and economic status of women and lower severe violence use by men. Hypothesis 2 is supported by the current study's economic and political dimensions.

Focusing our attention on Model 2, the per capita GDP effect on the study relationships is also presented in Table 16. Overall per capita GDP has a minimal effect, as

both political and economic status of women predictor variables continue to have high beta scores with similar significance levels to Model 1. The political dimension continues to be significant at the $p \leq .05$ level while the economic dimension falls to a p-value of $\leq .10$. Significance levels aside, the strength of the relationship between the economic status of women and men's use of severe violence is worth considering as it reflects a beta of -.35. In the end, it may be concluded that a region's economic makeup does not influence the relationship between the status of women and men's use of severe violence in intimate partner relationships.

Hypothesis 3. The third hypothesis predicts that women's use of severe violence and a region's status of women scores are negatively related. OLS regression was performed with women's use of severe violence and the four status of women dimensions. Table 17 reports the regression scores for both models (with and without the control variable, per capita GDP). Examining Model 1 we can see that both the political and economic dimensions significantly predict ($p \leq .05$; $p \leq .01$) women's use of severe violence with strong beta scores (-.45 and -.46). Twenty percent of the variance of women's use of severe violence may be explained by the political dimension, and 22% by the economic dimension. Both of the dimensions indeed have a strong, negatively linear relationship with the outcome variable. That is, higher political and economic status of women scores are related to lower use of severe violence by women in intimate relationships. From these statistics, it may be concluded that the political and economic dimensions support Hypothesis 3.

Shifting our focus to Model 2, it may be seen that the relationship between women's use of severe violence and women's economic status remains strong with a beta of -.40 ($p \leq .05$). Interestingly, the strength of the relationship involving women's political status is weaker, producing a beta of -.37 with a non-significant p-value of .12. Despite the effect per

capita GDP has on the political relationship in this model, due to the small sample size in the current study, these two dimensions are still considered to support Hypothesis 3.

Hypotheses 4. In order to support the claim that intimate terrorism is indeed a typology, it must be substantiated that men's use of control tactics, men's use of severe violence and women's use of severe violence (either due to retaliation or defense) are significantly correlated with one another. Table 18 illustrates correlation scores between these three variables. All three variables are indeed significantly correlated with one another ($p \leq .01$) with high correlation scores. These bivariate correlations support the notion that intimate terrorism is a typology consisting of the following: men's use control tactics, men's use of severe violence and women's use of severe violence.

Hypothesis 5. The relationship between male use of minor violence and the status of women dimensions was tested with OLS regression. Both models are represented in Table 19, illustrating the relationship between the variables as well as any changes to the strength or significance of the relationship when per capita GDP is controlled for. For Model 1, the strength of the relationship between regional status of women and men's use of minor violence in intimate relationships ranges from -.08 to .31, and variance explained ranges from 1% to 10%. From these scores it may be concluded that Hypothesis 5 of the current study is supported. That is, regional status of women scores *do not* predict men's use of minor violence in intimate partner relationships.

Focusing our attention on Model 2, which is also summarized in Table 19, the per capita GDP effect on the study relationships may be inspected. Overall per capita GDP has no effect on the relationship between status of women predictor variables and men's use of minor violence. The dependent variable's variance is similarly explained by including per capita GDP in the model (again ranging from 1% to 10%), and strength of relationship scores

similarly range from -.06 to .35. In the end, it may be concluded that a region's economic makeup does not influence the relationship between the independent and dependent variables of Hypothesis 5. That is, status of women regardless of per capita GDP, is not associated with men's use of minor violence.

Hypothesis 6. The final hypothesis predicts that women's use of minor violence is not associated with regional status of women scores. OLS regressions were conducted with women's use of minor violence and the four status of women dimensions. Table 20 reports the regression scores for both models (with and without the control variable, per capita GDP). Examining Model 1 we can see that none of the status of women dimensions predict women's use of minor violence, supporting Hypothesis 6.

Shifting our focus to Model 2, predictive relationships between political, educational, and economic status of women dimensions remain unchanged. Per capita GDP does have an impact on the predictive value of the reproductive control dimension, demonstrating a beta of -.39 ($p \leq .05$). Despite this relationship being statistically supported, an explanation of why reproductive control is not considered as influential a dimension as political and economic dimensions is addressed in the discussion section. In the end, it may be concluded that Hypothesis 6 when controlled for by per capita GDP is supported. Status of women is not associated with women's use of minor violence.

Discussion

The goal of the current study is to explain Johnson's (1995) intimate partner violence typologies by applying a model offered by Yllö's 1983 study results. Acknowledging the connection between societal structure and individual behaviors, the current study supports the claim that in areas where women are politically and economically inferior to men, intimate terrorism is more likely to manifest in intimate partner relationships. Similarly situational

couple violence, a gender symmetric typology will manifest when regions are deemed more egalitarian.

Modeling Yllö's 1983 study results, the current study finds substantial support for the claim that intimate terrorism more frequently occurs in areas in which there is great gender inequality. Aligning with Johnson's (1995) typological claim women's use of severe violence is lower in more egalitarian regions, reflecting a reduced need for retaliation or self-defense against a partner's violent attacks. This rationale is borrowed from studies showing female victims of patriarchal violence and control are more likely to use severe violence, motivated by retaliation, self-defense or protection of children (Straus, 1980).

Furthermore, in regions that ascribe to more egalitarian views, men and women use fewer severe violence in intimate relationships and men use fewer controlling behaviors. Minor violence, a behavior regarded by Johnson (1995) as indicative of situational couple violence, was found in the current study to be unaffected by regional status of women. This finding supports the family violence theory that violence is commonplace and apart of typical intimate relationships (Hotaling & Straus, 1980). Acknowledgement that minor violence did not vary across the regions demonstrates how pervasive the use of minor violence is in intimate relationships. Even Yllö (1983) remarked that due to the rampant use of minor violence in her sample, it was dropped from analysis and attention was focused on severe violence study only.

Interestingly, despite the current study's full support of Johnson's typologies, claims proposed by Yllö's (1983) model that were not supported are the notion of a backlash hypothesis, as well as women's frequent use of severe violence associated with higher status of women scores. A backlash typically occurs when regions move towards adopting egalitarian views. As status of women increases, men's violence towards women first

diminishes then escalates. This upswing in men's use of violence is termed a backlash – a process in which violence towards women is reinstated, although not necessarily to the same level as when patriarchal attitudes dominate (Yllö, 1993; Yllö & Straus, 1990).

> Violence may be greater in high status [transitioning] states because these are the states in which the patriarchal structure is breaking down and in which husbands may feel most threatened. Domestic conflict may increase in those areas where women are achieving equality most quickly. (Yllö & Straus, 1990, p. 394)

Demonstrated in the current study is a steady negative relationship between severe violence use and societal equality. This difference in results, along with women's lower severe violence scores instead of higher, may be explained by confounding effects due to different sample descriptions. Specifically, Yllö (1983) studied patriarchal and *transitioning* regions whereas the current study compared patriarchal, *transitioning* and *transitioned* regions.

Yllö (1983) stated concern that even though some of the states in her sample ranked as *more* egalitarian than others, it was doubtful that these regions were indeed egalitarian. Yllö (1983) proposed that these states might in fact be *transitional*. Unlike the regions used in Yllö's analysis, it is felt that the regions examined in the current study provided greater variance on the patriarchal-egalitarian continuum.

To demonstrate that the regions included in Yllö's work were indeed *transitional* in nature, a comparison between women's status in 1983 and women's status in 2000 is necessary. This comparison may be made by investigating historical female political representation. In 1983, the state with the highest political representation was New Hampshire, with women occupying 28.5% of the political seats (www.cawp.rutgers.edu). Comparing New Hampshire in 1983 to the regions analyzed in the current study, we can see

from Table 12 that 28.5% is roughly equivalent to the mean value of the current study (27.0%). In fact 12 of the regions included in the current study have political representation values $\geq 27\%$, with some regions as high as 51% (Germany) and 75% (Sweden). This finding substantiates Yllö's concern that indeed patriarchal and *transitioning* states were studied.

What may be borrowed from Yllö's (1983) model is the notion that as regions transition towards egalitarianism, gender symmetry with respect to intimate partner violence emerges. A proposed model of what may transpire is illustrated in Figure 6. The vertical line represents regions that are *transitioning*. This line depicts the endpoint of Yllö's model. To the right of the line is the proposed continuation of the model, supported by the results of the current study. As regions continue towards egalitarianism, gender symmetry persists with frequency of men's and women's severe violence in intimate relationships diminishing. This of course could occur in a linear fashion or in a series of smaller curvilinear relationships.

The proposed model in Figure 6 illustrates how regional status of women explains men's and women's use of severe violence in Johnson's (1995) typologies. In patriarchal regions, women and men are asymmetrical in their employment of severe violence, with men using more severe violence than women. This blend of behaviors describes the intimate terrorism typology. As regions transition towards egalitarianism, men's use of severe violence decreases, then increases completing a curvilinear pattern. Concurrently, women's use of severe violence increases in a linear fashion. Regions that are considered *transitioning* are characterized with gender symmetry – men and women use similar levels of severe violence in intimate partner relationships. Finally, as regions continue towards an egalitarian state, men's and women's use of severe violence persist in a gender symmetric nature continuously diminishing in frequency. This final process characterizes the situational couple violence typology, in which severe violence is infrequent.

An implication for future study would be to test the proposed model in Figure 6. To do so, *patriarchal*, *transitional* and *transitioned* regions would first need to be identified. Since the model in Figure 6 proposes that the midline point (the endpoint of Yllö's study) approximates a *transitional* state, regions that equivocate scores possessed by the more egalitarian states in Yllö's study may be considered transitional. The highest ranked regions in the current study may be considered egalitarian. Although the current study is able to rank regions as more and less patriarchal, to amplify the findings, a future study may incorporate regions that are identified globally for harboring patriarchal attitudes towards women. Such countries are often listed by the United Nations' Division for the Advancement of Women, and include Afghanistan, Iraq, Iran, and Somalia.

Continuing with ideas for future initiatives, one may consider the study sample. The extent to which the current study conclusions may be generalized are limited, as data used represents reports by university undergraduates, resulting in a non-randomized sample (Straus, 2001). Research that generated Johnson's (1995) typologies and Yllö's (1983) findings were based primarily upon reports by married participants. Future inquiry must include participants in marital unions. The present study suggests extending recruitment of participants outside of the university setting as most undergraduates are in dating relationships. It may also be argued that there is discordance between the sample used to create the current study's measures of regional status of women and the sample used to represent intimate partner violence and control behaviors. That is, comparisons between women and men of multiple age categories were performed to construct relative measures of status of women. By contrast, the International Dating Violence Study was administered to young adults, predominately in their early twenties. The current study does not consider this discordance to be a limitation. Instead it may be reasoned that the status of women data

generated by the former sample represents the cultural milieu that the latter has been socialized in. Therefore even if a particular generation may be considered as more egalitarian than a preceding generation, multiple generations culminate to produce an overall regional culture.

When developing status of women dimensions, choices must be made about which items are included and how items are organized into constructs. The dimensions included in the current study were guided by theory, past study examples and availability of regional data. Overall, the political and economic dimensions consistently supported study hypotheses, while education and reproductive control did not. Reflecting on the literature as well as the items included in the construction of the dimensions, it may be determined that both education and reproductive control lacked validity. This section first discusses overlap between the current study's education and economic dimensions, and ends with a summary of why the predictive nature of the reproductive control dimension is felt to be inconsequential compared to results generated by both political and economic status of women dimensions.

In a number of gender inequality studies political, education and economic dimensions are considered separate constructs (Bradley & Khor, 1993; Straus, 1994; Yllö, 1983; 1984; Yllö & Straus, 1990; Yodanis, 2004). Other studies determine that measures of education inequality ultimately reflect economic inequality (Di Noia, 2002; Dixon, 1976; Harvey et al., 1990). Dixon explains that gender segregation occurs in the educational sphere, mirroring the inequality that women experience in the occupational sphere. That is, women are encouraged to enroll in post-secondary institutions that align with gender-segregated professions, such as teaching and nursing.

Upon inspection of the intimate terrorism results generated by the current study's education measure, significant relationships were not predicted for the second and third hypotheses: men's and women's use of severe violence. This is felt to be due to two reasons. Upon review of the status of women literature, there is greater theoretical support for the education dimension to be combined with the economic dimension. This was not carried forth in the current study. Secondly, and perhaps most importantly, the current study was limited by available data. Despite attempts to create an education measure reflecting gender segregation in enrollment (i.e., women compared to men enrolled in engineering or the sciences), regional data was unavailable. In the end, the education dimension is felt to be inferior to the economic and political dimensions in its ability to predict study relationships.

With respect to the reproductive control dimension, two reasons for its lack of validity are suggested, incongruence with other dimensions and suggestion that fertility is an outcome of economic conditions. In creating the reproductive control dimension, the current study was guided by Dixon's (1976) model which suggests that reproductive autonomy is a sphere in which women must be emancipated. Potential study items suggested by Dixon include issues surrounding abortion rights, access to birth control, and attitudes towards remaining childless. The current study suggests the items: age-specific fertility rates and a region's abortion restrictions to represent reproductive control.

Upon inspection of the four status of women dimensions included in the current study, incongruence exists between the reproductive control measure and the other three dimensions. Previously stated, status of women in the current study represents a *relative* measure of gender inequality. That is, consideration of an item in terms of how women compare to men. For the current construction of reproductive control, fertility rates and abortion law restrictions were used. These items may be considered as *absolute* in nature.

Unlike the other dimensions, the reproductive control dimension measures something other than women's status relative to men's. Also referring again to Dixon's (1976) delineations between public and private status, political, economic and education dimensions are considered public whereas reproductive control represents private. Again the reproductive control dimension is incongruent when compared to the other three.

Finally, the reproductive control item age-specific fertility rate, may in fact represent an outcome variable of economic conditions. Research demonstrates that as long as women have economic viability, women are more likely to have children. For example, women have stated the following as reasons to terminate a pregnancy: "I cannot afford a baby now", "I want to finish my education", and "I need to work full-time to support [myself or] my children". All three of these suggest that many women decide to have abortions due to economic considerations (www.agi-usa.org).

Also related to the measurement of status of women, the current study has uncovered a concern with respect to cultural sensitivity. Since status of women measurement has been used for a number of decades in multiple fields for a plethora of reasons, it cannot be assumed that what makes an adequate measure of status of women in one research initiative will translate for another. Researchers must exercise caution, especially when comparing pre-industrial to industrial nations (Oppenheim Mason, 1986) or, areas with differing political ideals.

For example, in the current study Lithuania and Russian Federation represent two former communist nations. Examining Table 11, both countries rank towards the patriarchal end politically, while ranking fairly egalitarian with respect to the economic dimension. This fluctuation in the relative ordering may be attributed to a history of communist ideal. That is, working outside the home is not indicative of women's status, rather a result of economic

hardship (Ashwin, 2000). When considering communist or former communist regions, the political dimension may better represent status of women. This example's fluctuation of women's status between dimensions demonstrates the multidimensional nature of status of women and must be considered in every study (Oppenheim Mason, 1986; Sugarman & Straus, 1988).

Another implication of the current study is the impact it has on the notion that there may be a ceiling effect to gender equality. In the past, research initiatives have questioned whether women as a class are able to overcome gender barriers and gain entitlement to societal benefits equal to men. Harvey et al. (1990) report that in the province of Ontario there was a substantial increase in women's gender equality between the late 1970s and the early 1980s. However this momentum had slowed by 1984 and appeared to level off. On the same note, Di Noia (2002) replicated Sugarman and Straus' 1988 study in 2002, noting gender equality achievements in a nearly two decade timeframe. Interestingly, although the overall status of women score had improved in twenty years, it was felt that this was largely due to a decrease in overall state variance. More specifically, changes in women's status were felt to be due to lower ranking states in 1988, improving in equality measures and moving closer to the national average. States that were more egalitarian in 1988 presented with little additional change by 2002. The cross-regional findings of the current study support the notion that gender equality is entirely possible.

These above examples in mind, what may be stated is that women's status may not be a constant linear process. Besides the multidimensional nature of status of women, each dimension may change at a non-constant rate. When the backlash hypothesis was discussed earlier, what was not mentioned was the adverse effects a backlash may have on women's developing gender equality. Just as men's severe violence is curvilinear in an upswing

pattern, women's developing equality may experience one or more downswings before increasing again. It would be of interest to study the effects feminist and anti-feminist political movements have on gender equality, both in terms of rate of status of women change as well as directionality.

The final implication the current study would like to propose is the impact research of this nature has on violence against women study. Sociological debates surrounding men's and women's symmetric use of violence in intimate relationships aside, psychological theories have been proposed to explain intimate partner violence. Psychopathology has been suggested as an explanation for men's severe violence towards women and perceived right to control female partners (Dutton, 1995). It has even been suggested that some forms of psychopathology may lead some men to adopt patriarchal ideology to justify and rationalize their own pathology (Dutton, 1994).

Although explanations of this nature are compelling, the current study's results challenge the explanatory magnitude of such explanations. Psychopathological theories would have a difficult time explaining current study results such as, why Russian Federation men are ranked much higher with respect to controlling behavior items when compared to Swedish men, or why men from Louisiana are 12 times more likely to use severe violence in intimate relationships, when compared to men from New Zealand. Continuing with a psychological framework, one could only conclude that psychopathology runs rampant in Russian Federation and Louisiana when compared to Sweden and New Zealand – indeed a doubtful prospect.

Even though the methodology of the current study may be questioned by a number of feminist theorists, arguing that assessing violence against women with empirical measures is insensitive and patriarchal in nature (Dobash & Dobash, 1983; Johnson, 1998), the current

study serves to bridge the gap between quantitative and qualitative methodologies. Importantly a contextual piece has being added, one that few quantitative studies have considered, control. Further, feminist researcher, Kersti Yllö remarks that "exploratory research [has] generated questions that cannot be answered through further qualitative research" (p. 35). Therefore although some feminist researchers may disagree, others may support the nature and ambition of the current study.

In the end this study offers an alternative approach to individual-level explanations of intimate relationship violence. Macro-level structural measures, specifically women's access to political and economic equality, are implicated as predictive entities when studying men's and women's motivations for intimate partner violence. Overall this study offers support for feminist theory and its continued use in studying violence against women.

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Table 1
Data Sources for Status of Women Dimensions

Dimension	Item	Region	Resource
Political	Representation of women in government	Manitoba, Ontario, Quebec	Canadian Library of Parliament www.parl.gc.ca
Political	Representation of women in government	Indiana, Louisiana, Mississippi, New Hampshire, Ohio, Pennsylvania, Texas, Utah	Center for American Women and Politics www.cawp.rutgers.edu
Political	Representation of women in government	Australia, Belgium, Brazil, Germany, Hong Kong, India, Israel, Lithuania, Mexico, Netherlands, New Zealand, Portugal, Republic of Korea, Russian Federation, Singapore, Sweden, Switzerland, United Kingdom	Inter Parliamentary Union www.ipu.org
Political	Number of years since women's suffrage	Manitoba, Ontario, Quebec	Cohen, 2003
Political	Number of years since women's suffrage	Indiana, Louisiana, Mississippi, New Hampshire, Ohio, Pennsylvania, Texas, Utah	Basch, 2003
Political	Number of years since women's suffrage	Australia, Belgium, Brazil, Germany, Hong Kong, India, Israel, Lithuania, Mexico, Netherlands, New Zealand, Portugal, Republic of Korea, Russian Federation, Singapore, Sweden, Switzerland, United Kingdom	Inter Parliamentary Union www.ipu.org
Reproductive control	Female Population (15-44 years), 2001	Manitoba, Ontario, Quebec	Canadian Census Profile Tables (online) CANSIM
Reproductive control	Female Population (15-44 years), 2000	Indiana, Louisiana, Mississippi, New Hampshire, Ohio, Pennsylvania, Texas, Utah	US Census Bureau, Population Division (online)
Reproductive control	Female Population (15-44 years), 1996	Australia	Australian Bureau of Statistics, Census of Population and Housing (online)
Reproductive control	Female Population (15-44 years), 2001	Australia, Belgium, Brazil, Germany, Hong Kong, India, Israel, Lithuania, Mexico, Netherlands, New Zealand, Portugal, Republic of Korea, Singapore, Sweden, Switzerland, United Kingdom	United Nations, Demographic Yearbook, 2001, Table 7 unstats.un.org

Reproductive control	Female Population (15-44 years), 2000	India, Netherlands, Republic of Korea, Russian Federation	United Nations, Demographic Yearbook, 2000, Table 7 unstats.un.org
Reproductive control	Number of abortions (used in calculation of Age-specific abortion rate)	Manitoba, Ontario, Quebec	Statistics Canada www.statcan.ca
Reproductive control	Number of abortions (used in calculation of Age-specific abortion rate)	Indiana, Louisiana, Mississippi, New Hampshire, Ohio, Pennsylvania, Texas, Utah	Finer & Henshaw, 2003
Reproductive control	Number of abortions (used in calculation of Age-specific abortion rate)	Australia, India, Republic of Korea, Russian Federation, Switzerland	The Alan Guttmacher Institute (Planned Parenthood) agi-use.org
Reproductive control	Number of abortions (used in calculation of Age-specific abortion rate)	Belgium, Germany, Hong Kong, Israel, Lithuania, Netherlands, New Zealand, Singapore, Sweden, United Kingdom	United Nations, Demographic Yearbook, 2002, Table 13 unstats.un.org
Reproductive control	Number of abortions (used in calculation of Age-specific abortion rate)	Mexico	United Nations, Demographic Yearbook, 2001, Table 13 unstats.un.org
Reproductive control	Restrictions on abortion laws	Manitoba, Ontario, Quebec, Indiana, Louisiana, Mississippi, New Hampshire, Ohio, Pennsylvania, Texas, Utah, Australia, Belgium, Brazil, Germany, Hong Kong, India, Israel, Lithuania, Mexico, Netherlands, New Zealand, Portugal, Republic of Korea, Russian Federation, Singapore, Sweden, Switzerland, United Kingdom	Women's Indicators and Statistics Database, United Nations, Version 4 CD-ROM
Reproductive control	Number of births (used in calculation of Age-specific fertility rate)	Manitoba, Ontario, Quebec	Statistics Canada, Births, 2000, Cat. No. 84F0210XPB

Reproductive control	Number of births (used in calculation of Age-specific fertility rate)	Indiana, Louisiana, Mississippi, New Hampshire, Ohio, Pennsylvania, Texas, Utah	Centers for Disease Control and Prevention, National Vital Statistics Reports, 51(12) www.cdc.gov
Reproductive control	Number of births (used in calculation of Age-specific fertility rate)	Australia, Belgium, Brazil, Germany, Hong Kong, Israel, Lithuania, Mexico, Netherlands, New Zealand, Portugal, Republic of Korea, Russian Federation, Singapore, Sweden, Switzerland, United Kingdom	United Nations, Demographic Yearbook, 2002, Table 9 unstats.un.org
Reproductive control	Number of births (used in calculation of Age-specific fertility rate)	India	United Nations, Demographic Yearbook, 2002, Tables 5 and 9 unstats.un.org
Education	Representation of women in tertiary education, all fields of study	Manitoba, Ontario, Quebec	Education Indicators in Canada, Tables D1.9, D1.10, D5.9
Education	Representation of women in tertiary education, all fields of study	Indiana, Louisiana, Mississippi, New Hampshire, Ohio, Pennsylvania, Texas, Utah	United States Department of Education, National Center for Education Statistics (IPEDS), Table 193, http://nces.ed.gov/
Education	Representation of women in tertiary education, all fields of study	Australia, Belgium, Brazil, Germany, India, Israel, Lithuania, Mexico, Netherlands, New Zealand, Portugal, Republic of Korea, Russian Federation, Sweden, Switzerland, United Kingdom	EFA Global Monitoring Report, UNESCO, 2003, Table 8 unesco.org
Education	Representation of women in tertiary education, all fields of study	Hong Kong, Singapore	Women's Indicators and Statistics Database, United Nations, Version 4 CD-ROM
Economic	Wage disparity between men and women	Manitoba, Ontario, Quebec	Statistics Canada, 2001, Census of Population Tables www.statcan.ca
Economic	Wage disparity between men and women	Indiana, Louisiana, Mississippi, New Hampshire, Ohio, Pennsylvania, Texas, Utah	Institute for Women's Policy Research, Appendix Table 3c, www.iwpr.org

Economic	Wage disparity between men and women	Australia, Belgium, Brazil, Germany, Hong Kong, Mexico, New Zealand, Portugal, Republic of Korea, Singapore	World Bank, Gender Stats genderstats.worldbank.org
Economic	Wage disparity between men and women	Lithuania, Netherlands, Russian Federation, Sweden, Switzerland, United Kingdom	Economic Commission for Europe, Table 5A.2
Economic	Women's economic activity rate	Manitoba, Ontario, Quebec	Statistics Canada, 2001, Census of Population Tables www.statcan.ca
Economic	Women's economic activity rate	Indiana, Louisiana, Mississippi, New Hampshire, Ohio, Pennsylvania, Texas, Utah	US Census Fact Finder Sheets, 2000 factfinder.census.gov
Economic	Women's economic activity rate	Australia, Belgium, Brazil, Germany, Hong Kong, Israel, Lithuania, Mexico, Netherlands, New Zealand, Portugal, Republic of Korea, Russian Federation, Singapore, Sweden, Switzerland, United Kingdom	United Nations, Social Indicators unstats.un.gov
Economic	Women's economic activity rate	India	Women's Indicators and Statistics Database, United Nations, Version 4 CD-ROM
Economic	Gender segregation, agriculture, industry and service	Manitoba, Ontario, Quebec	Statistics Canada, 2001, Census of Population Tables www.statcan.ca
Economic	Gender segregation, agriculture, industry and service	Indiana, Louisiana, Mississippi, New Hampshire, Ohio, Pennsylvania, Texas, Utah	Bureau of Labor Statistics, 2000 www.bls.gov
Economic	Gender segregation, agriculture, industry and service	Australia, Belgium, Brazil, Germany, Hong Kong, Israel, Lithuania, Mexico, Netherlands, New Zealand, Portugal, Republic of Korea, Russian Federation, Singapore, Sweden, Switzerland, United Kingdom	World Bank, Gender Stats genderstats.worldbank.org

Control Variable	Region	Resource
Per Capita Gross Domestic Product	Manitoba, Ontario, Quebec	ESTAT, Statistics Canada Tables 384-0002, 051-0001 http://estat.statcan.ca
Per Capita Gross Domestic Product	Indiana, Louisiana, Mississippi, New Hampshire, Ohio, Pennsylvania, Texas, Utah	Bureau of Economic Analysis, US Department of Commerce http://www.bea.gov
Per Capita Gross Domestic Product	Indiana, Louisiana, Mississippi, New Hampshire, Ohio, Pennsylvania, Texas, Utah	http://www.fedstats.gov
Per Capita Gross Domestic Product	Manitoba, Ontario, Quebec, Australia, Belgium, Brazil, Germany, Hong Kong, India, Israel, Lithuania, Mexico, Netherlands, New Zealand, Portugal, Republic of Korea, Russian Federation, Singapore, Sweden, Switzerland, United Kingdom	World Bank http://www.worldbank.org/data

Table 2
Sample Descriptives

Case	Level of Status of Women Data	Number Of Sites
Australia	National	1
Belgium	National	1
Brazil	National	1
Germany	National	1
Hong Kong	Territorial	1
India	National	1
Indiana	State	1
Israel	National	1
Lithuania	National	1
Louisiana	State	1
Manitoba	Provincial	1
Mexico	National	1
Mississippi	State	1
Netherlands	National	1
New Hampshire	State	2
New Zealand	National	1
Ohio	State	1
Ontario	Provincial	3
Pennsylvania	State	1
Portugal	National	1
Quebec	Provincial	2
Republic of Korea	National	1
Russian Federation	National	1
Singapore	National	1
Sweden	National	1
Switzerland†	National	1
Texas	State	4
United Kingdom	National	2
Utah	State	1

† French and German students were sampled at the University of Freiberg

(Straus, 2001)

Table 3
Preliminary Status of Women Items

Dimension	Item	Calculation of Item
Political	Representation of women in government	Total number of women in government/ total number of men in government
Political	Number of years since women's suffrage	Year 2000 – Year women were granted the vote
Reproductive control	Age-specific abortion rate	(Number of abortions for the year 2000/ Number of women in the population between the ages of 15-44 years) * 1000
Reproductive control	Restrictions on abortion laws	0 = No restrictions on abortion laws 1 = At least one restriction on abortion laws
Reproductive control	Age-specific fertility rate	(Number of births for the year 2000/ Number of women in the population between the ages of 15-44 years) * 1000
Education	Representation of women in tertiary education, all fields of study	% of enrolled students that are women/ % of enrolled students that are men
Economic	Wage disparity between men and women	Women's average wage/ Men's average wage
Economic	Women's economic activity rate	% women of all women employed/ % men of all men employed
Economic	Gender segregation, agriculture	% of agriculture workers that are women/ % of agriculture workers that are men
Economic	Gender segregation, industry	% of industry workers that are women/ % of industry workers that are men
Economic	Gender segregation, service	% of service workers that are women/ % of service workers that are men

Table 4
*Data Substitutions Made During Item Creation**

Dimension	Item	Region	Substitution
Political	Representation of women in government	Hong Kong	1997-1998 data
Political	Representation of women in government	Brazil, Germany, Netherlands, Sweden	1998 data
Political	Representation of women in government	Belgium, India, Israel, New Zealand, Portugal, Russian Federation, Switzerland	1999 data
Political	Representation of women in government	Australia, Singapore, United Kingdom	2001 data
Political	Representation of women in government	Hong Kong	National level data (China)
Reproductive control	Restrictions on abortion laws	All regions	1998 data
Reproductive control	Age-specific fertility rate	India	1998 data
Reproductive control	Age-specific fertility rate	Belgium, Germany, Netherlands, Portugal, Russian Federation, Sweden, Switzerland, United Kingdom	1999 data
Education	Representation of women in tertiary education, all fields of study	Hong Kong	1993-1994 data
Education	Representation of women in tertiary education, all fields of study	Singapore	1995 data
Education	Representation of women in tertiary education, all fields of study	Manitoba, Ontario, Quebec	1998-2000 data
Economic	Wage disparity between men and women	Germany	1990 data
Economic	Wage disparity between men and women	Netherlands	1995 data
Economic	Wage disparity between men and women	Russian Federation	1996 data
Economic	Wage disparity between men and women	Sweden	1997 data
Economic	Wage disparity between men and women	India	1997-1998 data
Economic	Wage disparity between men and women	Lithuania, Switzerland	1998 data
Economic	Wage disparity between men and women	Louisiana, Mississippi, New Hampshire, Ohio, Pennsylvania, Texas, Utah, United Kingdom	1999 data
Economic	Wage disparity between men and women	Manitoba, Ontario, Quebec	2001 data
Economic	Wage disparity between men and women	Israel	Swiss data used as a proxy**
Economic	Women's economic activity rate	India	Used 1995 data

Economic	Women's economic activity rate	Manitoba, Ontario, Quebec, Brazil	Used 2001 data
Economic	Women's economic activity rate	Lithuania	Used 2002 data
Economic	Women's economic activity rate	Australia, Belgium, Germany, Hong Kong, Israel, Mexico, Netherlands, New Zealand, Portugal, Republic of Korea, Russian Federation, Sweden, Switzerland, United Kingdom	Used 2003 data

* Only data substitutions for items used in the final analysis are detailed.
** Israeli data not available. Since the GINI coefficient for Israel is similar to Switzerland, Swiss data used as a proxy.

Table 5
Factor Loading Scores for Preliminary Dimensions and Status of Women Index

Dimension	Factor	Component 1	Component 2
Political	Representation of women in government	.82	-
Political	Number of years since women's suffrage	.82	-
Reproductive control	Age-specific abortion rate	-.72	-
Reproductive control	Restrictions on abortion laws	.72	-
Reproductive control	Age-specific fertility rate	.83	-

Table 6
Factor Loading Scores for Final Dimension Items

Dimension	Item	Component 1
Reproductive control	Restrictions on abortion laws	.84
Reproductive control	Age-specific fertility rate	.84
Economic	Wage disparity between men and women	.88
Economic	Women's economic activity rate	.88

Table 7
Bivariate Correlations for Preliminary Political Dimension Items

Item	Representation of women in government	Number of years since women's suffrage
Representation of women in government		.36
Number of years since women's suffrage	.36	

*p ≤ .05. **p ≤ .01. ***p ≤ .001.

Table 8
Bivariate Correlations for Preliminary Reproductive Control Dimension Items

Item	Age-specific abortion rate	Restrictions on abortion laws	Age-specific fertility rate
Age-specific abortion rate		-.25	-.42*
Restrictions on abortion laws	-.25		.42
Age-specific fertility rate	-.42*	.42*	

*p ≤ .05. **p ≤ .01. ***p ≤ .001.

Table 9
Bivariate Correlations for Preliminary Economic Dimension Items

Item	Gender wage disparity	Women's economic activity rate	Gender segregation, agriculture	Gender segregation, industry	Gender segregation, service
Gender wage disparity		.54**	.09	-.14	-.27
Women's economic activity rate	.54**		-.21	-.54**	.11
Gender segregation, agriculture	.09	-.21		.48*	-.46*
Gender segregation, industry	-.14	-.54**	.48*		-.28
Gender segregation, service	-.27	.11	-.46*	-.28	

*p ≤ .05. **p ≤ .01. ***p ≤ .001.

Table 10
Bivariate Correlations for Status of Women Index

Dimension	Political	Reproductive control	Education	Economic
Political		-.35	.26	.47*
Reproductive control	-.35		-.30	-.57**
Education	.26	-.30		.44*
Economic	.47*	-.57**	.44*	

*p ≤ .05. **p ≤ .01. ***p ≤ .001.

Table 11
Rank Order of Cases Listed By Descending Order of Status of Women

Political†	Control Over Body	Education	Economic †
Sweden	Hong Kong	Quebec	Sweden
Germany	Russian Federation	Ontario	Australia
Netherlands	Lithuania	Manitoba	New Zealand
New Hampshire	Germany	Lithuania	Lithuania
New Zealand	Quebec	Mississippi	Israel
Ontario	Ontario	Sweden	Manitoba
Manitoba	Sweden	New Zealand	Quebec
Australia	Belgium	Louisiana	Russian Federation
Quebec	New Hampshire	New Hampshire	Switzerland
Belgium	Pennsylvania	Portugal	New Hampshire
Switzerland	Singapore	Israel	Ontario
Hong Kong	Netherlands	Brazil	United Kingdom
Utah	Manitoba	Ohio	Belgium
Ohio	Australia	Russian Federation	Ohio
Indiana	Ohio	Pennsylvania	Germany
Texas	Indiana	Texas	Netherlands
Portugal	Louisiana	United Kingdom	Pennsylvania
United Kingdom	Mississippi	Australia	Indiana
Louisiana	Texas	Indiana	Portugal
Mexico	Utah	Belgium	Singapore
Mississippi	Portugal	Netherlands	Brazil
Pennsylvania	Switzerland	Utah	Mississippi
Israel	Republic of Korea	Mexico	Louisiana
Singapore	United Kingdom	Germany	Texas
Lithuania	Brazil	Hong Kong	Utah
India	New Zealand	Switzerland	Hong Kong
Russian Federation	Israel	India	Republic of Korea
Brazil	Mexico	Republic of Korea	India
Republic of Korea	India	Singapore	Mexico

† Dimensions that have a significant relationship with at least one dependent variable

Table 12
Descriptive Summary of Status of Women Items

Status of Women Items	Minimum	Maximum	Mean
Representation of women in government	0.04	0.75	0.27
Restrictions on abortion laws†	0	5	0.9
Age-specific fertility rate	30.4	129.4	63.0
Post-secondary enrollment ratio	0.4	3.1	1.24
Wage disparity between men and women	0.5	0.9	0.70
Women's economic activity rate	0.47	0.95	0.77

† Total number of abortion restrictions possible: 7

Table 13
Rank Ordering of Cases Listed By Ascending Value of Dependent Variables

Dominance/ Control (Men) †	Severe Violence (Men)†	Severe Violence (Women)†	Minor Violence (Men)	Minor Violence (Women)
Quebec	Sweden	Sweden	Australia	Israel
Sweden	Singapore	Netherlands	Mississippi	Utah
Belgium	New Zealand	Pennsylvania	Portugal	Australia
Netherlands	Utah	Germany	Quebec	Portugal
New Zealand	Hong Kong	Portugal	Ohio	Mississippi
Switzerland	Belgium	Singapore	Singapore	Ohio
Manitoba	Pennsylvania	Switzerland	Israel	Brazil
Germany	Portugal	Utah	Utah	Sweden
Utah	Switzerland	Brazil	New Zealand	Pennsylvania
United Kingdom	Lithuania	Belgium	Ontario	India
Australia	Brazil	Quebec	Louisiana	Republic of Korea
Pennsylvania	Netherlands	New Hampshire	Brazil	Texas
Israel	Quebec	Israel	India	Quebec
Portugal	United Kingdom	Texas	Republic of Korea	Manitoba
Ontario	Germany	Lithuania	Pennsylvania	Switzerland
New Hampshire	New Hampshire	Manitoba	Indiana	New Hampshire
Indiana	Israel	New Zealand	Russian Federation	Germany
Mississippi	Australia	Indiana	New Hampshire	Ontario
Brazil	Mexico	Ohio	United Kingdom	Indiana
Singapore	Ohio	United Kingdom	Manitoba	New Zealand
Mexico	Ontario	Ontario	Sweden	Singapore
Ohio	Texas	Mexico	Lithuania	United Kingdom
Texas	Manitoba	Russian Federation	Texas	Louisiana
Louisiana	Republic of Korea	Australia	Switzerland	Belgium
Lithuania	Russian Federation	Mississippi	Hong Kong	Netherlands
Hong Kong	Mississippi	Hong Kong	Belgium	Hong Kong
Republic of Korea	Indiana	Republic of Korea	Mexico	Lithuania
India	India	Louisiana	Netherlands	Mexico
Russian Federation	Louisiana	India	Germany	Russian Federation

† Has a significant relationship with at least one status of women dimension

Table 14
Descriptive Summary of Dependent Variables

	Minimum	Maximum	Mean
Men's Control Scores	1.63	2.38	1.91
Men's Use of Severe Violence Scores	1.20	37.00	13.09
Women's Use of Severe Violence Scores	1.90	30.10	13.07
Men's Use of Minor Violence Scores	3.80	27.10	15.34
Women's Use of Minor Violence Scores	10.10	36.30	20.41

Table 15
Summary of Regression Analyses for Men's Use of Control Tactics

Model 1	R^2	B	SE B	β
Political dimension	.46	-0.74	0.16	-.68***
Reproductive control dimension	.01	0.02	0.03	-.10
Education dimension	.14	-0.14	0.06	-.38*
Economic dimension	.25	-0.09	0.03	-.50**
Model 2				
Political dimension	.49	-0.64	0.17	-.58***
Reproductive control dimension	.23	-0.02	0.03	-.10
Education dimension	.36	-0.13	0.06	-.36*
Economic dimension	.35	-0.07	0.03	-.38*

$^{\dagger}p \leq .10$. $^{*}p \leq .05$. $^{**}p \leq .01$. $^{***}p \leq .001$.

Table 16
Summary of Regression Analyses for Men's Use of Severe Violence

Model 1	R^2	B	SE B	β
Political dimension	.17	-23.24	9.94	-.41*
Reproductive control dimension	.03	1.51	1.74	.17
Education dimension	.00	0.11	3.55	.01
Economic dimension	.14	-3.37	1.64	-.37*
Model 2				
Political dimension	.17	-25.09	11.38	-.44*
Reproductive control dimension	.03	1.22	1.92	.13
Education dimension	.02	0.17	3.59	.01
Economic dimension	.14	-3.35	1.79	-.37†

$^{\dagger}p \leq .10$. $^{*}p \leq .05$. $^{**}p \leq .01$. $^{***}p \leq .001$.

Table 17

Summary of Regression Analyses for Women's Use of Severe Violence

Model 1	R^2	B	SE B	β
Political dimension	.20	-20.81	8.04	-.45*
Reproductive control dimension	.05	1.76	1.41	.23
Education dimension	.02	-2.33	2.89	-.15
Economic dimension	.22	-3.51	1.29	-.46**
Model 2				
Political dimension	.22	-17.33	9.11	-.37†
Reproductive control dimension	.12	0.91	1.51	.12
Education dimension	.13	-2.19	2.78	-.14
Economic dimension	.25	-3.00	1.37	-.40*

†p ≤ .10. *p ≤ .05. **p ≤ .01. ***p ≤ .001.

Table 18

Bivariate Correlations for Intimate Terrorism Items

Item	Men's use of control tactics	Men's use of severe violence	Women's use of severe violence
Men's use of control tactics		.54**	.66**
Men's use of severe violence	.54**		.72**
Women's use of severe violence	.66**	.72**	

*p≤ .05. **p≤.01. ***p≤.001.

Table 19

Summary of Regression Analyses for Men's Use of Minor Violence

Model 1	R^2	B	SE B	β
Political dimension	.10	10.01	5.91	.31
Reproductive control dimension	.01	-0.40	1.00	-.08
Education dimension	.06	-2.64	1.96	-.25
Economic dimension	.04	-0.97	0.99	-.19
Model 2				
Political dimension	.10	11.30	6.76	.35
Reproductive control dimension	.01	-0.30	1.11	-.06
Education dimension	.07	-2.66	1.99	-.25
Economic dimension	.06	-1.26	1.06	-.24

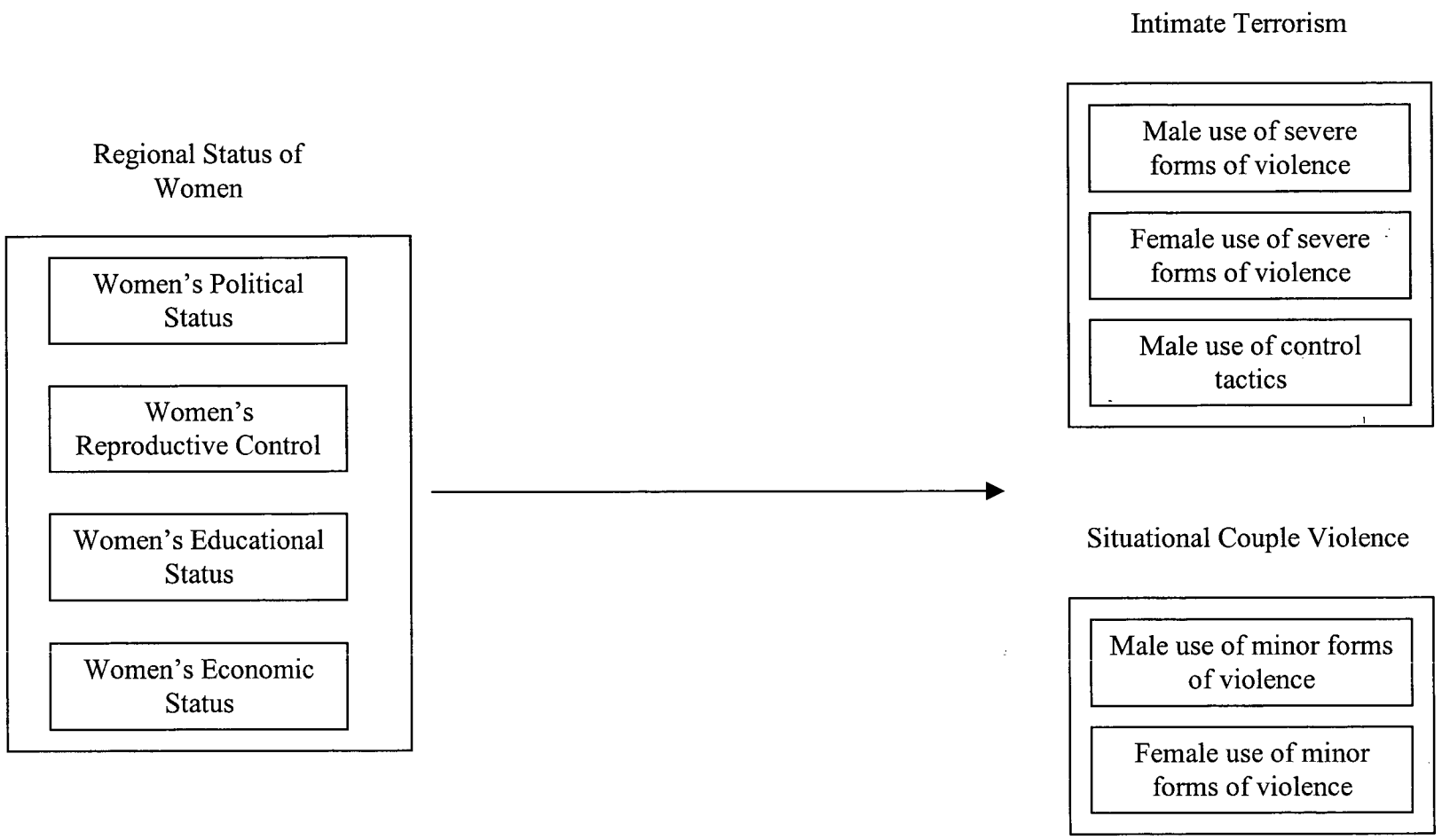
†p ≤ .10. *p ≤ .05. **p ≤ .01. ***p ≤ .001.

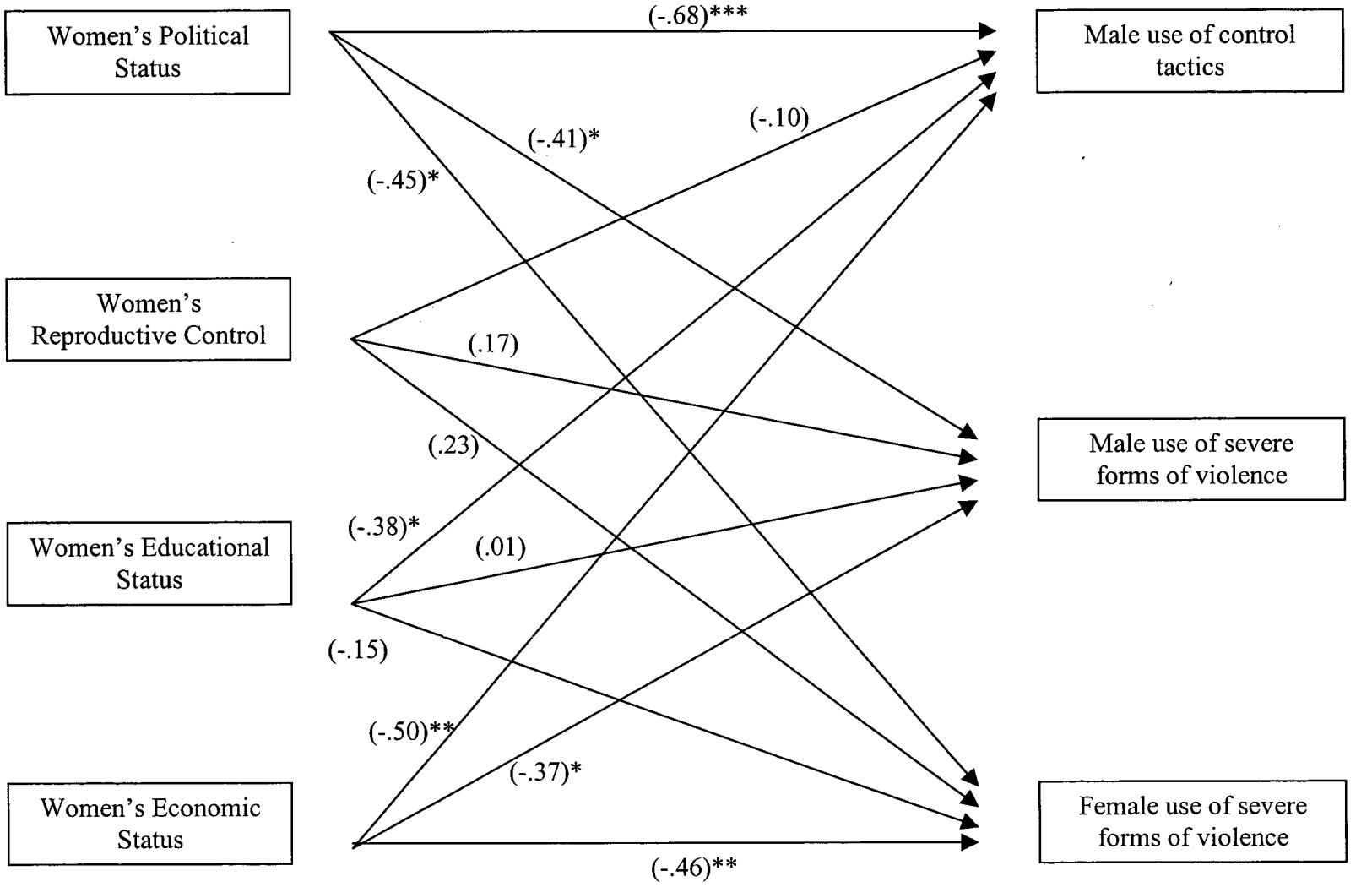
Table 20

Summary of Regression Analyses for Women's Use of Minor Violence

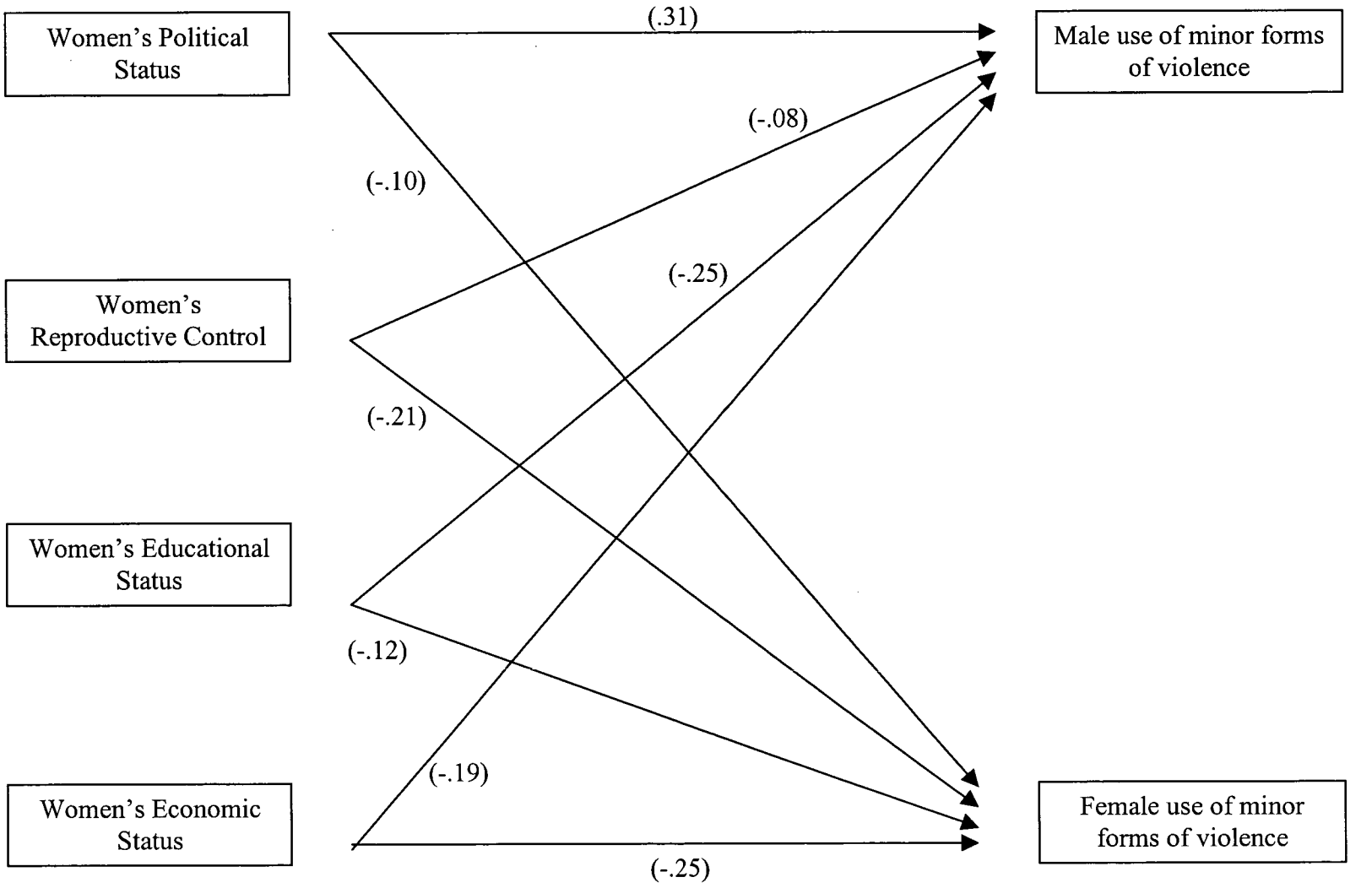
Model 1	R^2	B	SE B	β
Political dimension	.01	-3.85	7.41	-.10
Reproductive control dimension	.04	-1.31	1.18	-.21
Education dimension	.01	-1.52	2.41	-.12
Economic dimension	.06	-1.57	1.17	-.25
Model 2				
Political dimension	.10	2.12	8.12	.06
Reproductive control dimension	.23	-2.45	1.18	-.39*
Education dimension	.11	-1.41	2.34	-.11
Economic dimension	.12	-1.02	1.23	-.16

$^{\dagger}p \leq .10$. $^{*}p \leq .05$. $^{**}p \leq .01$. $^{***}p \leq .001$.

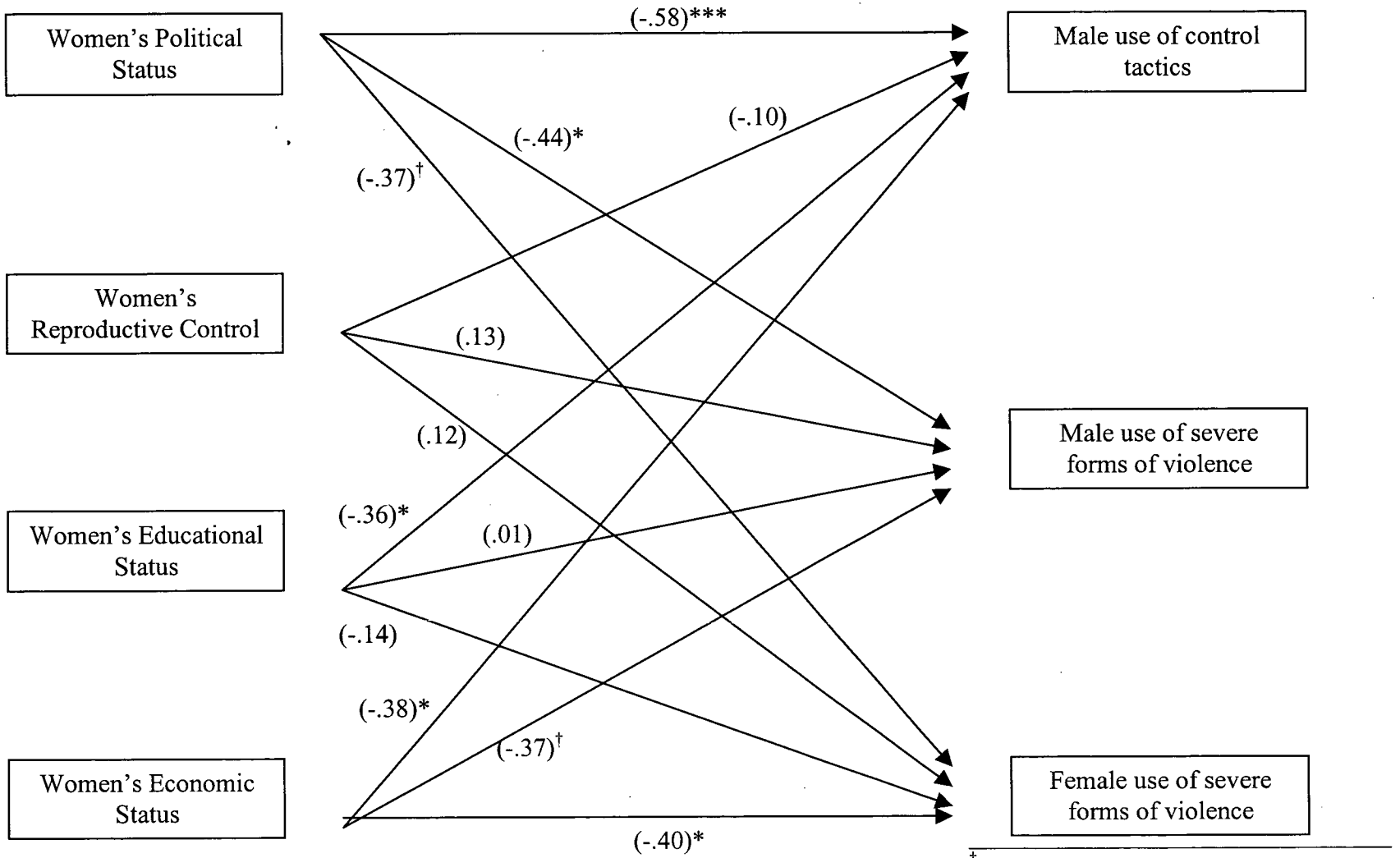

Regional Status of Women
Women's Political Status
Women's Reproductive Control
Women's Educational Status
Women's Economic Status
Intimate Terrorism
Male use of severe forms of violence
Female use of severe forms of violence
Male use of control tactics
Situational Couple Violence
Male use of minor forms of violence
Female use of minor forms of violence


Women's Political Status
Women's Reproductive Control
Women's Educational Status
Women's Economic Status
Male use of control tactics
Male use of severe forms of violence
Female use of severe forms of violence
(-.68)***
(-.41)*
(-.10)
(-.45)*
(.17)
(.23)
(-.38)*
(.01)
(-.15)
(-.50)**
(-.37)*
(-.46)**

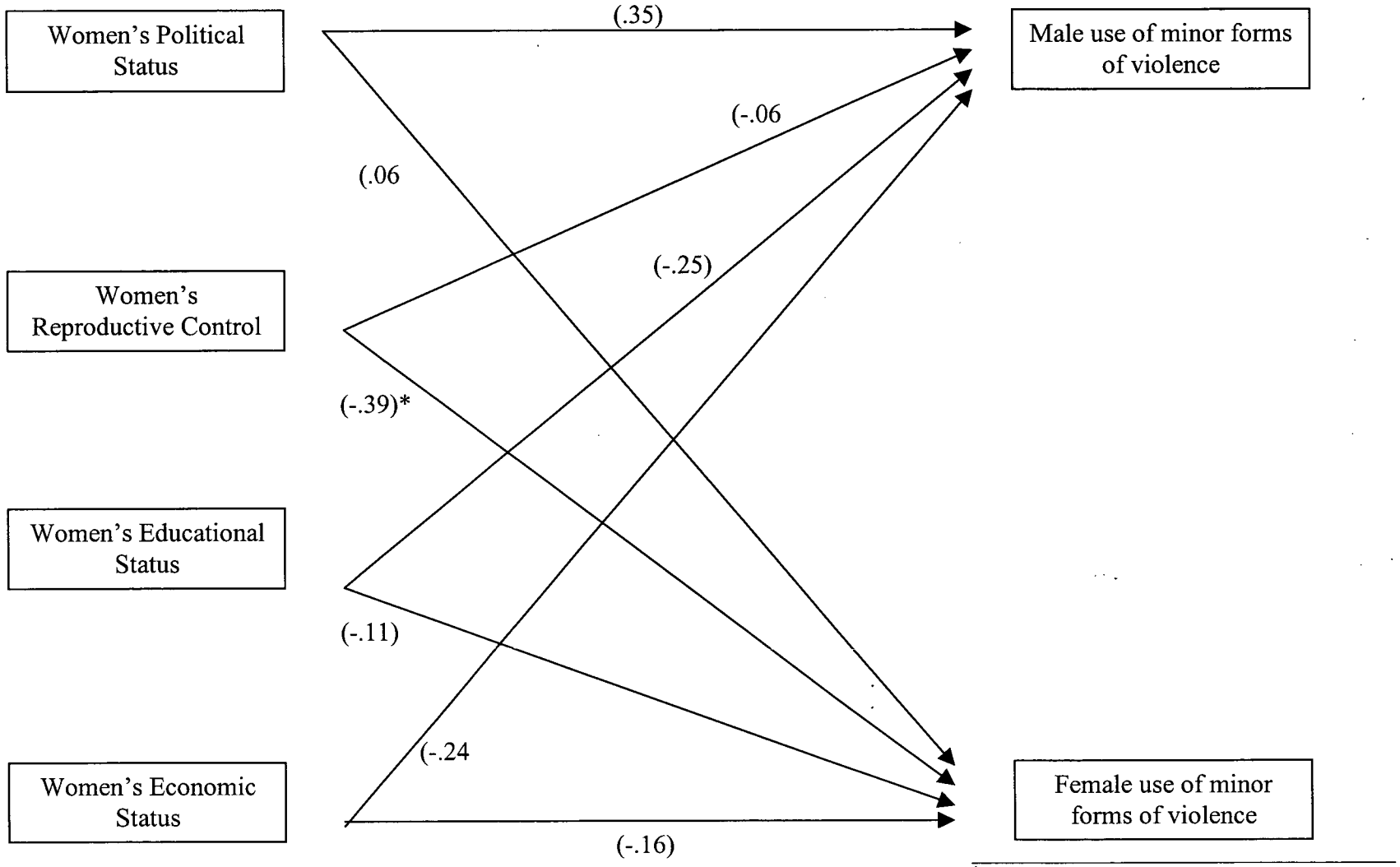
*p ≤ .05. **p ≤ .01. ***p ≤ .001.


Women's Political Status
Women's Reproductive Control
Women's Educational Status
Women's Economic Status
Male use of minor forms of violence
Female use of minor forms of violence
(.31)
(-.08)
(-.10)
(-.25)
(-.21)
(-.12)
(-.19)
(-.25)

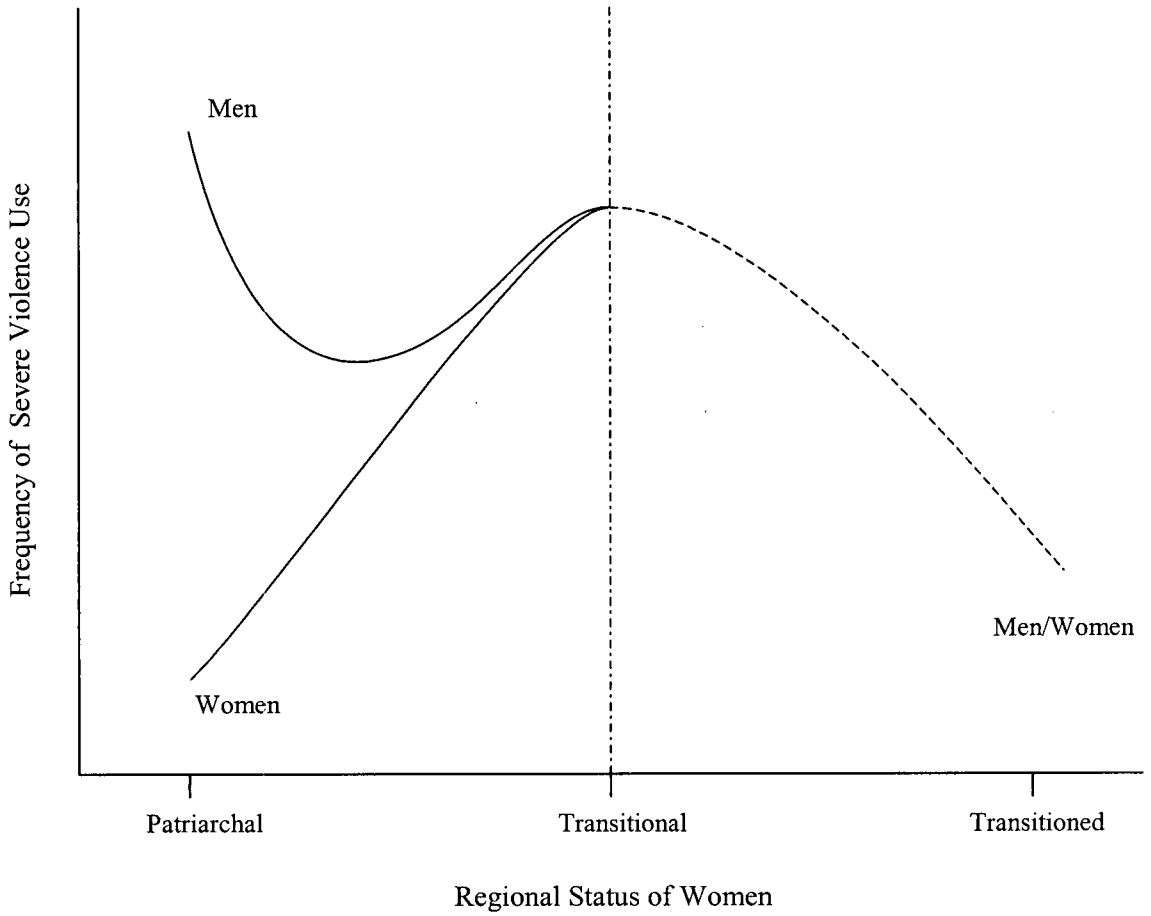
*p ≤ .05. **p ≤ .01. ***p ≤ .001.



†p ≤ .10. *p ≤ .05. **p ≤ .01. ***p ≤ .001.



$^{\dagger}p \leq .10$. $*p \leq .05$. $**p \leq .01$. $***p \leq .001$.


Men
Women
Men/Women
Frequency of Severe Violence Use
Patriarchal
Transitional
Transitioned
Regional Status of Women

Appendix 1: Intimate Partner Violence Severity Measure

No matter how well a couple gets along, there are times when they disagree, get annoyed with the other person, want different things from each other, or just have spats or fights because they are in a bad mood, are tired or for some other reason. Couples also have many different ways of trying to settle their differences. This is a list of things that might happen when you have differences. Please mark how many times you did each to these things in the past year, and how many times your partner did them in the past year. If you or your partner did not do one of these things in the past year, but it happened before that, mark a "7" on your answer sheet for that question. If it never happened, mark an "A8" on your answer sheet.

How often did this happen?
1 = Once in the past year
2 = Twice in the past year
3 = 3-5 times in the past year
4 = 6-10 times in the past year
5 = 11-20 times in the past year
6 = More than 20 times in the past year
7 = Not in the past year, but it did happen before
8 = This has never happened

Dimension 1: Violent Acts (Minor)

Item 1: Threw something at my partner that could hurt
Item 2: Twisted my partner's arm or hair
Item 3: Pushed or shoved my partner
Item 4: Grabbed my partner
Item 5: Slapped my partner

Dimension 2: Violent Acts (Severe)

Item 1: Used a knife or gun on my partner
Item 2: Punched or hit my partner with something that could hurt
Item 3: Choked my partner
Item 4: Slammed my partner against a wall
Item 5: Beat up my partner
Item 6: Burned or scalded my partner on purpose
Item 7: Kicked my partner

(Straus et al., 1996)

Appendix 2: Control Measure

The following statements are about you or about the relationship between you and someone else such as your parents or a partner. Please read each statement and fill in one of the circles to indicate how much you *agree or disagree* with it.

For questions about your partner in a relationship:
If you are currently in a relationship that has lasted *one month or more,* answer about that relationship. If you are *not now* in a relationship, but *have been* in a relationship that lasted *one month or more* in the past, answer about what went on during the most recent relationship of that length. If you have *not* been in a relationship that *lasted one month or more,* omit the question about partners and relationships.

1 = Strongly Disagree
2 = Disagree
3 = Agree
4 = Strongly Agree

Dimension 1: Authority
Item 1: Sometimes I have to remind my partner of who's boss
Item 2: My partner and I generally have equal say about decisions (R)
Item 3: My partner needs to remember that I am in charge

Dimension 2: Disparagement
Item 1: My partner is basically a good person (R)
Item 2: People usually like my partner (R)
Item 3: My partner doesn't have enough sense to make important decisions

Dimension 3: Restrictiveness
Item 1: I have a right to know everything my partner does
Item 2: I insist on knowing where my partner is at all times
Item 3: I have a right to be involved with anything my partner does

(Straus et al., 1999)