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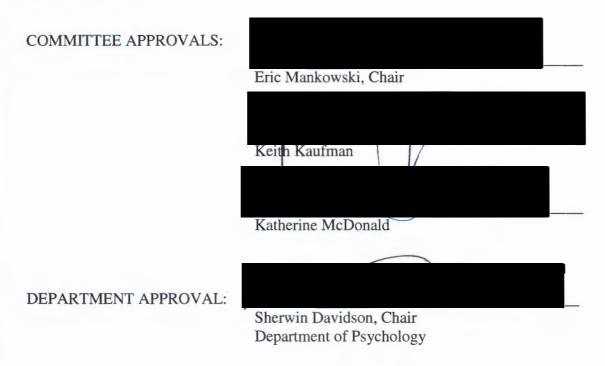
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#### THESIS APPROVAL

The abstract and thesis of Mary Elisabeth Gray for the Master of Science in Psychology were presented June 2, 2009, and accepted by the thesis committee and the department.



#### ABSTRACT

An abstract of the thesis of Mary Elisabeth Gray for the Master of Science in Psychology presented June 2, 2009.

Title: The relationship of group support, majority status, and interpersonal dependency in predicting intimate partner violence.

One of the most common community responses to intimate partner violence is batterer intervention programs (BIPs), which are aimed at ending perpetrators' violent behavior. Unfortunately, however, the success rates of BIPs are questionable (Aldarondo, 2002; Gondolf, 2002) and we do not know what factors of the program facilitate decreases in abusive behavior when this does occur. Specifically, it is unknown whether and how individual characteristics interact with intervention group dynamics to facilitate change. To better understand this gap in the literature, this study investigated the relationship between social support, group majority-minority status, and interpersonal dependency in predicting intimate partner violence. The study utilizes data collected for a larger study sampling 180 men enrolled in a batterer intervention program in Portland, Oregon. It was hypothesized that partner violence is positively related to interpersonal dependency and negatively related to group social support. Furthermore, it was hypothesized that majority-minority group status moderates the relationship between group social support and intimate partner violence. As predicted, men who were more dependent on their partners also reported higher levels of psychological aggression perpetrated against their partners during the past 6-months. However, this relationship did not exist between interpersonal dependency and conflict tactics related to physical assault, injury, or sexual coercion. Further, perceived social support in the group did not predict partner violence as hypothesized. However, among men who had attended nine or fewer BIP sessions, both group social support and interpersonal dependency were positively associated with psychological aggression. Finally, among men who were involved in an intimate relationship at the time of data collection, interpersonal dependency was positively related to psychological aggression and physical assault.

# 'THE RELATIONSHIP OF GROUP SUPPORT, MAJORITY STATUS, AND INTERPERSONAL DEPENDENCY IN PREDICTING INTIMATE PARTNER VIOLENCE

by

## MARY ELISABETH GRAY

A thesis submitted in partial fulfillment of the requirements for the degree of

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The relationship of group support, majority status, and interpersonal dependency in predicting intimate partner violence

#### Introduction

Intimate Partner Violence

Over the past few decades, intimate partner violence has emerged as one of humankind's most damaging social problems. Intimate partner violence (IPV) is defined by the Centers for Disease Control and Prevention to include physical violence, sexual violence, threats of violence, and psychological or emotional abuse (when prior violence has occurred or been threatened) that is perpetrated by a current or former spouse, boyfriend or girlfriend, or dating partner (CDC, 2006). Specifically, physical violence may include behaviors such as slapping, hitting, kicking, beating; sexual violence may include forced intercourse or rape and other forms of sexual coercion; psychological or emotional abuse may include acts of intimidation, belittling, and humiliation; and various forms of controlling behaviors may include isolating a person from their family and friends, monitoring them, restricting their access to information and resources (Krug, 2002). Statistics on the prevalence and brutality of intimate partner violence illustrate the severity of this social problem. For example, 24% of women and 12% of men report being a victim of intimate partner violence at some point during their lifetime (CDC, 2005). Furthermore, the CDC estimates 1,200 women are killed and two million are injured annually as the result of intimate partner violence (CDC, 2005). For example, the Department of Justice reported 1,158 women and 386 men were killed

by an intimate partner in 2004 (Department of Justice, Bureau of Justice Statistics, 2006).

Intimate partner violence has been associated with negative physical, mental health consequences among its victims (Coker et al., 2002; Golding, 1999), and their reproductive health (Pallitto & O'Campo, 2005), many of whom seek emergency medical care (Tjaden & Thoennes, 2000). In fact, 36% of all emergency room visits by women are the result of intimate partner violence (CDC, 2003). Consequently, prevalence rates of partner violence and the severity of abuse has been associated with extensive economic costs and health fees surpassing 8.3 billion dollars per year (CDC, 2003). In addition to physical health related injuries, there are also serious mental health effects as a result of isolation, humiliation, and ongoing threats of violence (Kirk & Okazawa-Ray, 2004). Moreover, chronically abused women report suffering more health problems than women who have never been abused or have experienced abuse to a lesser extent (Staggs & Riger, 2005).

Recently, serious debate has erupted among researchers and practitioners concerning the gender of both the perpetrators and victims of partner violence (Kimmel, 2002). Given the patriarchal culture of the United States, it is surprising that some research indicates that women in heterosexual relationships use physical violence against their partners as much or even more often than men (Archer, 2000). However, these findings do not necessarily represent gender symmetry of violent acts within the home (Kilmartin, 2007). Researchers tend to measure intimate partner violence using the Conflict Tactics Scale (CTS; Straus, 1979),

which counts the frequency of violent acts, but neglects to incorporate the context, motivation, and consequences of these acts. For that reason, women and men may report similar frequencies of perpetrating physically aggressive acts, but these acts may stem from very different contexts and motives, and result in different levels of injury (Archer). Kilmartin provides a detailed illustration of how one frequency count on the CTS can represent two very different acts of violence -- "Person A threatens to hit Person B in the head with a baseball bat and rushes towards Person B, who tries to push Person A away as Person A strikes Person B with the bat and causes a severe brain injury which leads to death." (p. 231). In this example, the CTS would measure both Person A and Person B's aggressive act with a frequency count of one, ignoring both the context and severity of each act (Kilmartin, 2007). In fact, researchers have found men's violence against their female partners to result in more severe injuries and be motivated uniquely by an attempt to dominate and terrorize their partner (Kantor, Kaufman, & Jasinski, 1998). For this reason, intimate partner violence must be understood in the context of an embedded social system of gender inequality, which produces different motives for abuse and differences in the resulting injury (Kilmartin, 2000). To illustrate two different motivations behind perpetrating partner abuse, one may initiate a physically abusive act towards an intimate partner out of aggression and domination or on the other hand, perpetration of physical abuse may be acted out in self-defense. Therefore, in considering the context, motivation, and severity intimate partner violence often is documented to be gender asymmetric in heterosexual relationships (Kilmartin, 2007) with men committing the majority of the violent acts and women most often falling the victim.

In understanding the context and consequences of intimate partner violence, it is important to realize that although IPV most often occurs within the home, partner abuse also has detrimental effects on the employment of both its victims and perpetrators. Literature suggests that intimate partner violence may result in different consequences on battered woman's ability and capability to work. Where some women struggle to work, others work but cannot sustain employment over time, and still others do not or cannot obtain jobs at all (Tolman & Raphael, 2000). Though intimate partner violence may not prevent some victims from working, it does prevent some victims from maintaining stable jobs due to safety concerns and job interference tactics by their abuser (Swanberg, Logan, & Macke, 2005). Browne, Salomon, & Bassuk (1999) report that women who experienced intimate partner violence had one third the odds of maintaining employment as did women who were not abused. Specifically, researchers, domestic violence advocates, health care providers, and employers report that consequences of intimate partner violence on employment of the victim may result in reduced productivity, work morale, absenteeism, safety, well being of all employees, increased health-carerelated costs, or employee turnover (Brownell, 1996; Swanberg, et al.; Tolman & Raphael). Employee turnover may result in poor economic consequences that may interfere with the health and stability of the family. In addition, the employment of partner abusive men may also be compromised. Job interference tactics used by the

perpetrator (e.g., work disruption, stalking, repeated phone calls) (Galvez, Mankowski, Glade, Ruiz, & Glass, 2008; Swanberg, et al.) impacts the victims' ability to work but, may also distract the perpetrator and take time away from his work and productivity. As a result of intimate partner violence, batterers report missing work and making careless mistakes on the job that result in physical injury and loss of productivity (Mankowski, Galvez, & Glass, 2008). Thus, the employment of both the victim and the perpetrator may be interrupted by intimate partner violence and consequently the workplace organization may experience a loss of productivity (Tolman & Raphael). Ultimately, this loss in productivity may affect workplace relationships with coworkers, supervisors, and customers (Mighty, 1997), as well as company wide production, including its material or intellectual contribution to society. As such, persons experiencing IPV may experience a minimized ability or opportunity to gain access to the built-in social support network that is inherent in a workplace.

Sadly, adults are not the only victims of intimate partner violence. It is estimated that between 10-20% of children are exposed to partner violence through their parents each year (Carlson, 2000). Moreover, as many as one third of children are exposed to intimate partner violence at some point during their childhood (Carlson). Exposure to partner violence results in a range of harmful effects on the children including implications in social learning, stress and coping, risk and resilience, and trauma (Carlson). Perhaps the most concerning is that children exposed to parental aggression are more likely to enter violent relationships as an

adult, either experiencing violence from or toward intimate partner (Carlson). Furthermore, exposure to violence in the home as a child may be associated with insecure attachment in childhood, which consequently is related to excessive interpersonal dependency in intimate adult relationships (Dutton, 1995). Such dependency is more prevalent among partner abusive men than their non-violent counterparts (Carney & Buttell, 2006; Murphy, Meyer, & O'Leary, 1994).

Bronfenbrenner's (1979) developmental ecological model can usefully be applied to intimate partner violence, highlighting how the social problem affects multiple levels of society. Intimate partner violence tends to most often be conceptualized within the field of psychology at the microsystem-level, particularly, on the victim's role or response to intimate partner violence. For example, attachment theory, learned helplessness, survivor theory, social exchange theories, investment models (Foa, Cascardi, Zoellner, & Feeny, 2000) battered woman syndrome, and rape trauma syndrome (Kirk & Okazawa-Rey, 2004) are conceptual models to address why victims remain in abusive relationships. In addition, literature has provided a vast knowledge of understanding of the negative physical and psychological consequences to intimate partner violence on its victims. While this information may inform development of interventions that can aid the healing and growth of the victim, it does not directly inform efforts to change the abusive behavior of the perpetrator, nor does it address how the overarching macrosystem-level influences violent behavior.

Research conducted on the cessation of violence at an individual (victim) level may be problematic, leading some to believe that the victim is somehow to blame. According to Ryan (1973) it is not strengthening the victim that leads to equality, but achievement of equality that will strengthen the victim as well as the victim – perpetrator relationship. Thus, research must also be conducted at a preventative level, focusing on changing beliefs, attitudes, and customs at the microsystem-level and through intervention programs at the ecosystem-level aimed at changing the behavior of the perpetrator at the microsystem-level.

Research conducted with perpetrators of intimate partner violence often focuses on the investigation of individual characteristics and environmental conditions that are correlated with the perpetration of violence and examining how men who batter their partners differ from men who do not. However, recent research has demonstrated that partner abusive men comprise a heterogeneous group who vary along key theoretical dimensions (Holtzworth-Munroe, Meehan, Stuart, Herron, & Rehman, 2000). One commonly utilized typology was proposed by Holtzworth-Monroe and Stuart (1994) to include three subtypes of batterers; family only, borderline-dysphoric, and generally violent-antisocial. The benefit of understanding the diversity amongst batterers is to enable researchers and practitioners to create interventions better tailored to fit the differences amongst this population. Holtzworth-Munroe's typology of batterers is based on three dimensions; (1) the severity of the abuse, (2) the generality of the violence, (3) the batterers psychopathology or personality disorder (Holtzworth-Monroe & Stuart).

Men that were classified into the family only subtype engage in the least amount of abuse overall, in abuse outside the home, and in criminal behavior, but exhibit no psychopathology. Men in the borderline-dysphoric group engage in moderate abuse aimed primarily at confining their partner, have borderline personality characteristics, and are prone to substance abuse. The generally-violent anti-social men engage in moderate to severe partner abuse, exhibit the highest level of extra familial aggression and criminal behavior, and are most likely to have antisocial personality disorder and problems with substance abuse (Holtzworth-Monroe & Stuart).

Although several batterer typologies have been theorized, such as

Holtzworth-Monroe and Stuart's cited above, intimate partner violence cuts across
all economic, racial, ethnic, education and class boundaries to affect people from
every backgrounds (Nicholson & Wilson, 2004). Some researchers have reported
correlations between several environmental factors or situations that may contribute
to increased rates of partner violence such as, economic stress and job strain (Fox,
Benson, DeMaris, & Wyk, 2004), substance abuse (Straus, Gelles, & Steinmetz,
1980), pregnancy (Gielen, O'Campo, Faden, Kass, Xue, 1994), and impulse control
(Rosenbaum & O'Leary, 1981). Moreover, the power imbalance between men and
women has led some researchers to believe that intimate partner violence is just one
of the many behavioral acts that promote, and stem from, this gender disparity
(Edleson & Tolman, 1992). In this view, intimate partner violence is the primary
means for men to control and maintain power over women (Cardarelli, 1997).

Therefore, it is clear that intimate partner violence must be understood as a contextual problem that may be linked to various environmental situations, personal characteristics, and social imbalances.

### Batterer Intervention Programs

Batterer intervention programs (BIPs) are the main preventive approach to IPV. These programs are typically conceptualized as education rather than therapeutic groups for partner abusive men (Mederos, 2002). BIPs are part of a community-level (i.e. criminal justice system) response to intimate partner violence. Established in the late 1970s (Edleson & Tolman, 1992; Gondolf, 2002), BIPs have become a major element of the community response to intimate partner violence (Mankowski, Wilson, Silvergleid, & Huffine, under review). By the mid 1980s, as a result of jail overcrowding and court-mandated counseling, partner abusive men were frequently referred, mandated, or both to BIPs by the criminal justice system (Gondolf, 1997; 2002). BIPs remain a central component in helping men stop their abusive behavior (Edleson & Tolman, 1992) and thus, a central component in the intervention of ending intimate partner violence.

Currently, BIPs vary in the format, duration, model and therapeutic approach they take towards changing violent behavior (Gondolf, 1997). In general, BIPs consist of weekly group counseling sessions for men arrested for assaulting their female partners (Gondolf, 2002) and generally last between 12-52 weeks (Babcock, Green, & Robie, 2004). Group treatment, a method that makes possible multiple sources of social support, of partner abusive men has been adopted as the

treatment of choice for men in batterer intervention programs (Tutty, Bidgood, Rothery, & Bidgood, 2001) for a variety of reasons. For example, one-to-one therapy was developed by mostly male therapists to treat mostly female clients and as such, it continues to hold a stigma that those seeking one-to-one treatment are weak (Kilmartin, 2000). This clashes with traditional masculine ideals that men are valued for being strong and in control (Kilmartin). Whereas one-to-one treatment does not provide a traditional masculine environment (Kilmartin), group-based treatment or intervention is more similar to classes or other group settings in which men have previously been involved (Schwartz & Waldo, 1999) and for that reason may be more comfortable and familiar. Benefits of group treatment are that it is reported to be less threatening to male participants than couple's therapy, it reduces social isolation, and provides peer social support (Edleson & Tolman, 1992). Moreover, group dynamics may be more successful than one-to-one therapy because peer influence may be more compelling than influence from therapists in an authoritative role (Schwartz & Waldo). This suggests focusing on the relationships among men in the BIP group in order to understand better how BIPs can be most effective designed.

The two most frequently used intervention models implemented in BIPs are a psychoeducational feminist approach known as the Duluth model and a cognitive behavioral group model (Babcock et al., 2004). In comparing these two models based on both victim reports and police records, neither model has proven more effective than the other (Babcock et al.). Regardless, most states place standards on

batterer intervention curriculum (Mederos, 2002). Interestingly, however, these standards are generally not based on empirical evidence (Babcock et al.).

Because of this lack of evidence, a fundamental research question continues to be whether batterer intervention programs are effective in changing men's abusive behavior? Some studies suggest that BIPs are effective for some men, some of the time. For example, Mederos (2002) reports that BIPs may provide more sustainable solutions to intimate partner violence than the short break in violence brought on by arrest. However, the results of most studies are not conclusive when considered together. In a meta-analytic review evaluating the effectiveness of BIPs, Babcock and colleagues (2004) found programs to have only a minimal impact on reducing intimate partner violence beyond the effect of being arrested. A few studies have found statistically significant reductions in both the severity and the frequency of the abuse of men in treatment (e.g., Tutty et al., 2001). One wellconducted study of four different BIPs from four different states, less than half (41%) of partner assaultive men, court mandated to a batterer intervention program, committed a re-assault during a 30-month follow-up period according to their female partners (Gondolf, 2000). These numbers indicate that the majority of the men in this study were successful in changing their abusive behaviors and moreover, remained violence-free for at least two and a half years. Even more encouraging, some studies report recidivism rates of less than 15% (Gondolf, 2002). As such, current literature is inconsistent in reporting batterer intervention effectiveness of reducing intimate partner violence (Aldarondo, 2002; Gondolf,

2002) and researchers are generally unsure as to why they are effective for some men and not others. For example, although literature suggests that social psychological processes underlie many prevalent aggressive behaviors (e.g., Geen, 2001), such as intimate partner violence, no research has examined how individual characteristics interact with social group dynamics in a BIP to affect men's abusive behavior.

To address this gap in the literature on behavior change, this project will analyze how three major social psychological constructs -- group social support, group majority-minority status, and interpersonal dependency -- are related to each other and to intimate partner violence among men in various stages of a batterer intervention program. As of yet, these social psychological processes have not been well studied in batterer intervention research. Understanding the relationship between social psychological processes and intimate partner violence would help inform efforts to make batterer intervention program curricula more effective. In the section to follow, I explain more fully these concepts of group social support, majority-minority group status, and interpersonal dependency before introducing a study designed to examine the relationship among these constructs and IPV.

# Group Social Support

Although it has been shown in some studies that treatment groups for partner abusive men have been associated with reductions in frequency and severity of abuse (Gondolf, 2000; Tutty et al., 2001), the specific support dynamics and

behavior provided by the group that enable men to change remain unknown. While some studies address processes of change in BIPs (e.g., Silvergleid & Mankowski, 2006), they do not specifically focus on social support or group dynamics. To address this lack of information, this project will investigate men's reported perceived social support within the batterer intervention group and its association to intimate partner violence. In this section, I will first define the concept of perceived social support, review research on social support, specifically looking at studies investigating the relationship between social support and stress, health, and behavior change, and conclude by defining perceived social support in a BIP group.

Social support can be conceptualized as either *structural* to assess the size and structure of an individual's social network or *functional* to assess whether particular support functions are perceived as available if needed (Stroebe & Stroebe, 1996). Functional social support can be further distinguished into either *perceived* or actual *received* support (Stroebe & Stroebe). The concept of perceived social support is defined by Blazer (1982) as "a subjective appraisal of the social network rather than observable characteristics of the network" (p. 692). Literature suggests that perceived social support provides more direct measures of social support than alternative measures of social integration (Cohen & Willis, 1985). In addition, perceived social support can be understood as an overall sense of acceptance (Sarason, Pierce, & Sarason, 1990).

Literature has linked social support to positive mental and physical health (Cohen & Willis, 1985; Pearson, 1986). Specifically, there is some agreement in

social support literature that *perceived* social support is the only aspect of social support as a whole that is related to positive health outcomes (Sarason et al., 1990). Moreover, literature suggests that social support may act as a stress buffer to the effects of psychosocial stressors (Bolger & Eckenrode, 1991; Cohen & Willis; Pearson) and has been associated with positive outcomes for individuals facing difficult life situations (Cutrona & Russell, 1990). Stress is defined as hardship or adversity (Lazarus, 1966) and may arise in an individual who faces challenging situations in which they are not prepared with the appropriate coping response (Cohen & Willis). The perception of social support may prevent negative reactions to a stressful event, as well as provide a solution to the problem and support for coping with stress (Cohen & Willis).

In this light, experiencing IPV as a victim or a perpetrator may be viewed as a psychosocial stressor. For example, social support has been associated with a significant reduction in poor perceived mental health in survivors of intimate partner violence (Coker et. al., 2002). Moreover, in a study conducted with imprisoned sex offenders, perceived social support was greater in those in the low-violent group (verbal coercion or forced sex without injury and withdrawal from assault because of the victim's resistance) than the high-violent group (physically aggressive sexual assault with vaginal or anal penetration, applying physical force or injuring even without penetration, and sexual murder), most significantly concerning support from male friends (Gutierres-Lobos et al., 2001).

In addition to providing support, social relationships may be seen as an added source of stress. Rook, Dooley, and Catalano (1991) found a positive relationship between husbands' level of job stress and their wives' psychological distress. Therefore, stress may be transferable through social relations and social relationship themselves may be seen as the source of stress. In addition, unemployment and economic stress has been associated with partner abuse (Straus & Gelles, 1986). While stress is not the sole cause of intimate partner violence (Edleson & Tolman, 1992), relationship stressors, in combination with other stressors or other variables, may increase the likelihood of violence (Straus, Gelles, Steinmetz, 1980).

Straus and colleagues (1980) report higher levels of intimate partner violence in isolated families with low levels of social support. In examining social support further, Eisikovits, Guttmann, Sela-Amit, and Edleson (1993) sought to (1) distinguish between couples with reported intimate partner violence and those where no such violence was reported and (2) to account for the variation in men's use of violence in relationships in which IPV has previously been reported. In regard to the first research question, partner abusive men reported lower levels of perceived availability and adequacy of close social support as compared to nonviolent men (Eiskovits et al.). In addressing the second research question, the authors report an interaction between perceived availability of support networks and conflict in child-related issues to predict men's violence. This is somewhat contrary to the findings presented by Straus and colleagues (1980) above, though

the significant findings did not exist with measures of adequacy of social support only with perceived availability of support networks. The authors propose that perceived availability of support networks, external to the intimate relationship in which the abuse occurs, "may reduce men's inhibitions against violence, since the marital relationship is not the only one available to them" (Eisikovits et al., p. 317).

By applying Cutrona and Russell's (1990) stress – social support matching model, changing violent behavior can be viewed as a potential *controllable* stressor. Although some men may initially feel that changing their violent behavior is uncontrollable, consistent among many batterer intervention programs is the pedagogy that practicing nonviolent behavior is a choice (Mederos, 2002) and thus, controllable. A controllable stressor can be seen as either a threat or a challenge (Cutrona & Russell, 1990). For men in batterer intervention programs a threat can represent the threat of criminal justice involvement or of losing a partner or children if the violent behavior does not cease and the *challenge* may represent the positive challenge to change one's violent behavior. In addition, other men in the batterer intervention group, as well as the group facilitator, may be seen as a threat and/or a challenge to the individual. Both batterers and facilitators within a group treatment describe how other men in the group might affect the batterer's process of change through providing supportive and also confrontational interactions (Silvergleid & Mankowski, 2006). For example, the group may provide support by helping a man work out a non-violent solution to a recent argument he had with his partner and the group may confront or challenge a member by calling a group

member out on his unacknowledged abusive behavior or pressing group members to share whether they have engaged in abusive behavior since the previous section. Participants in one batterer intervention program placed a high value on group facilitators confronting them about their denial and minimization of their violent behavior (Silvergleid & Mankowski). Thus, confrontational interactions can be seen as either a threat or a challenge, and may be necessary to change abusive behavior within group treatment. In addition, controllable stressors, such as changing violent and abusive behavior, require social support components that foster problem-focused coping (Cutrona & Russell). Problem-focused coping including advice, information, feedback, actual assistance, and emotional support (Cutrona & Russell) are likely to be present in batterer intervention programs. For example, in my own observations of a batterer intervention group, social support in the form of problem-focused coping was present among the group members via feedback to reported weekly abusive behavior and provided by the group facilitators through information presented about male gender roles and gender role conflict (O'Neil, Helms, Gable, David, & Wrightsman, 1986).

Social support may be an integral part of changing violent behavior for men in a batterer intervention program. For example, the Transtheoretical Model (TTM; Prochaska, 1979) includes a social support component. TTM has traditionally been applied to health promotion behaviors such as weight management and smoking cessation, but has recently been applied to men in batterer intervention programs (Eckhardt, Babcock, & Homack, 2004). The model states that the change process is

cyclical in nature and moves through five different stages; pre-contemplation, contemplation, action, maintenance, and relapse (Prochaska & DiClemente, 1983). Eckhardt and colleagues applied the Transtheoretical Model to a cross-sectional sample of men in a batterer intervention program and reported that men in more advanced stages of change reported using more behavior change processes, which include "helping relationships (social support, opening up to trusted others)" (p. 82).

In the present study, I will investigate whether perceived social support of men facing similar stressful life situations, such as partner violence and changing abusive behavior, may assist other men in the group in becoming nonviolent. For the purpose of this study, group social support is defined as the perceived support received from and provided to other men in a batterer intervention group, self-reported by the individual participant. Specifically, perceived social support will be measured amongst batterer intervention group members who may share the common goal of becoming non-violent and therefore, I predict social support to be positively related to non-violent behavior. Further, I predict perceived social support to be higher among men who have been in the BIP for a longer amount of time, than those relatively new to the group.

Group Majority-Minority Status and Group Identifications

Many researchers believe the composition of a group may influence the group's structure, dynamics, and performance (Moreland & Levine, 2003). Group composition refers to the demographics of people that make up a group. In this

section, I will review literature that addresses how group dynamics differ for members who make up the majority or the minority of the group. This is particularly important in understanding how batterer intervention programs may facilitate change for men who are similar to or different from other men in the group. I will first define group status in social psychology, then review research on group majority-minority status and conclude by defining group status in a BIP group, as it will be defined this study.

Each member of a group is respected to differing degrees and hold unequal levels of power to exert influence or control over the other group members (Brown, 1988). In social psychological literature, group status is hierarchically defined and changes with changes in group membership, when group members enter and leave a group (Brown). A group member's status is influenced by the degree to which they are similar to other members in their group (majority) or different (minority) from the other members.

Group status may influence how group members interact in the group, for example, how they provide and receive support from each other. Differences in received support could affect whether members are affected by group participation, for example, whether they reduce their violent behavior over time. As reported by Brown (1988), the most easily observed social influence is seen in individuals who conform to the attitudes and behaviors of the majority group. The group is thought to be a cohesive group in that group members readily accept program goals, decisions, and norms (Forsyth, 2004). Research suggests that therapeutic groups,

such as a BIP group, are most successful when they are cohesive (Forsyth). Brown highlights three individual motivations in conforming to the majority — the need to depend on others for information, achievement of unified group goals, and the need for approval out of not wanting to be different. These can each be applied to understanding the many different possible motivations of men in BIP groups. For example, the need to depend on others for information may be seen when men new to a BIP group depend on the majority of other men who have been in the program longer for guidance and group participation norms. Achievement of unified group goals may be viewed as a positive motivator when a BIPs' unified group goal is to become nonviolent. The need for approval out of not wanting to be different may occur in men that sensor their check-ins with the group to highlight the behaviors that conform and shadow the behaviors that go against the program goals.

In a BIP group, majority influence can be seen as either a positive or negative influence on the achievement of program outcome goals. If the majority group is unified in the goal of becoming non-violent, social influence and conformity to this majority group likely would lead to a positive outcome. On the other hand, if the majority group is not motivated to change their violent behavior, conforming to the majority would be seen as negative and conversely being deviant or a minority of this group would be positive. For the purpose of this study, I will assume the group is unified on the positive outcome goal of becoming nonviolent.

Deviates and members of the minority group have also been shown to influence the majority (Brown, 1988). Moreover, people of high prestige or status

[in our society] may be more influential than low status people (Forsyth, 1990). Therefore, socially high-status members who do not conform to the majority may be more accepted and feel less pressure to conform than low-status deviants (Forsyth). For example, if a BIP group majority is of low socioeconomic status and of color, a white man of high socioeconomic status may not feel the same pressure to conform to the majority because based on his demographics he holds prestige in our society. In the assumption that the unified group goal is to be nonviolent, the minority status member would report higher rates of IPV than the majority. However, if the group is not unified on the goal of nonviolence, but are unified on another goal, such as finishing the program without the concern for changing violent behavior, the minority status member may report less IPV than the majority. In addition, the high status man may hold higher influence over other group members even if he is a minority in the group context. Conversely, men with low social status may make up the majority, in which their social influence may be greater within the BIP group than outside it.

Additionally, the number of sessions a man has attended the BIP group could also be influential regardless of majority-minority group status. For example, new members are socialized to think and act more like experienced members of the group (Levine, 1989). In this sense, experience in the BIP group is positively related to the level of status the man holds. For example, a man in his last weeks in the program may be viewed as a senior member of the group and perceived as

having more wisdom and authority over other group members than men who have attended the group for only a few weeks.

We can assume that most men in a BIP group are similar to each other on at least three common dimensions. These men are male, heterosexual, and share an experience and common problem relating to the perpetration of IPV. However, men may either acknowledge or deny these IPV experiences. By virtue of this commonality, social support theorists believe that similar group members can provide resources -- such as understanding, information, and acceptance to each other -- that those who do not share these experiences cannot provide (Medvene, 1992). Researchers have theorized that support groups must be carefully composed of group members who are likely to view other group members as similar with respect to both the nature of their adversity [commonality] and their demographic characteristics (Helgeson & Gottleb, 2000)

Social support researchers have not determined when and why support is sought from those who are more similar to or different from us. Preliminary results of the effectiveness of using culturally specific counseling for abusive African American men demonstrated that participants felt more comfortable and more willing to talk within a culturally homogenous group than in a mixed group (Williams, 1995). But, we do not know generally whether abusive men who are dissimilar from in a group treatment others (i.e., of minority status) receive and provide as much support as men who are more similar to others (i.e., majority status) in the group (Nadler, 1997).

More broadly, an interesting question about how BIP groups work to change participants is how much members of stigmatized groups (e.g., "batterers") receive support from the other members of that group compared to those outside the group. Members could disidentify with the group and thus be more likely to seek support from and depend on others outside the group. For example, some studies have reported higher drop out rates from BIP and higher incidence of reassault in African American men (Gondolf & Williams, 2001). Clinical explanations for these differences are culturally focused and include the idea that African American men tend to be more reluctant to disclose information in a group of strangers and instead rely more heavily on family and friends outside the group (Gondolf & Williams). However, it remains unclear if dependency on family and friends outside the group is related to group majority-minority status or lower levels of social support received and provided within the BIP group.

Furthermore, the concern among researchers to take diversity into account in designing BIP curriculum (Edleson & Tolman, 1992) also is related to the question of whether majority status predicts success in BIP. Currently, BIP counselors often use a color-blind approach in which cultural diversity is essentially ignored (Gondolf & Williams, 2001). Gondolf and Williams have attributed the color-blind approach to diminished BIP outcomes in culturally specific populations. For example, results from men enrolled in a 12-week BIP in Pittsburg, show that only half of the African American men completed the program, as compared to 82% of the white men, and were twice as likely to be

rearrested for IPV than the white men (Gondolf & Williams). Therefore, these researchers suggest culturally focused counseling that goes beyond cultural sensitivity and competence to create culturally homogeneous groups, using facilitators of the same cultural background, as well as integrating specific cultural issues into the curriculum.

For the purpose of this study, group majority-minority status will be defined as the status a man holds in a BIP group. At one extreme, a man with a *majority group status* will be of the same race and ethnicity, age, income, and education as the majority of other men in the group. At the other extreme, a man with a *minority group status* will be a different race and ethnicity, age, income, and education as the majority of the other men in the group. In the current study, I am interested in investigating how group composition may influence the relationship between social support and intimate partner violence. Because both the level of interaction within a BIP group (Gondolf & Williams, 2001) and the relevancy of resources provided by the group (Medvene, 1992) are influenced by the composition of that group, I predict group majority-minority status will moderate the relationship between social support and intimate partner violence.

# Interpersonal Dependency

Interpersonal dependency has often been studied within violent intimate relationships (Rathus & O'Leary, 1997) because men who feel overly dependent on their partners may feel especially threatened by their partner's independence and autonomy. In this section, I will first define the concept of interpersonal

dependency, review research on interpersonal dependency as it relates to intimate partner violence, and conclude by explaining how interpersonal dependency will be defined in the current study.

Interpersonal dependency is defined as "a complex of thoughts, beliefs, feelings, and behaviors which revolve around the need to associate closely with, interact with, and rely upon valued other people" (Hirschfeld et al., 1977, p. 610), such as an intimate partner. Beliefs of interpersonal dependency pertain to the value one places on friendship and intimacy (Hirschfeld, et al.). Interpersonal dependency is not itself pathological (Hirschfeld, et al.), but viewed as problematic when experienced at an extreme high or extreme low.

Excessive dependency on an intimate partner may be associated with intimate partner violence for a variety of reasons. Conceptually, excessive interpersonal dependency among abusive men has been viewed as a consequence of insecure attachment in childhood (Dutton, 1995). A main principle component to attachment theory, as developed separately by both Ainsworth and Bowlby, is that attachment relationships continue to be important throughout a person's life (Bartholomew & Horowitz, 1991). Interestingly, child-parent attachment pattern may be related to intimate partners attachment pattern formed as an adult. For example, Dutton (1995) agued that mothers who are battered cannot adequately attend to the demands of the attachment process, therefore, the child becomes insecurely attached in childhood and, in adulthood, exhibits excessive-dependency on their partners.

Adult attachment research suggests that there are four categories of attachment that are consistent with those found in infants (Bartholomew & Horowitz, 1991). These four attachment styles are secure, preoccupied, dismissive, and fearful-avoidant. Secure attachment refers to those who have a strong sense of self-worth and an expectation that people are generally accepting and receptive. Preoccupied attachment style refers to those with low or no self-worth combined with a positive evaluation of others. The preoccupied person will be anxiously attached and seek the approval of others. Dismissive attachment refers to those who have a sense of self-worth and self-love in combination with the expectation that others are untrustworthy and negatively disposed. The dismissive person will be an autonomous individual who finds relationships threatening and as a result avoids intimacy. Fearful-avoidant attachment refers to those with low or no self-worth in combination with the expectation that others are untrustworthy and negatively inclined. The fearful person will exhibit anxious and avoidant attachment patterns and will desire connection with others to alleviate feelings of low self-worth, but will avoid interacting with others due to a fear of rejection.

Mauricio & Gromley (2001) theorized that adults with anxious attachment style (preoccupied and fearful) may respond to stressful situations that are threatening to their relationship with hostility and anger directed at their intimate partner and adults with avoidant attachment (fearful and dismissive) may act violently toward their partner due to their generally hostile interpersonal pattern and negative internalization of others. Therefore, of the four attachment styles,

three (preoccupied, dismissive, and fearful) can be categorized as insecurely attached and potentially related to extreme levels of interpersonal dependency and intimate partner violence.

Furthermore, Murphy and colleagues (1994) suggests that excessive dependency may be related to coercive and controlling behaviors, as well as other emotional and motivational dynamics of intimate partner violence. Coercive behaviors present in abusive relationships may "diminish the partner's sense of autonomy by limiting her social support networks, narrowing her relationship alternative, confining her activities to inside the home, and controlling her access to finances, education, and employment" (Kane, Staiger, & Ricciardelli, 2000, p. 24). Conversely, Carney and Buttell (2006) found excessive dependency to be unrelated to a multidimensional conceptualization of intimate partner violence, which included psychological aggression, physical assault, coercion and injury. The authors concluded that because interpersonal dependency was not related to a specific batterer "type" it should be targeted in intervention settings for all partner abusive men. These rather contradictory findings suggest that though interpersonal dependency is more common in partner abusive men, how it is related to behavior unclear and thus, warrants further investigation. Regardless, Carney and Buttell's (2006) recommendation for targeting interpersonal dependency in BIP treatment should be seriously considered.

Additionally, interpersonal dependency may be more common in partner abusive men because of the common duality in dealing with issues of intimacy

among men. Traditional masculine gender roles are inconsistent with some forms of intimacy. Men who adhere to these roles as well as those who do not may feel threatened by these forms of intimacy. Kilmartin (2000) suggests intimacy may be threatening for many heterosexual men "because it involves connecting, being vulnerable, and sharing power, all of which have been labeled feminine" (p. 214). On the other hand, intimacy may be more strongly desired by men because they have fewer other relationships outside their intimate partner in which they can get those needs met (Kilmartin). In fact it is reported that abusive men simultaneously desire and fear emotional intimacy with their partners (Coleman, 1980). Therefore, unbalanced dependency on an intimate partner may be related to an internal struggle between the desire to be intimate and the fear of intimacy with their intimate partners.

Within intimate relationships, research on interpersonal dependency has focused specifically on relationships that are violent (Rathus & O'Leary, 1997). In fact, "clinical lore has identified excessive dependency in the primary relationship as an important element in the emotional and motivational dynamics of wife abuse" (Murphy et al., 1994, p. 729). Research suggests that extreme levels of interpersonal dependency may distinguish violent men from their non-violent counterparts (Kane, Staiger, & Ricciardelli, 2000). For example, studies have found extreme levels of interpersonal dependency to be significantly higher in a sample of partner abusive men voluntarily enrolled in a batterer intervention program as

compared to non-violent men not enrolled in an intervention program (Kane, et al.; Murphy, et al.).

In their study, Murphy and colleagues (1994) compared 24 married or cohabiting physically violent men with 24 marital discordant but nonviolent men and 24 happily married, nonviolent men, using two measures of interpersonal dependency. General dependency was assessed using the Interpersonal Dependency Inventory (IDI; Hirschfield et al., 1977) and specific dependency on one's intimate partner was assessed using the Spouse Specific Dependency Scale (Rathus, 1990). For both general dependency and spouse specific dependency, married or cohabiting physically violent men scored significantly higher than both marital discordant but nonviolent men and happily married, nonviolent men (Murphy, et al.). In addition, Kane and colleagues (2000) compared 23 partner abusive men enrolled in a family support program with 30 Australian rules football players recruited from an inner-city Australian rules football club and 30 community volunteers recruited from a soup van near St. Vincent de Paul, using the IDI (Hirschfield et al.). The study reported partner abusive men displayed significantly higher levels of interpersonal dependency than both men on the football team and men volunteering for community service.

Interestingly however, no differences between partner abusive men and non-abusive men in level of interpersonal dependency have also been reported. For example, Buttell and Jones (2001) report no significant differences in reported interpersonal dependency between violent men court-mandated to batterer

intervention programs and their nonviolent counterparts. Unlike the previous studies, Buttell and Jones used a sample of court-mandated men enrolled in a batterer intervention program rather than volunteer samples. In addition, Buttell and Jones employed a sample of men in various types and stages of relationships whereas previous studies reported have primarily utilized samples of men who were married or currently living with their intimate partner. These important discrepancies might help explain the inconsistency in reports of interpersonal dependency with partner abusive men.

Recently, Carney and Buttell (2006) conducted a study to understand better these reported discrepancies. They compared 114 mostly (56.8%) unmarried, partner abusive men (56 men who completed a 16-week court-mandated BIP treatment and a random selection of 58 dropouts) with a small sample of 25 men with no identified history of domestic violence recruited from the community, using the Interpersonal Dependency Inventory (IDI; Hirschfield et al., 1977). The authors found significant differences between partner abusive men and the nonviolent comparison group on the level of interpersonal dependency, where partner abusive men scored significantly higher on the IDI than the nonviolent comparison group at the pretreatment assessment (Carney & Buttell). These findings contradict those of the second author's previous study that found no significant differences between court-mandated men and their non-violent counterparts (Buttell & Jones, 2001). Therefore, the authors conclude that the findings from Buttell and Jones may be an anomaly, reporting both court mandated and voluntary partner abusive men enrolled in a BIP, exhibit elevated levels of dependency on their intimate partners (Carney & Buttell).

The current focus on interpersonal dependency is not intended to imply that dependency is a sole cause of intimate partner violence, nor is it to imply that interpersonal dependency should take away from existing theories regarding the development of abusive behaviors. However, further investigation of interpersonal dependency may contribute to existing knowledge and provide unique insight to understanding and the formulation of successful batterer intervention programs for abusive men.

For the purpose of this study, interpersonal dependency will be defined as over-reliance on an intimate partner, encompassing feelings of extreme dependency. In this study, I will investigate the relationship between interpersonal dependency, group social support, and intimate partner violence. Consistent with the literature cited above, I predict that reports of interpersonal dependency will be related positively to reports of intimate partner violence. Furthermore, I predict interpersonal dependency to mediate the relationship between social support and intimate partner violence.

# The Present Study

The purpose of this study is to investigate two research questions that address the gaps identified in the above review of the literature.

Research Question One

The first research question addresses the relationship between perceived group social support, interpersonal dependency, and intimate partner violence among men in various stages of a batterer intervention program. Specifically, how do group social support and interpersonal dependency relate to intimate partner violence for men in with differing levels of exposure to a BIP group? As depicted in the conceptual model for the study (figure 1), I predict that perceived group social support will be negatively related to IPV (H: 1.1), group social support will be negatively related to interpersonal dependency (H: 1.2), and interpersonal dependency will be related positively to IPV (H: 1.3). Further, I predict that interpersonal dependency will mediate the relationship between perceived group social support and IPV (H: 2).

Hypothesis 1.1. Perceived social support is negatively related to intimate partner violence.

Hypothesis 1.2. Perceived social support will be negatively related to interpersonal dependency.

Hypothesis 1.3. Interpersonal dependency is positively related to intimate partner violence.

Hypothesis 2. Interpersonal dependency will partially mediate the relationship between perceived social support and intimate partner violence.

Research Question Two

The second research question addresses the influence of group composition and individual status on the relationship between social support and intimate

partner violence. Specifically, does the relationship between perceived social support and intimate partner violence depend on group status? As depicted in the conceptual model (figure 1), I predict (H: 3) that group majority-minority status will moderate the relationship between social support and intimate partner violence.

Hypothesis 3. The relationship between perceived social support and intimate partner violence is moderated by the majority-minority status of the individual in the BIP group.

### Study Context

This study utilizes a secondary analysis of data collected for a larger research project conducted by Dr. Eric Mankowski and colleagues at Portland State University. The original project evaluated the predictors and mediators of intimate partner violence among men in a local batterer's intervention program in Portland, Oregon, in July 2000. Dr. Mankowski and his research team developed a collaborative research partnership with the directors and group facilitators at the BIP that enabled the research team to access abusive men through their group facilitator and to administer research surveys during the regularly scheduled group meetings. The local BIP utilized a multifaceted approach to treating partner-abusive men. The five goals of the batterer intervention group are: (1) take responsibility for one's behavior and remain accountable for that behavior; (2) understand the effects of abuse; (3) change attitudes about power and control in relationships; (4) learn anger management skills; (5) and heal from violence and abuse.

Partner-abusive men who join the local BIP complete an interview at intake and begin to attend group sessions. The men are required to attend 2-hour, weekly meetings, costing \$47 each session. The groups are made up of 9-12 men and are structured and led by at least one facilitator (usually male) who is a certified counselor. As part of the program, the men in the group are required to purchase and read three books relating to violence and complete weekly coursework assignments (e.g. journals, practicing strategies to counter violence, and writing a letter of accountability). The groups are open-enrollment and therefore, consist of men at various stages in the program simultaneously. The intervention program at the local BIP is designed to take approximately 6 months to complete. However, completion of the program requires a minimum number of attended sessions and satisfactory completion of coursework and thus, length of completion varies considerably for each man.

#### Method

# **Participants**

The participants in the current study were men who had attended a local batterer intervention program in Portland, Oregon for three or more weeks. Of the 247 men who were present in the BIP groups at the time the surveys were administered, 221 agreed to participate for a response rate of 89%. One participant was removed from analyses because he was the only member who responded from his particular BIP group. Additionally, 29 men were removed from analyses because they had only attended 3 or fewer meetings of the BIP. The remaining 191 participants represent 77% of the men who were present in a group at the time of data collection and 86% of the men who completed a survey. The majority of participants are Caucasian (81%); followed by 6% African American, 4% Hispanic, 3% Asian, and 2% Native American. Participants range in age from 18 to 65 years (M = 37.5, SD = 9.5). Most participants (97%) reported a heterosexual orientation, while fewer than 2% identified as bisexual, and no participants reported a homosexual orientation. Most participants who reported a religious affiliation identified as Protestant or other Christian denomination (44%) or Catholic (17%). Participants' years of education ranged between "8 years or less" to "5 or more years in college." Ninety-four percent reported current employment with an income ranging between \$10,000 per year (6%) and over \$75,000 per year (10%). Most of the participants (35%) reported being married, while 14% were single, 15% were separated, 10% were divorced, and 24% were single but in a relationship. The

average length of marriage was 10 years (SD = 7). The majority of participants had children (82%). The majority of participants reported having 1 or 2 children (53%), followed by those with 3 to 5 children (26%), and only 2% having more than 5 children. Detailed demographic information regarding ethnicity, education, income, and religion are displayed in Table 1.

#### Procedure

Batterer intervention group facilitators introduced the potential research participants to the study during one of their regularly scheduled group meetings one week before survey administration. The study was conducted with each group at the local BIP within a 2-week time period, to minimize historical confounds. The facilitator of each group read a script designed by the research team describing the nature of the study and the details of participating. During the following week's regularly scheduled meeting, the facilitators reintroduced the study to the group. The participants were informed that the information they would provide as part of the study would be kept confidential and that no one outside the research team would see any of their survey responses. The men were also notified that participation in the study was completely voluntary and would not affect their relationship with the BIP provider. At this point, the men who decided to participate in the study were asked to sign and return a copy of the informed consent form (see Appendix A). The participants kept a copy of the informed consent for their own records, which included contact information for the principal investigator of the study. This consent form was used to match the survey data to

facilitators' reports regarding men's attendance in the BIP. The men who chose not to participate were asked to leave the room and work on another task. In most cases, the survey took about one hour to complete, after which they were returned by the men, together with their consent form in a sealed manila envelope to a designated box at the BIP. The completed surveys and consent forms were picked up by the research team and moved to a locked research office at Portland State University.

After administering the surveys, the group facilitators reported the number of men enrolled in the group at the time of the study, the number of men present during the survey administration, and the number of BIP sessions each participant had attended.

# Design

The current study utilizes a one-time, cross-sectional, quasi-experimental research design. The quasi-experimental design is implemented by surveying participants at one time point in which participants had attended a different number of batterer intervention group sessions. The total number of sessions attended will be used as a covariate in all analyses to model change in measured variables because there are no hypotheses in the current study about the relationship between the study variables and level of exposure to the BIP. Only men who had participated in the BIP for at least 3 weeks were included in the study so that a valid and reliable measure of group social support could be obtained.

#### Measures

The current study utilizes a number of measures from the larger study. The measures for the original study included those that assessed demographic information, attitudes about masculinity, women and sexuality, depression, anger and anger management, beliefs about power and control, dependency, attributions for violence, group support, and partner violence. The following measures were used in the present study (see Appendix B).

Demographic variables. Demographic items included 14 questions about various aspects of men's lives and identity including age, income, ethnicity, religious affiliation, sexual orientation, marriage/relationship status, length of time attending batterer groups at the local BIP, and other related questions. Income was measured by indicating the level of income per year on one of eight distinct categories; (a) less than \$10,000 a year, (b) \$10,001-\$15,000, (c) \$15,001-\$25,000, (d) \$25,001-\$35,000, (e) \$35,001-\$45,000, (f) \$45,001-\$65,000, (g) \$65,001-\$75,000, or (h) \$75,001 or more a year.

Exposure to the program. Participants' exposure to the batterer intervention group was assessed by reports of the number of past batterer intervention sessions attended, ranging from three to 124 sessions.

Perceived Group Social Support. Perceived group social support was measured on a 5-item scale adapted from the Social Provisions Scale (Cutrona & Russell, 1987). The purpose of the Social Provisions Scale is to examine the degree to which respondent's social relationships provide various forms of social support. The total internal consistency reliability for the Social Provisions Scale is high ( $\alpha$  =

.92) (Cutrona & Russell). Strong predictive, convergent and divergent validity has also been established. In addition, construct validity of the SPS was supported by positive correlations with other self-report measures of social support (Cutrona & Russell).

The instructions provided on the adapted measure asked the participants to think about their experiences in their respective BIP groups and write the number on a 1-6 point Likert scale that most closely represents the degree to which they disagree (strongly disagree = 1) or agree (strongly agree = 6) with the statement. The five items that were constructed for this measure correspond with five of the six social provisions identified by Weiss (1974) as cited by Cutrona and Russell (1987). Attachment was measured with the item "I feel close to the other men in the group." Reassurance of Worth was measured with the item "I feel like an important and valued member of the group." Reliable Alliance was measured with the item "The other men in the group support my efforts to become less abusive." Social Integration was measured with the item "I have similar experiences and beliefs with the other men in the group." Nurturance was measured with the item "The other men in the group count on me for help." Responses to the 5 items will be averaged for a composite score of social support. Higher scores will represent higher perceived group social support and lower scores will represent lower perceived group social support. In the current study, reliability of this measure is moderate (Cronbach's alpha = .77).

Group Majority-Minority Status. Group majority-minority status was measured for each participant as a function of race/ethnicity, age, income, and education relative to the other members in their group. Age, income, and education (in number of years) were transformed into z-scores for standardization. Each variable were then weighted appropriately by multiplying the absolute value of its z-score to the absolute value of the standardized beta weight produced by a regression equation using the CTS-2 total score as the dependent variable. The absolute value of the z-score multiplied by its standardized beta weight summed with each of the four demographic items represents the degree of majority status within the participant's batterer intervention group. As indicated in the demographics of the participants (see Table 1), the majority of the participants in this sample are white. For that reason, race was coded dichotomously as white and nonwhite and will be multiplied to its standardized beta weight. The ratio of the number of men in each participant's BIP group who are not of the same race/ethnicity category as the participant relative to the number of men in the group were used as a measure of racial majority-minority status. This race/ethnicity ratio score was then added to the z-score total. The resulting total majority status score represents the participant's degree of similarity or dissimilarity to the other members of the group. A large number represents a high level of dissimilarity to other group members (i.e., minority status) whereas a smaller number represents a high level of similarity to other group members (i.e., majority status).

Interpersonal Dependency. Interpersonal dependency was assessed using 5 items from the Batterer Intervention Program Proximal Outcome Survey (BIPPOS; Mankowski, Wilson, Silverglied, & Huffine, 2006), a 41-item self-report inventory designed to assess relevant beliefs, values, feelings, and behaviors of men who are partner abusive. The BIPPOS consists of statements that ask participants how much they agree or disagree about an item. For each statement, respondents indicate the degree to which they agree or disagree with the item 1 = strongly disagree, 2 = disagree, 3 = slightly disagree, 4 = slightly agree, 5 = agree, and 6 = strongly agree. Scores on the BIPPOS statements are transformed into 6 subscales: *Anger* Management, Power & Control Beliefs, Partner Dependency, Understanding the Effects of Abuse on Self, Understanding the Effects of Abuse on Others, and Personal Responsibility for Abuse. Interpersonal dependency is measured using the 5-item Partner Dependency Subscale. Those items include the following; (1) I am dependent on my partner, (2) My partner is the only person with who I have a close relationship, (3) I don't know what I would do without my partner, (4) Thinking about losing my relationship with my partner makes me feel worried, (5) If my partner gets angry with me, I feel desperate. The average score on the 5 Partner Dependency items will be used to assess interpersonal dependency, where higher scores indicate a higher level of dependency on the intimate partner or spouse. The reliability of this subscale is below moderate (Cronbach's alpha = .67).

Intimate Partner Violence. Intimate partner violence was assessed using the CTS-2 (Straus, Hamby, Boney-McCoy, & Sugarman, 1996), a 78-item self-report

measure of the frequency (ranging from 0 times to 20 times) that the participant and his partner have engaged in, during the last six months, in response to conflicts in their relationships. The five subscales of the CTS-2 are physical assault, injury, psychological aggression, sexual coercion, and negotiation. Sample items for each of the five subscales are: "I threw something at my partner that could hurt" (physical assault subscale); "My partner passed out from being in a fight with me" (injury subscale); "I insulted or swore at my partner" (psychological aggression subscale); "I used threats to make my partner have oral or anal sex" (sexual coercion subscale); "I showed my partner I cared even though we disagreed" (negotiation subscale). For each question, the respondents indicate the frequency with which they have perpetrated the abuse in the past six months; once, twice, 3-5 times, 6-10 times, 11-20 times, not in the past 6 months, but before, or this has never happened.

The CTS-2 was scored by taking the sum of the midpoints of the response categories chosen by the participant. For example, the midpoint of the response category "3-5 times in the past 6 months" is 4; the midpoint of the response category "11-20 times" is 15, and so on. A midpoint of 25 is recommended for use in the case of the response category "more than 20 times in the past 6 months." For responses of "not in the past 6 months, but before," Straus and colleagues (1996) recommend assigning a code of "1" to represent that the event has occurred at some point in the respondent's lifetime. When all item responses on the CTS-2 were

coded with their appropriate value, they were summed to create a total score for each of the subscales as well as an overall score for the scale

The five subscales of the CTS-2 demonstrate high internal consistency with Cronbach's alpha between .79 and .95 (Strauset al., 1996). Straus and colleagues also demonstrated construct validity by correlating different subscales of the CTS-2 with each other for both men and women. In demonstrating concurrent validity, psychological aggression and physical assault were more highly correlated with sexual coercion for men than for women, as predicted by the authors. Physical assault was also more highly correlated with psychological aggression for men than for women. In establishing discriminant validity, negotiation, a sub-scale indicating non-abusive behaviors, was uncorrelated with both the sexual coercion and injury subscales.

In the current study, four of the five subscales will be used in the analysis. Cronbach alphas in this sample are  $\alpha = .79$  (Psychological Aggression subscale),  $\alpha = .86$  (Physical Assault subscale),  $\alpha = .44$  (Sexual Coercion subscale), and  $\alpha = .71$  (Injury subscale).

# Analysis Plan

Because the research questions address group composition (majority-minority status) and group influence (social support), the amount of exposure to the BIP group should be considered. For example, I predict perceived social support to be related positively to exposure the batterer intervention program therefore, men in the program for only a couple weeks may experience low social support solely

because they have not had adequate opportunity to engage in the group.

Furthermore, as I observed first hand, men who were new to the BIP group were less talkative and less engaged with other group members than men who had been in the group for a month or longer. In addition, men who were in the group for longer periods of time held a position of seniority and because of their experience in the group were able to provide more support to the group than men in the group for shorter periods of time. For these reasons, men who have only been in the program for only one or two sessions at the time of data collection will be excluded from the analysis because their limited exposure to the group may confound the data. Furthermore, exposure to the BIP group will be addressed in the correlational analyses conducted by controlling for the number of sessions attended. Following this selection, I will assess the intraclass correlation using the Intercepts-Only Model to determine whether it is important to account for the nesting structure of partner-assaultive men in their respective BIP groups. However, the smaller number groups may affect the power of the analyses and thus, must also be considered. If the intraclass correlation is moderate to high, I will account for the nesting structure of my research design using Multilevel Linear Modeling, rather than linear regression or correlation, as is proposed in the following section. Hypotheses Tests

Hypotheses 1. To evaluate research question #1, (H: 1.1, H: 1.2, H: 1.3), correlation analyses between the independent variables (i.e., social support and interpersonal dependency) and the dependent variable (i.e., intimate partner

violence) will be conducted. I predict that scores on the outcome variable, IPV, will be correlated with (H: 1.1) perceived social support (r = -, p < .05) and (H: 1.3) interpersonal dependency (r = -, p < .05) respectively. Furthermore, I also predict (H: 1.2) that perceived social support will be negatively correlated with interpersonal dependency (r = -, p < .05). These predicted correlations (H: 1.1, 1.2, 1.3) can be examined in Table 3.

Hypothesis 2. To evaluate hypothesis 2, a series of regression analyses will be conducted according to Baron and Kenny (1986) in order to determine whether interpersonal dependency mediates the relationship between the independent variable (group social support) and the dependent variable (IPV). First, I will use a regression analysis to determine whether perceived social support predicts intimate partner violence, controlling for program exposure. Second, I will use a regression analyses to determine whether perceived social support predicts interpersonal dependency, controlling for program exposure. Third, I will use a regression analysis to determine whether interpersonal dependency predicts IPV, controlling for program exposure. Lastly, while controlling for interpersonal dependency and program exposure using multiple regression analysis, I will see if the relationship between perceived group social support and IPV decreases. If the relationship between perceived group social support and IPV decreases when controlling for interpersonal dependency, hypothesis 2 will be supported and interpersonal dependency will be said to mediate this relationship.

Hypothesis 3. To evaluate research question #2 (H: 3), moderated multiple regression (Aiken & West, 1991) involving a hierarchical regression analysis will be used. Intimate partner violence will serve as the outcome variable in this analyses, social support as a predictor variable and group status as the moderator variable. Because of concerns for multicollinearity, each variable will be centered before conducting the analyses. After centering the variables, an interaction term between the standardized predictor and moderator variable will be created. I will then regress intimate partner violence (dependent variable) on social support (predictor variable), group status (moderator variable), and the interaction term social support x group status (interaction variable). If the b weight of the interaction term, social support x group status, is significant, hypothesis 3 will be supported, indicating that the regression of intimate partner violence on social support depends on the status of the BIP group member.

#### Results

### Preliminary Analysis

Subgroup Comparisons. I anticipated that men with differing levels of exposure to the intervention group and men with differing relationship statuses might respond to the survey questions uniquely. Specifically, men who are relatively new to the BIP group are temporally closer to the event that led to his involvement in the group. Therefore, when responding to items on the CTS-2 and interpersonal dependency, they may be more likely to have completed the measures about the person whom they offended against. Moreover, men later in the program may experience a greater relationship between perceived social support and IPV, than men who are newer to the BIP because they are more familiar with the men in their group. Finally, men who are currently in a relationship may respond to items on the CTS-2 and interpersonal dependency subscale while referring to their current intimate partner. However, it will not be clear how men who are currently single respond to these same questions.

For these reasons, correlation coefficients between interpersonal dependency and perceived social support on each of the four CTS-2 subscales were computed and compared between four groups -- men currently in a relationship versus men who are currently single (see Table 2), as well as between men with three to nine sessions completed versus men with 10 or more sessions completed (see Table 3). Participants who responded to item 9, what is your relationship status, in the demographic questionnaire (see Appendix B) as single, separated, or

divorced were placed in the 'single' group and those who responded with either single, but in a relationship or married were placed in the 'in a relationship' group. Ten sessions was chosen as a cutoff point between new and tenured members. This cutoff was chosen because facilitators at the local BIP described a qualitative shift in men's denial of their abusive behavior after approximately 10 sessions (E. Mankowski, personal communication, December 12, 2008).

Comparing the difference between two independent correlation coefficients may be problematic because the sampling distribution becomes more and more skewed as p gets closer to 1 or -1 and thus, the standard error is not easily estimated. This becomes problematic because in order to create a t-test on the difference between the two sets of correlation coefficients the standard errors must be known. A solution to this problem was provided by Fisher (1921) as cited in Howell (2002) and was used to compare the correlations between groups of participants based on relationship status (men in a relationship versus those who are single) and program tenure (men who have attended three to nine sessions versus those who have attended 10-124 sessions). First, the correlation coefficients were transformed from r to r', which is approximately normally distributed around p'. Using the transformed values of r' for each of the correlations, Fisher's z statistic was calculated. Fisher's z statistic's standard error, unlike t statistic's standard error, does not depend on statistics that are computed from the sample and thus, is a parameter. Using the calculated z statistics for each of the eight comparisons (eight

z statistics total) a two-tailed test assessing the null hypothesis that the correlations were equal was conducted.

Significant differences were found between men new to the BIP group (3-9 sessions attended) compared to those more familiar with the group (10 or more sessions attended) for the correlation between perceived social support and the CTS-2 subscale injury (z = 2.3, p = .02). Moreover, the comparison between men who are single versus those in a relationship on the relationship between interpersonal dependency and physical assault trended towards a significant difference (z = 1.96, p = .05). However, the correlation comparisons on interpersonal dependency and psychological aggression, injury, and sexual coercion, as well as perceived social support and psychological aggression, physical assault, and sexual coercion were not different. Because most of the comparisons were not different, though one was, all hypothesis tests for the present study will contain the entire sample (i.e., both men in a relationship and those who are single, as well as men at various stages of program completion) with the exclusion criterion previously mentioned of more than 2 sessions completed. In addition, because significant differences were detected for two of the comparisons, the relationships between IPV and group social support and interpersonal dependency will be assessed for each of the four groups separately.

Data screening and calculations of composite variable scores. Before organizing and assessing the data any further, all participants who had attended two or fewer BIP group sessions at the time of data collection were removed from

analyses. This exclusion criterion was established because men who had only attended one or two sessions at the time of data collection likely do not have enough experience in the group to accurate reflect on their perceived social support within the group. A number greater than three sessions was not chosen because it would decrease the sample size even further. At this time, the sample size dropped from 212 cases to 192 cases. Data were then organized into composite mean scores for perceived group social support (M = 4.31, SD = .78), interpersonal dependency (M = 3.03, SD = 1.01), and total scores using Straus and colleagues (1996) midpoint scoring system described previously for the four CTS-2 subscales. In addition, weighted group minority scores were computed. To compute a minority group score, at least two participants must be present for each group. For the 192 cases, there are 33 groups represented in this data set, ranging from one to 11 participants per group. As indicated (Table 4) there is only one participant in group number 38, whereas all other groups have at least two participants. From the data it is unclear whether this particular man was the only member of his group or whether the other members declined to participate. Regardless of the reason, minority status within the group cannot be calculated for this participant. Moreover, dependency of the group (i.e., the nesting structure) and the measure of social support of other group members cannot be confidently assessed with this participant. For these reasons, this participant will be excluded from all analyses to follow.

For the remaining 191 cases, a group minority score was computed for each individual participant compared to the other participants in his respective BIP

group. First, a regression analysis was conducted to determine the weight of each of the four components of the group minority score. The absolute value of each standardized beta weight for ethnicity ( $\beta$  = -.10), age ( $\beta$  = -.09), education ( $\beta$  = .03), and income ( $\beta$  = .16), will be used in the calculation of the group minority score. For this calculation, dichotomous ethnicity scores (white = 0, nonwhite = 1) were multiplied by its respective standardized beta weight and the absolute value of the standardized score of age, income, and education were multiplied by their respective standardized beta weights. These four products were averaged, for a composite group minority score (M = .06, SD = .03). Mean values, standard deviations, and internal consistency coefficients for each of the CTS-2 subscales, group support, group majority, and interpersonal dependency are displayed in Table 5.

All data were screened for outliers, normality and missing data. Outliers were nonexistent for the independent variables; group support, majority status, and interpersonal dependency. However, outliers were present in all the subscales of the CTS-2, which is to be expected given that they are total scores asking for the frequency of a behavior. The proportion of missing data by variable was low, ranging between 1 and 5 percent.

Because four demographic variables went into the calculation of the minority group composite variable, an exclusion criterion of three or more demographic variables (75% response rate) was created. Most participants' (n = 185) score was calculated with at least three of the four variables. Those six

participants whose minority group score was computed from one or two demographic variables only, were excluded for the analyses to follow.

Missing data was also examined within cases for the remaining independent variables (social support and interpersonal dependency) as well as for the four CTS-2 subscale dependent variables. Most participants (n = 178) received scores for all of the independent variables and dependent variables that will be used in the analyses. However, some participants were missing scores from one variable (n = 8), two variables (n = 2), four variables (n = 1), and five variables (n = 2). Participants with at least 80% response rate (5 or more variables) were included in the analysis. The five participants with response rates lower than 80% were removed, leaving a sample size of 180 for the analysis to follow.

After removing the six cases with lower than a 75% response rate for group majority-minority status and five cases with a response rate lower than 80% for the remaining variables, 180 cases were left. These 180 participants represent 73% of the men who were present in the groups at the time of data collection and 81% of the men who completed the surveys. These remaining scores were screened for normality. The scores were normally distributed for the group minority, social support, and interpersonal dependency variables, but non-normally distributed for the subscales of the CTS-2. Straus and colleagues (1996) recommend the use of the traditional frequency of violence scoring method when collecting data within populations that are known to be violent. Therefore, the positive skew of the CTS-2

subscales, as well as the few notable outliers, within the current sample are to be expected.

Mean values, standard deviations, and internal consistency coefficients for each of the CTS-2 subscales, group support, group majority, and interpersonal dependency, after removing the 11 cases with systematically missing data described above (e.g., response rate below 80% for all variables except group minority which had an exclusion criterion of 75%), are displayed in Table 6. Additionally, the number of BIP sessions attended by these participants is also included in this table. The data displayed in this table will be used for all further analyses.

Group non-independence. The nesting structure of the data was assessed for each of the dependent and independent variables listed above. First, mean scores of each variable (group support, interpersonal dependency, group majority, and CTS-2 subscales) were created for each of the 32 BIP groups. Second, a one-way analysis of variance was conducted to evaluate the relationship of each variable across groups. The results indicate that the mean group scores of interpersonal dependency, social support, group minority status, psychological aggression, physical assault, injury, and sexual coercion scores are not different across groups. Thus, the initial scan of means would imply that the nesting structure of the data within groups could be ignored for all measures used in the present analysis. A second check for dependency using the intercepts-only model was also assessed.

An intercepts-only model was conducted to assess the nesting structure of the data within BIP groups. For each variable the intercept variance (variance in the group means) and the residual (the variance not explained by the group) were used to compute the intraclass correlation, which indexes dependency in variable scores due to BIP group membership. All intraclass correlations computed were low and near zero, indicating that average group support, group majority, interpersonal dependency, and CTS-2 subscale scores do not vary much across groups.

Moreover, men within a particular group are not more likely to score similarly to one another than they are to men in different groups. Therefore, further analyses will ignore the group structure of the data and will follow the analysis steps outlined in the previous section.

Bivariate relationships among study variables. Correlation coefficients between the four CTS-2 subscales, group social support, interpersonal dependency, and group minority status are displayed in Table 7. Additionally, the number of sessions a participant has attended was anticipated to influence the hypothesis tests below. For these reasons, partial correlation coefficients between the variables listed above, controlling for exposure to the program, are displayed in Table 8. The significant bivariate and partial correlations between interpersonal dependency and psychological aggression will be discussed within its corresponding hypotheses. However, no other significant relationships were found. In the following results section, hypothesis test results will be discussed in the order they were presented in the proposed analysis plan. Following the hypothesis discussion, bivariate

correlational analyses on the subgroups (e.g., men in a relationship, single men, men who have attended 3-9 sessions attended, and men who have attended 10-124 sessions) identified in the data will be presented.

Hypotheses Tests

Research Question One

Hypothesis 1.1. Perceived social support is negatively related to intimate partner violence. Correlation coefficients were computed among perceived group social support and the four CTS-2 subscales psychological aggression, physical assault, injury, and sexual coercion. The results of the correlational analyses presented in Table 6 did not support the hypothesis that perceived group social support is negatively related to each of the four subscales of the CTS-2. Partial correlation coefficients were then computed among group social support and the four CTS-2 subscales holding constant the number of sessions attended. The partial correlations are reported in Table 8. When controlling for exposure to the program, the results still did not support the hypothesis that group support is negatively related to intimate partner violence.

Hypothesis 1.2. Perceived social support will be negatively related to interpersonal dependency. Correlation coefficients were computed among perceived group social support and interpersonal dependency. The results of the correlational analyses presented in Table 7 did not support the hypothesis that group support is negatively related to interpersonal dependency. Partial correlation coefficients were then computed among perceived social support and interpersonal

dependency. Partial correlation controlling for the number of sessions attended were also conducted. The partial correlations are reported in Table 8. When controlling for exposure to the program, the results still did not support the hypothesis that group support is negatively related to intimate partner violence.

Hypothesis 1.3. Interpersonal dependency is positively related to intimate partner violence. Correlation coefficients were computed among interpersonal dependency and the four CTS-2 subscales psychological aggression, physical assault, injury, and sexual coercion. The results of the correlational analyses presented in Table 7 partially support the hypothesis. Interpersonal dependency was significantly correlated with the psychological aggression sub-scale of the CTS-2 (r = .21, p < .05). However, no relationships were found between interpersonal dependency and physical assault, injury, and sexual coercion. Partial correlation controlling for the number of sessions attended were also conducted (Table 8). When controlling for exposure to the program, the relationship between interpersonal dependency and psychological aggression remained significant (r =.20, p < .05). These findings suggest that men who are more dependent on their intimate partner more frequently use psychological aggressive tactics towards their partners.

Hypothesis 2. Interpersonal dependency will partially mediate the relationship between perceived social support and intimate partner violence. To evaluate hypothesis 2, a series of regression analyses (Baron & Kenny, 1986) were proposed in the analysis plan in order to determine whether interpersonal

dependency mediates the relationship between the independent variable (group social support) and the dependent variable (IPV). To satisfy the first step of the mediation analyses, four linear regression analyses were conducted to evaluate the prediction of perceived group social support on each of the four CTS-2 subscales. The confidence intervals for each regression slope contained the value zero indicating that perceived social support is not related to the four CTS-2 subscales. Mediated regression analysis depends on the presence of a significant relationship at step one. Because the variables entered in the first step in the four step series of regression analyses did not predict the outcome, interpersonal dependency cannot mediate any relationship and thus, no other steps in the analyses were conducted. Results from step one in the mediated regression analyses displayed in Table 9 did not support the hypothesis that interpersonal dependency will partially mediate the relationship between perceived social support and IPV because there is no relationship between perceived social support and IPV.

## Research Question Two

Hypothesis 3. The relationship between perceived social support and intimate partner violence is moderated by the majority-minority status of the individual in the BIP group. Results from the linear regression analyses conducted for hypothesis 2 (see Table 9) indicate that there is no relationship between perceived social support and IPV is non-significant. Because there is no relationship, it is not possible to assess whether group majority-minority status functions as a moderator. Therefore, hypothesis 3 is not supported with this data.

Planned Comparisons.

As described in the correlation comparison sub-section above, correlation coefficients between interpersonal dependency and perceived social support and the four CTS-2 subscales were compared among groups of participants depending on their relationship status or tenure in the program. The results suggest that the groups differed in their correlations with psychological aggression, though most of the Fisher's z test comparing the correlations of interpersonal dependency and social support on physical assault, injury, and sexual coercion were not statistically significantly. However, because some of these comparisons were significantly different, analyses for each of these four groups were assessed. The data were divided into the four respective groups (single, in a relationship, attended 3-9 sessions, and attended 10-124 sessions) for the analyses that follow. The four hypotheses stated below were formulated based on the calculations of correlation differences (see Table 2 and Table 3) and hypotheses proposed for the entire sample.

Comparisons 1 and 2: Relationship Status

Comparison 1. Interpersonal dependency is positively related to intimate partner violence for men who were in a relationship at the time of data collection, but not for those who are single. Correlation coefficients were computed among interpersonal dependency and the four CTS-2 subscales psychological aggression, physical assault, injury, and sexual coercion for men who were in a relationship at the time of data collection (n = 109). The results of the correlation analyses

presented in Table 10a partially support the hypothesis that interpersonal dependency is positively related to IPV for men who are in a relationship. Interpersonal dependency was significantly correlated with the psychological aggression sub-scale of the CTS-2 (r = .22, p < .05) and with the physical assault sub-scale (r = .24, p < .05). However, there were no relationships between interpersonal dependency and injury and sexual coercion for this group. Correlation coefficients were then computed among interpersonal dependency and the four CTS-2 subscales psychological aggression, physical assault, injury, and sexual coercion for men who are single (n = 71). The results of the correlation analyses presented in Table 10b support the second component of the hypothesis that interpersonal dependency is not related to IPV for men who are single. These findings suggest that men who are in a relationship differ from those who are single in the relationship between interpersonal dependency and psychological aggression and physical assault. For men in a relationship, those who are more dependent on their intimate partner more frequently use psychological aggressive and physical assault conflict tactics towards their partners. However, this was not the case for men who are single.

Comparison 2. Perceived social support is negatively related to intimate partner violence for men who were single at the time of data collection, but not for those who are in a relationship. Correlation coefficients were computed among perceived group social support and the four CTS-2 subscales psychological aggression, physical assault, injury, and sexual coercion for men who were in a relationship at

the time of data collection (n = 109). The results of the correlation analyses presented in Table 10c do not support the hypothesis that social support is related to IPV for men who are single. Perceived social support is not correlated with any of the subscales on the CTS-2. To assess the first component of the hypothesis stated above, correlation coefficients were computed among perceived social support and the four CTS-2 subscales psychological aggression, physical assault, injury, and sexual coercion for men who are single (n = 71). The results of the correlation analyses presented in Table 10d do not support the hypothesis that perceived social support is related to IPV for men who are single. Perceived social support is not correlated with any of the subscales on the CTS-2. However, the direction of the correlations, though small, were all positive for men who are in a relationship and negative (except for the correlation between social support and sexual coercion) for men who were single, which suggest that group social support may influence men who are in a relationship differently than for those who are single.

Comparisons 3 and 4: Tenure in the BIP

Comparison 3. Interpersonal dependency is positively related to intimate partner violence for men who are new to the program, but not for those who are tenured. Correlation coefficients were computed among interpersonal dependency and the four CTS-2 subscales psychological aggression, physical assault, injury, and sexual coercion for men who were new to the BIP, having attended anywhere between three and nine sessions (n = 45). The results of the correlational analyses presented

in Table 11a partially support the hypothesis that interpersonal dependency is positively related to IPV for men who are newer to the program. Interpersonal dependency was significantly correlated with the psychological aggression subscale of the CTS-2 (r = .42, p < .01). However, there were no relationships between interpersonal dependency and physical assault, injury and sexual coercion for this group. To assess the second component of the hypothesis above, correlation coefficients were computed among interpersonal dependency and the four CTS-2 subscales psychological aggression, physical assault, injury, and sexual coercion for men who were tenured in the program, having completed ten or more sessions (n = 136). The results of the correlation analyses presented in Table 11b support the second part of the hypothesis that interpersonal dependency is not related to IPV for men who are tenured. These findings suggest that men who have attended three to nine BIP sessions differ from those who have completed 10 or more sessions in their respective relationships between interpersonal dependency and psychological aggression. For men newer to the program, those who are more dependent on their intimate partner report more frequently use psychologically aggressive conflict tactics towards their partners. However, this was not the case for men who had attended 10 or more BIP sessions.

Comparison 4. Perceived social support is negatively related to intimate partner violence for men who are tenured in the program, but not for those who are new.

Correlation coefficients were computed among perceived social support and the four CTS-2 subscales psychological aggression, physical assault, injury, and sexual

coercion for men who were new to the BIP, having attended anywhere between three and nine sessions (n = 45). The results of the correlational analyses presented in Table 11c partially support the second component of the hypothesis that perceived social support is not related to intimate partner violence for men who are new to the program. However, the hypothesis was not supported by the significant correlation found between perceived group social support and the psychological aggression sub-scale of the CTS-2 (r = .31, p < .05). The hypothesis was supported by the fact that there were no relationships between perceived social support and physical assault, injury and sexual coercion for this group. To evaluate the first component of the hypothesis stated above, correlation coefficients were computed among perceived social support and the four CTS-2 subscales psychological aggression, physical assault, injury, and sexual coercion for men who were tenured in the program, having completed ten or more sessions (n = 136). The results of the correlation analyses presented in Table 11d do support the hypothesis that perceived social support is negatively related to IPV for men who are tenured in the program. In fact, perceived social support is not correlated with any of the subscales on the CTS-2. These findings suggest that the relationship between perceived social support and IPV is complex and that men who have attended three to nine BIP sessions differ from those who have completed 10 or more sessions in their respective relationships between interpersonal dependency and psychologically aggressive conflict tactics. What is more, the significant relationship between perceived social support and psychological aggression for

men new to the BIP is counter to the relationship predicted in hypothesis 1 above. I had predicted a negative relationship between social support and IPV, so that men who perceive greater levels of support from other men in their group would report lower levels of IPV. However, this relationship was positive for men newer to the program, so that the more support perceived was related to higher frequencies of psychologically aggressive tactics reported.

#### Discussion

The purpose of this thesis was to examine the relationship between perceived group social support, interpersonal dependency, and group majorityminority status in predicting intimate partner violence (see Figure 1). First, I explored the relationship between interpersonal dependency and IPV. The data supported the relationship that men with higher levels of interpersonal dependency reported using psychologically aggressive conflict tactics more frequently. Next, I explored the relationship between perceived group social support and IPV and proposed to assess the mediation properties of interpersonal dependency and moderation properties of group similarity on this relationship. However, the data did not support the hypothesized relationship between perceived social support and intimate partner violence, which in turn limited the possibility that interpersonal dependency could mediate this relationship and that group similarity could moderate it. Finally, correlation analyses were conducted for four different groups of men within this sample; (1) men in a relationship, (2) men who are single, (3) men who have attended three to nine BIP sessions, and (4) men who have attended 10-124 sessions. Results suggest that men in a relationship are different from those who are single regarding the association between interpersonal dependency and IPV and men who are newer to the program are different from those who have attended 10 or more group sessions regarding the relationship between social support and interpersonal dependency with IPV. Specifically, for men who were in a relationship at the time of data collection, interpersonal dependency was

positively related to both psychological aggression and physical assault. For men who were new to the program (3-9 sessions attended) interpersonal dependency and social support were positively related to psychological aggression. However, for men who were single and for men who were tenured in the program (10 or more sessions attended), the correlations between interpersonal dependency and social support with IPV were not significant. The sections below provide a more detailed discussion of the hypotheses that were supported by the data, including the correlation comparisons used to understand the subgroups within the sample, and ends with a discussion on the hypotheses that were not supported.

Interpersonal Dependency and Intimate Partner Violence

One of the relationships predicted in my model was supported by the data. Men who reported higher levels of interpersonal dependency on their partners also reported using psychological aggression at higher rates. These results support much of the literature that links emotional dependency to the perpetration of partner violence (Bornstein, 2006; Carney & Buttell, 2006; Kane et al., 2000; Murphy et al., 1994). In his review of research concerning emotional dependency and perpetration of IPV, Bornstein (2006) presents several ways in which this relationship has been understood and explained. For example, men who are highly dependent on their partner are also more vulnerable and fear abandonment from their partner. In an attempt to ease this vulnerability and minimize the fear of abandonment, highly dependent men may use aggressive and intimidating tactics against their partners. Further, researchers believe that men who are highly

dependent on their partners are more prone to jealousy and thus, turn to aggression when they believe their relationship is being threatened (i.e., their partner is becoming emotionally or physically close to another person) (Bornstein). This understanding of the connection between dependency and partner violence resonates with the significant relationship between interpersonal dependency and psychological aggression found in this study. However, the findings from this study also go beyond the understanding of the relationship between interpersonal dependency and IPV currently in literature. Most studies (e.g., Buttell & Jones, 2001; Carney & Buttell, 2006; Kane et al., 2000; Murphy et al., 1994) have compared men who are known to be violent to their non-violent counterparts. However, in the current study all participants are men who are known to be violent. Within this sample, those who reported more frequent perpetration of psychologically aggressive conflict tactics over the past 6-months had higher levels of interpersonal dependency. Therefore, the data suggests that within a sample of known violent men, men who are more dependent on their partners perpetrate psychologically aggressive acts more often than men who are less dependent.

The comparisons between two sets of men provided further insight on the relationship between interpersonal dependency and IPV. The results of this study illustrate that for men who are currently in a relationship, the correlation between interpersonal dependency and both psychological aggression and physical assault is significant. However, this was not true for men who reported to be single at the time of data collection. This distinction may shed light on the explanations

provided by Bornstein (2006) above. Perhaps interpersonal dependency becomes problematic only for men who are in a relationship because aggression is used when the relationship is threatened. Further, Kilmartin (2000) suggests that some heterosexual men may struggle with intimacy because it threatens the basic core traits that go against being masculine (i.e., vulnerability, emotional connection). Perhaps the relationship between high levels of interpersonal dependency and partner violence exists for men in a relationship, because their ability to be intimate is unstable due to their fear of intimacy and thus their level of dependency on their partner is unbalanced as a result. Finally, because the relationship between interpersonal dependency and IPV is only significant for men who are in a relationship, the meaning of interpersonal dependency for men who are single may be invalid. Therefore, for men who are single, the association between interpersonal dependency and IPV would not be expected.

Further, these comparisons reveal a relationship between interpersonal dependency and psychological aggression for men in their first three to nine sessions at the BIP, but not for those who have attended ten or more sessions.

These results suggest that exposure to a BIP may have influence on the relationship between interpersonal dependency and IPV, so that with more exposure to the program the relationship between interpersonal dependency and psychological aggression decreases.

Perhaps the association described above could be explained by assuming the BIP actually breaks down the association between interpersonal dependency

and IPV by uniformly reducing either variable. The descriptive visual analyses of scatterplots demonstrating these relationships reveal that level of interpersonal dependency on a partner increases slightly with time in the program, while frequency of psychological aggression and physical assault decreases. Further, the variance of interpersonal dependency, psychological aggression, and physical assault was examined for men who have attended 10 or more sessions as compared to men who have attended three to nine sessions. Interestingly, the variance in all variables examined was higher for men later in the program. Therefore, the BIP may affect change on the dependent variable, IPV, which decreases with time in the program, even though interpersonal dependency stays relatively unchanged. Thus, the relationship between the two variables disappears as frequency of IPV decreases.

Finally, because interpersonal dependency and IPV are correlated for men who are in a relationship and for men who are new to the BIP, it would be interesting to examine the association between these two sets of selection criterion. Future research should examine the association between interpersonal dependency and IPV for men in a relationship who are new to the BIP as compared to those who are tenured in the program. These analyses may provide a better understanding of the complex relationship between interpersonal dependency and the perpetration of partner violence.

Perceived Group Social Support and Intimate Partner Violence

The hypothesized relationship between perceived social support and intimate partner violence was not supported by the data. Contrary to my prediction, men who reported higher perceived support from their BIP group members did not report lower frequencies of IPV. Furthermore, because this relationship was not significant, hypotheses assessing the mediation properties of interpersonal dependency and moderation properties of group majority-minority status were not assessed.

I had originally intended to assess the effects of group similarity using the independent variable, group majority-minority status. However, because the relationship between social support and IPV was not significant, similarity to other men in the group was not assessed in relation to IPV. Without assessing the impact of group majority-minority status on this relationship, I am unable to determine whether men who were more similar to other members in the group, reported higher levels of social support and lower levels of intimate partner violence.

One possible reason why men who reported higher levels of support within their group did not report lower frequencies of IPV could be explained by their reference group identity dependence. Literature suggests that reference group identity dependence, the amount a man is dependent on a male reference group for his gender role self-concept (Wade & Gelso, 1998), may influence his attitudes towards help-seeking behaviors (Cummings, 2001). Factor-analysis has found three types of reference group identity dependence; no reference group (a feeling of disconnectedness to all males), reference group dependent (a psychological

relatedness to some males, but not to others), and reference group nondependent (psychological relatedness to all males) (Wade & Gelso). Wade and Gelso discovered two additional factors within the reference group nondependent men; a reference group nondependent diversity factor, relating to a man's comfort and appreciation of differences in all males, and a reference group nondependent diversity similarity factor, relating to the belief that though there are difference among men, there is a connection and sense of commonality with all types of men. In one study of men in a batterer intervention program in Canada, the reference group nondependent similarity men were more likely to have negative attitudes towards help-seeking behaviors (Cummings). Because attitudes towards seeking professional help for abusive men may be indicative how much faith man places in the batterer intervention system and thus, their desire to change within the program, this relationship is particularly important. For example, it could be that men who fall into the reference group nondependent similarity factor would also report high levels of perceived social support from the group because they feel a connection to all men regardless of their differences. However, given the relationship between the reference group nondependent similarity group and negative attitudes towards helpseeking behavior, perhaps this negative attitude towards help-seeking behavior outweighs the benefits of the support within the group. Therefore, men who report higher levels of social support may harbor disapproving attitudes towards helpseeking behaviors, which could negatively affect their buy-in to the batterer

intervention system and thus, the their adherence to the program goals of becoming nonviolent.

Interestingly, the results from this study are different from the predicted negative relationship between social support and IPV. The few studies that have assessed the relationship between social support and the perpetration of IPV have looked at social support provided from the family's natural social network (e.g., Eiskovits et al., 1993; Straus et al., 1980). However, the present study is interested in the perception of social support within the BIP group and therefore is a relatively novel attempt to understand the support dynamics of at BIP group and how it relates to non-violent change.

The comparisons between two sets of groups of men provided further insight on the relationship between perceived group social support and IPV. The results of this study illustrate that no differences exist between groups of men depending on their relationship status. However, the results also illustrate that when selecting for men who are new to the BIP (attended 3-9 sessions), the relationship between social support and psychological aggression is significant, though this was not the case for men who had attended ten or more sessions. These results suggest that for men new to the BIP, higher levels of perceived support from their group is related to higher reports of psychological aggression. On its own, these findings are inconsistent with the literature that links social support to positive health outcomes (Cohen & Willis, 1985; Pearson, 1986; Stroebe & Stroebe, 1996). However, it may speak to the complex relationship between social support and the perpetration of

partner violence. For example, Eisikovits and colleagues (1993) propose that men who perceive relatively greater availability of social networks external to his intimate relationship may experience a reduction in their inhibitions against the perpetration of violence because their intimate relationships are no longer the only available relationships. Thus, as men in a BIP form new relationships with the other men in their group, they may feel less reticence to control violence against partners because they now have other relationships available to them. On the other hand, these findings may speak to a limitation in measurement, described in greater detail below. For example, the CTS-2 asks about abuse perpetrated during the previous 6months whereas the social support questions assess general beliefs about the group and do not specify a response period. Therefore, the men may be reporting on frequent abuse that occurred before they entered the program, but reporting on more recent perceptions of support. Consequently, the perpetration of abuse may be decreasing as perceived social support increases with time in the group, but the means to measure these constructs cannot adequately capture this complex relationship.

## Intimate Partner Violence

A discussion regarding the significant outcome variables of some of the CTS-2 subscales, but not of others is important for this study. As described above the psychological aggression subscale was the only outcome variable that was significantly related to the predictor variable, interpersonal dependency, for the entire sample. This may be explained due to the fact that psychological aggression was reported at a higher frequency for more men as compared the other subscales. A most notable comparison is with sexual coercion, which was not reported much less often. Whereas, 96% of men reported at least one act of psychological aggression perpetrated over the past six months, 72% of men reported at least one physically abusive act, 49% of men reported at least one abusive act that resulted in injury, and only 36% of men reported at least one sexually coercive act. This notably low reporting for the sexual coercion subscale and higher reporting for psychological aggression is consistent with the literature that has evaluated these subscales at length (Straus et al., 1996; Vega & O'Leary, 2007).

#### Limitations

One limitation of this study concerns measurement validity. Several scales used in this study may have limited construct and external validity, making statements about the generalizability of the results questionable. For instance, the measure of social support was adapted from an existing measure that has established strong construct validity, but has been modified substantially and as a result may have lost this strength. Further, the measure used to assess interpersonal dependency has not been used in previous research and therefore has not yet established construct validity. Moreover, the instructions for completing the interpersonal dependency scale ask the participants to reflect on their past abuse and complete the questionnaire using their memories of their interactions with their partner. However, as a researcher I have no way to tell whether the participant was reflecting on a current relationship, a past relationship, or multiple relationships. In addition, I have no way to determine whether the participant is reflecting on the same relationship while completing both the interpersonal dependency scale and the CTS-2. To minimize this concern, comparison correlations were computed between men who were single at the time of data collection and men in a relationship, as described in more detail below.

The validity of the revised Conflict Tactics Scale (Straus et al., 1996) as administered in this study may also be questioned. The Scale assesses the frequency with which people have performed certain behaviors in the past six months. However, participants in this study may (a) not have been in a relationship

at the time of the study, (b) have been in jail or away from their partner during the past six months, (c) have abused someone other than their current partner or spouse. This potential error in measurement may weaken the validity of the measure. However, to address point (a) described above, comparison correlations were computed between men who were single at the time of data collection and men in a relationship. In fact, the hypotheses were partially supported for men currently in a relationship, but not for those who were single. Also, because the CTS-2 asks about abuse over the past 6 months, participants may suffer from recall bias in reporting their behavior over that extended time period, further reducing the validity. Despite these limitations, the CTS-2 remains the most widely used measure of intimate partner violence and has established validity and reliability (Straus, 1990).

In addition, the low internal consistency scores for some of the CTS-2 subscales in the current study is problematic. Whereas Straus and colleagues (1996) reported Cronbach alpha scores ranging from .79 to .95 for the four subscales used in the current study, the alphas in this study range from .44 to .86. Most concerning were the internal consistency reliability scores for the sexual coercion ( $\alpha$  = .44) subscale in the current study all others were greater than .71, which is acceptable. Due to this lack of internal consistency in the sexual coercion subscale, the outcome measurement using this subscale is limited.

There are also several limitations to the internal validity of this study. First, this quasi-experimental study does not utilize a true experimental or longitudinal

design. The partner-abusive men in this study have not been randomly selected from a larger population of abusive men nor randomly assigned either to batterer intervention or no treatment. This lack of randomization results in an inability to make causal inferences about the relationships among the measured variables. However, it would not be ethical to create a condition in which partner-abusive men are randomly assigned to receive "no treatment" as a comparison in an experimental design and therefore, quasi-experimental methods are acceptable for this population. To partially address this limitation, exposure to the program was entered as a covariate for analyses on the model.

Furthermore, there may be limitations due to the sample of participants used in this study. For example, the sample in this study consists of men who are known to be violent and who attend a local BIP. Therefore, the results of this study may not generalizable to samples of men who are abusive, but undetected by the criminal justice system.

Lastly, intimate partner violence is a very sensitive topic for many people, which may limit the validity of self reported domestic violence. The men in this study, for the most part, have been criminally charged with domestic violence and may be induced to participate in the intervention to avoid further legal ramifications. As a result, men may not have trusted that their responses to the surveys were kept confidential, despite the attempts of the researchers and BIP facilitators to assure them that each person's identity would not be known and that their individual responses would be kept private. For these reasons, the participants

may not have responded to the questions truthfully, particularly about intimate partner violence. To avoid this potential bias in future research, the perpetrator's victim/partner should be surveyed as a verification check on the perpetrator's reports.

# Implications and Conclusions

Though many of the relationships hypothesized in this study were not supported by the data, the proposed model and analyses conducted provide a starting point that may be enhanced by future research. This study provided support to previous research that has linked interpersonal dependency to the perpetration of partner violence. Further, this study adds to the understanding of this relationship by distinguishing the association in two groups of abusive men (e.g., those in a relationship versus those who are single and those newer to a BIP versus those later in the program). The finding that men who have attended ten or more sessions do not demonstrate a significant relationship between interpersonal dependency and IPV may have important implications for BIP design and standards that regulate BIP curricula. This finding suggests that experience in a BIP weakens the relationship between interpersonal dependency and psychological aggression, so that it becomes non-significant for men who have attended ten or more sessions. As noted elsewhere (e.g., Bornstein, 2006), some BIPs do not currently pay much attention to issues relating to interpersonal dependency within their curriculum and yet according to this finding the relationship seems to decrease during time in the program. With that said, integrating strategies aimed at decreasing problematic emotional dependency may further reduce recidivism rates of partner violence (Bornstein). Further, future research should be aimed at better understanding the complex relationship between interpersonal dependency and IPV. For example, the present study found that interpersonal dependency was linked to psychological

aggression and physical assault for men in a relationship, but not for those who were single. This finding may support the idea that emotional dependency becomes problematic only for partnered men when the relationship is threatened. On the other hand, perhaps men who were single at the time of data collection were unclear as to how they would accurately complete the survey items related to interpersonal dependency as discussed in the limitation section above. Moreover, men who were single at the time of data collection and had been single for at least 6-months might not have understood how to respond to the CTS, as it asks about abuse perpetrated against an intimate partner during the previous 6-months. At least for now, the results of this study indicate that more research is necessary to understand more fully the relationship between interpersonal dependency and IPV and the influence of batterer intervention programs on this relationship. With that said, these findings support Carney and Buttell's (2006) recommendation to target interpersonal dependency within batterer intervention program curricula.

Furthermore, it was predicted that perceived social support would be negative related to IPV. However, this relationship was not supported by the data. In fact, perceived social support was positively related to psychological aggression for men new to the BIP. Since success rates of BIPs are inconsistent in current literature (Aldarondo, 2002; Gondolf, 2002), understanding the social support dynamics of how a batterer intervention group may influence nonviolent change is practically important. However, because of the study's design limitations previously noted, understanding whether and how batterer intervention groups

enable and support partner-assaultive men to become non-violent cannot be established in this study with certainty. Future research using more established measures of perceived social support in addition to observational methods to monitor supportive behaviors provided within BIP groups could enhance understanding of the relationship between social support and IPV.

Finally, it was predicted that this study would illustrate that the relationship between social support and intimate partner violence is moderated by majorityminority status within the group. However, because the relationship between perceived social support and IPV was non-significant, the influence of group similarity was not assessed. Regardless, this prediction is important because it would suggest that the reason minority status men are dropping out and recidivating at higher rates than those of majority status (Gondolf & Williams, 2001) may partially be due to the fact that they are not receiving from or providing to the group as much social support as those of the majority. Further, it would support the idea of BIP forming intervention groups comprised of men who are more similar to each other, for example, separate groups for African American men. Previous research exploring the difference between three types of BIPs (culturally-focused, culturally-mixed, and culturally-homogeneous) for African American men found no difference in drop-out rates between the groups (Gondolf, 2005). Nevertheless, the men in this study who attended the culturally-focused group indicated that the program was helpful (70%), changed them (48%), and had an effective counselor/group leader (84%) at greater rates than those that did not

receive culturally-focused counseling in the culturally-mixed (61%; 38%; 64%) or culturally-homogenous (59%; 39%; 67%) groups. For these reasons, the influence of group similarity within both culturally-focused and standard BIP groups should be assessed in future research.

Figure 1.

Conceptual model representing hypothesized relationships of study variables

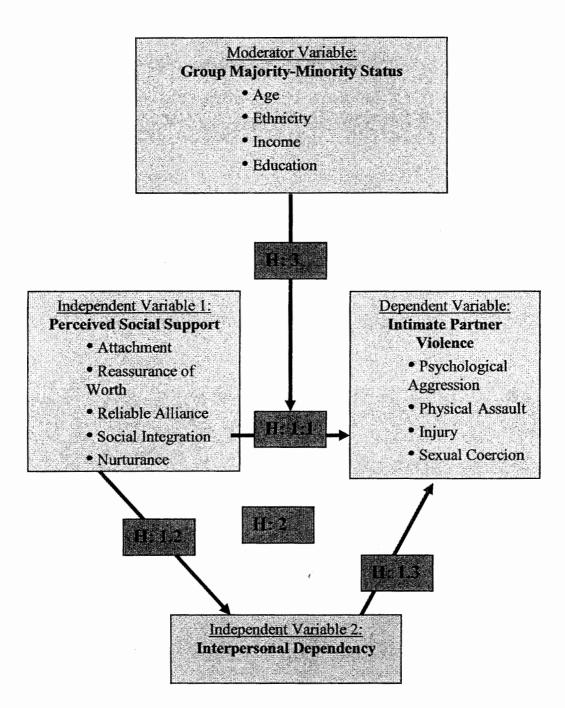


Table 1.

Distributions of Ethnicity, Education, Income, and Religion			
Variable	Distribution (approx)	n	
Ethnicity			
White	81%	155	
African American	6%	12	
Hispanic (Latino)	4%	8	
Asian	3%	7	
Native American	2%	3	
Other	4%	6	
Total	~100%	191	
Education (Years)			
8 or less	1%	2	
9	2%	3	
10	5%	9	
11	6%	12	
12	26%	49	
1 year college	14%	26	
2 years college	17%	33	
3 years college	9%	18	
4 years college	8%	16	
5 or more years college	11%	21	
Total	~100%	190	
Income (Annual)			
<\$10,000	6%	12	
\$10,001-\$15,000	9%	18	
\$15,001-\$25,000	14%	27	
\$25,001-\$35,000	21%	41	
\$35,001-\$45,000	13%	24	
\$45,001-\$65,000	17%	32	
\$65,001-\$75,000	5%	9	
>\$75,001	10%	20	
Total	~100%	183	
Religion			
None	29%	55	
Catholic	17%	33	
Protestant	44%	84	
Jewish	2%	3	
Other	7%	14	
Total	~100%		
191			

Table 2a-b.

Correlation Comparisons: Number of BIP Sessions Attended

Table 2a. Correlations: Interpersonal dependency and IPV

Dependent Variables	3-9 sessions attended <sup>1</sup>	10+ sessions attended <sup>1</sup>	Comparison scores <sup>2</sup>	p value
CTS-2 Psychological Aggression	$r_1 = .42**$ $n_1 = 45$	$r_2 = .14$ $n_2 = 142$	z = 1.75	p = .08
CTS-2 Physical Assault	$r_1 = .21*$ $n_1 = 46$	$r_2 = .09$ $n_2 = 142$	z = .44	p = .66
CTS-2 Injury	$r_1 = .15$ $n_1 = 45$	$r_2 =01$ $n_2 = 143$	z = .91	p = .36
CTS-2 Sexual Coercion	$r_1 =01$ $n_1 = 67$	$r_2 = .07$ $n_2 = 138$	z =65	p = .52

Table 2b. Correlations: Perceived Social Support and IPV

Dependent Variables	3-9 sessions attended <sup>l</sup>	10+ sessions attended <sup>1</sup>	Comparison scores <sup>2</sup>	p value
CTS-2 Psychological Aggression	$r_1 = .31**$ $n_1 = 45$	$r_2 = .11$ $n_2 = 142$	z = -1.17	p = .24
CTS-2 Physical Assault	$r_1 = .29$ $n_1 = 46$	$r_2 =03$ $n_2 = 142$	z = 1.88	p = .06
CTS-2 Injury	$r_1 = .28$ $n_1 = 45$	$r_2 =12$ $n_2 = 143$	z = 2.3	p = .02*
CTS-2 Sexual Coercion	$r_1 = .09$ $n_1 = 45$	$r_2 = .09$ $n_2 = 138$	z = .02	p = .98

Note.

CTS = Conflict Tactics Scale

$$z = \frac{r_1' - r_2'}{\sqrt{\frac{1}{n_1 - 3} + \frac{1}{n_2 - 3}}}$$

<sup>\*</sup>p<.05 \*\*p<.001

<sup>&</sup>lt;sup>1</sup>Transformation of each correlation coefficient (r to r'):  $r' = (0.5)\log_e \left| \frac{1+r}{1-r} \right|$ 

<sup>&</sup>lt;sup>2</sup>Test statistic z is used rather than t, since our standard error does not rely on statistics computed from the sample (other than n) and is therefore a parameter.

Table 3a-b.

Correlation Comparisons: Relationship Status

Table 3a. Correlations: Interpersonal dependency and IPV

Dependent Variables	In a Relationship <sup>I</sup>	Single <sup>1</sup>	Comparison scores <sup>2</sup>	p value
CTS-2 Psychological Aggression	$r_1 = .22**$ $n_1 = 111$	$r_2 = .21$ $n_2 = 71$	z = .07	p = .94
CTS-2 Physical Assault	$r_1 = .21*$ $n_1 = 112$	$r_2 =09$ $n_2 = 71$	z = 1.96	p = .05
CTS-2 Injury	$r_1 = .11$ $n_1 = 112$	$r_2 =1$ $n_2 = 71$	z = 1.4	p = .16
CTS-2 Sexual Coercion	$r_1 = .07$ $n_1 = 109$	$r_2 =13$ $n_2 = 69$	z = 1.29	p = .2

Table 3b. Correlations: Perceived Social Support and IPV

Dependent Variables	In a Relationship <sup>1</sup>	Single <sup>1</sup>	Comparison scores <sup>2</sup>	p value
CTS-2 Psychological Aggression	r <sub>1</sub> =.17 n <sub>1</sub> = 111	$r_2 =05$ $n_2 = 73$	z = 1.42	p = .16
CTS-2 Physical Assault	$r_1 = .09$ $n_1 = 112$	$r_2 =06$ $n_2 = 73$	z = 1.03	p = .30
CTS-2 Injury	$r_1 = .09$ $n_1 = 112$	$r_2 =1$ $n_2 = 73$	z = 1.26	p = .21
CTS-2 Sexual Coercion	$r_1 = .09$ $n_1 = 109$	$r_2 = .06$ $n_2 = 71$	z = .23	p = .82

Note.

CTS = Conflict Tactics Scale

$$z = \frac{r_1' - r_2'}{\sqrt{\frac{1}{n_1 - 3} + \frac{1}{n_2 - 3}}}$$

<sup>&</sup>lt;sup>1</sup>Transformation of each correlation coefficient (r to r'):  $r' = (0.5)\log_e \left| \frac{1+r}{1-r} \right|$ 

<sup>&</sup>lt;sup>2</sup>Test statistic z is used rather than t, since our standard error does not rely on statistics computed from the sample (other than n) and is therefore a parameter.

Table 4.

Group Comparisons: Number of men per BIP group

Number of Group	Group ID Number	Frequency Count: Participants per group
1	1	5
	2	3
2 3	3	6
4	6	8
5	7	4
6	10	4
7	11	11
8	12	8
9	13	6
10	14	6
11	15	
12	16	8 2 3 6
13	18	3
14	19	6
15	20	7
16	21	4
17	22	10
18	23	5
19	24	6
20	25	9
21	26	7
22	27	7
23	28	8 7
24	29	
25	30	9
26	31	7
27	32	7
28	33	5
29	34	4 5 2 2
30	35	5
31	36	2
32	37	
33	38	1
TOTAL		192

Table 5.

	Valid n	Minimum	Maximum	Mean	Std. Dev	Alpha	
CTS-2 <sup>1</sup> Psychological Aggression	187	.00	143.00	18.84	22.65	.59	
CTS-2 <sup>1</sup> Physical Assault	188	.00	44.00	3.97	5.52	.75	
CTS-2 <sup>1</sup> Sexual Coercion	183	.00	54.00	2.76	8.01	.44	
CTS-2 <sup>1</sup> Injury	188	.00	30.00	1.29	2.61	.71	
Group Social Support <sup>2</sup>	189	1.80	6.00	4.31	.78	.77	
Group Majority-Minority <sup>3</sup>	191	.01	.14	.06	.03	n/a	
Means, Standard Deviations, and Reliability Coefficients of Measures							
Interpersonal Dependency <sup>4</sup>	189	1.00	6.00	3.03	1.01	.67	

# Note.

Total possible participants n = 191

 $<sup>^{1}</sup>$ CTS-2 (Conflict Tactic Scale): 0 = 0 (never, all other values = times in the last 6 months), 1 = 1 time, 2 = 2 times, 4 = 3 - 5 times, 8 = 6 - 10 times, 15 = 11 - 20 times, 25 = 11 - 20 times.

<sup>&</sup>lt;sup>2</sup>Perceived Group Social Support ranged from (strongly disagree = 1) or agree (strongly agree = 6).

<sup>&</sup>lt;sup>3</sup>Group Majority-Minority was created using demographic variables; age, income, education, and ethnicity.

<sup>&</sup>lt;sup>4</sup>Interpersonal Dependency ranged from (strongly disagree = 1) or agree (strongly agree = 6).

Table 6.

Means, Standard Deviations, and Reliability Coefficients of Measures with systematically

	Valid n	Minimum	Maximum	Mean	Std. Dev	Alpha
CTS-2 <sup>1</sup> Psychological Aggression	180	.00	143.00	18.92	22.49	.79
CTS-2 <sup>1</sup> Physical Assault	180	.00	44.00	3.93	5.53	.86
CTS-2 <sup>1</sup> Sexual Coercion	174	.00	54.00	2.74	8.02	.44
CTS-2 <sup>1</sup> Injury	179	.00	30.00	1.31	2.67	.71
Group Social Support <sup>2</sup> missing data cases removed	179	1.80	6.00	4.33	.78	.77
Group Majority-Minority <sup>3</sup>	180	.01	.14	.06	.03	n/a
Interpersonal Dependency <sup>4</sup>	180	1.00	6.00	3.04	1.01	.67
Number of BIP Sessions Attended <sup>5</sup>	180	3.00	124	21.36	18.51	n/a

# Note.

Total possible participants n = 180

 $<sup>^{1}</sup>$ CTS-2 (Conflict Tactic Scale): 0 = 0 (never, all other values = times in the last 6 months), 1 = 1 time, 2 = 2 times, 4 = 3 - 5 times, 8 = 6 - 10 times, 15 = 11 - 20 times, 25 = 10 times.

<sup>&</sup>lt;sup>2</sup>Perceived Group Social Support ranged from (strongly disagree = 1) or agree (strongly agree = 6).

<sup>&</sup>lt;sup>3</sup>Group Majority-Minority was created using demographic variables; age, income, education, and ethnicity.

<sup>&</sup>lt;sup>4</sup>Interpersonal Dependency ranged from (strongly disagree = 1) or agree (strongly agree = 6). <sup>5</sup>Number of BIP Sessions Attended represents the number of BIP groups the participant has attended at the time of survey completion.

Table 7. Correlation Matrix (H: 1.1, 1.2, 1.3)

	Group Social Support	CTS-2 Psychological Aggression	CTS-2 Physical Assault	CTS-2 Injury	CTS-2 Sexual Coercion
Group Social Support		.09	.04	.03	.07
Interpersonal Dependency	05	.21**	.12	.01	.02
Group Minority- Majority		02	01	03	14

Note. \*p<.05 \*\*p<.001 CTS = Conflict Tactics Scale

Table 8. Partial Correlation Matrix (H: 1.1, 1.2, 1.3)

	Group Social Support	CTS-2 Psychological Aggression	CTS-2 Physical Assault	CTS-2 Injury	CTS-2 Sexual Coercion
Group Social Support <sup>1</sup>		.10	.05	.06	.10
Interpersonal Dependency <sup>1</sup>	05	.20**	.11	.02	.02
Group Minority- Majority <sup>1</sup>		01	05	02	13

Note.

<sup>\*</sup>p<.05 \*\*p<.001
CTS = Conflict Tactics Scale
Control Variable: Number of sessions attended (exposure to the program)

Table 9.

Linear Regression of Perceived Social Support on IPV (H:2)

	β	95% CI Lower Bound	95% CI Upper Bound
CTS-2 Psychological Aggression	.09	-10.99	26.47
CTS-2 Physical Assault	.04	-1.95	7.30
CTS-2 Sexual Coercion	.07	-7.37	6.27
CTS-2 Injury	.03	-1.44	3.03

Note. \*p<.05 \*\*p<.001 CTS = Conflict Tactics Scale

Table 10a-d.

Correlations by Relationship Status

Table 10a. Correlation Matrix among participants in a relationship (n = 109)

	CTS-2 Psychological Aggression	CTS-2 Physical Assault	CTS-2 Injury	CTS-2 Sexual Coercion
Interpersonal Dependency	.22*	.24*	.10	.06

Note.

\*p<.05 \*\*p<.001

CTS = Conflict Tactics Scale

Table 10b. Correlation Matrix among Participants who are Single (n = 71)

	CTS-2 Psychological Aggression	CTS-2 Physical Assault	CTS-2 Injury	CTS-2 Sexual Coercion
Interpersonal Dependency	.20	11	16	15

Note.

\*p<.05 \*\*p<.001

CTS = Conflict Tactics Scale

Table 10c. Correlation Matrix among participants in a relationship (n = 109)

	CTS-2 Psychological Aggression	CTS-2 Physical Assault	CTS-2 Injury	CTS-2 Sexual Coercion
Perceived Social Support	.16	.09	.09	.09

Note.

\*p<.05 \*\*p<.001

CTS = Conflict Tactics Scale

Table 10d. Correlation Matrix among Participants who are Single (n = 71)

	CTS-2 Psychological Aggression	CTS-2 Physical Assault	CTS-2 Injury	CTS-2 Sexual Coercion
Perceived Social Support	04	09	12	.05

Note.

\*p<.05 \*\*p<.001

CTS = Conflict Tactics Scale

Table 11a-d.

Correlations by Tenure in the BIP

Table 11a. Correlation Matrix among Participants who Attended 3-9 BIP sessions (n = 45)

	CTS-2 Psychological Aggression	CTS-2 Physical Assault	CTS-2 Injury	CTS-2 Sexual Coercion
Interpersonal Dependency	.42**	.17	.16	10

Note.

\*p<.05 \*\*p<.001

CTS = Conflict Tactics Scale

Table 11b. Correlation Matrix among Participants who Attended 10-124 BIP Sessions (n = 136)

	CTS-2 Psychological Aggression	CTS-2 Physical Assault	CTS-2 Injury	CTS-2 Sexual Coercion
Interpersonal Dependency	.14	.10	11	.07

Note.

\*p<.05 \*\*p<.001

CTS = Conflict Tactics Scale

Table 11c. Correlation Matrix among Participants who Attended 3-9 BIP sessions (n = 45)

	CTS-2 Psychological Aggression	CTS-2 Physical Assault	CTS-2 Injury	CTS-2 Sexual Coercion
Perceived Social Support	.31*	.29	.28	.09

Note.

\*p<.05 \*\*p<.001

CTS = Conflict Tactics Scale

Table 11b. Correlation Matrix among Participants who Attended 10-124 BIP Sessions (n = 136)

	CTS-2 Psychological Aggression	CTS-2 Physical Assault	CTS-2 Injury	CTS-2 Sexual Coercion
Perceived Social Support	.09	05	13	.09

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#### Client Consent Form

I, \_\_\_\_\_\_\_, agree to take part in this research project on the process of change in batterer's treatment conducted jointly by the XXX and Dr. Eric Mankowski at Portland State University.

I understand that the study involves answering survey and interview questions that ask about violent behavior I may have done recently, and my thoughts and feelings about men, women, and control issues. I understand that the survey questions will be asked at three times: when I enter the group at XXX, when I complete the program, and 6 months after I complete the program. I understand that the surveys will take about 45 minutes to complete each time and that the interview will take about 1 hour. I also understand that my partner will be contacted by phone or mail when I begin the program and 6 months after I complete the program. She will be asked to complete a survey over the phone about physical and psychological abuse that may have occurred in our relationship.

I understand that participation in the study will require about 3 ½ hours of my time during the two years to answer the survey questions. The research assistant and staff member at the XXX has told me that the purpose of this study is to learn how to better assist men in becoming non-violent. I may not receive any direct benefit from taking part in this study, but the study may help to increase knowledge that may help others in the future.

There is the potential that my participation or my partner's participation in this study could trigger upsetting incidents or angry feelings. If this should occur, I can make use of services available at the XXX as well as those on the attached list, which may be helpful.

The staff at the XXX (telephone: 234-3433) has offered to answer any questions I have about the study and what I am expected to do. They have promised that all of the information I give will be kept confidential to the extent

permitted by the law and that the names of all people in the study will be kept confidential.

I understand that I do not have to take part in this study, and that this will not affect my relationship with the XXX. I understand that I may also withdraw from this study at any time without affecting my relationship with the XXX.

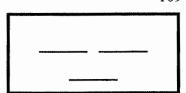
I have read and understand the above information and agree to take part of this study.

Date:	Signature:

If you have any concerns or problems about your participation in this study, please contact Dr. Eric Mankowski (503) 725-3901 at Portland State University, or the Human Subjects Research Review Committee, Office of Research and Sponsored Projects, 111 Cramer Hall, Portland State University, (503) 725-8182.

#### Study Measures

- Demographics variables (age, ethnicity, religion, sexual orientation, education, employment, income, self-help group participation, program goals and reasons for attending)
- 2. Revised Conflict Tactics Scale II (Straus et al., 1996; 39 items)
- 3. Emotional and Psychological Abusiveness twelve (12) selected items from the Psychological Maltreatment of Women Inventory (Tolman, 1989), and the Abusive Behavior Inventory (Shepard & Campbell, 1992)
- Gender Role Conflict Scale (O'Neil et al., 1986; 37 items); plus 6 items designed to assess personal, descriptive norms as opposed to level of importance
- 5. Simplified Attitudes Toward Women Scale (Nelson, 1988; 22 items)
- 6. Sexually Coercive Attitudes twenty (20) selected items from the Revised Attitudes Toward Sexuality Inventory (Patton & Mannison, 1995) and selected items from the Hypergender Ideology measure of gender role beliefs (Hamburger, Hogben, McGowan, & Dawson, 1996).
- 7. Perceived control in conflict items (generated for this study)
- 8. Multidimensional Anger Inventory (Siegel, 1986; 38 items)
- 9. Social Support (Cutrona & Russell, 1984; SPS 24 items)
- 10. CES-D Depression Scale (Radloff, 1977)



# Domestic Violence Survey

The following packet contains questions about your background, your use of violence, your feelings and your relationships.

Please read each set of instructions carefully, as they vary slightly. If you have any questions while you are completing the survey, please feel free to ask your group counselor/facilitator.

Thank you for your participation.

Portland State University & The XXX

# Instructions: Below is a short list of background questions. Please read each question carefully.

1) Wh	at is today's date?	Month	_ Day	Year	-
2) Wh	en did you start com	ing to the XXX?	Month_	Year	
3) Wh	y did you come to th	e XXX? (Please	check all t	hat apply)	
	volunteered	(What motivated	d you to co	me?	
	as a result of	Services to Chil	dren & Fa	mily	
	as a result of	a court mandate	;		
	as a conditio	n of my parole			
	Other, please	e describe			
4) We	re you ever in a diffe	rent group at the	XXX? Yo	es No	
	If yes, who was you	ır counselor/facil	itator		?
	How long did you a	attend that group?	?	(in months)	
	Why did you switch	n groups?			
•	at is your religious p	reference or affil	iation? (Pl	ease check <u>one</u> re	esponse
only)					
	Catholic				
	Jewish				
	Protestant or	other Christian	denominati	on	
	Muslim				
	None	Other (Please	e specify _	Salada and the salada	)

6) What is your ethnic background? (Please check one response only)

_	White			Native An	nerican
*****	Hispanic			Asian	
	African America	m			
	Other (Please sp	ecify			)
7) How 1	many years of school	have you	finished? (Please	e circle the la	st year
complete	ed).				
	HIGH SCHOOL		<u>COLLEGE</u>	/VOCATION	IAL
<u>SCHOO</u>	<u>L</u>				
8 or less	9 10 11	12	1 2	3 4	5 or
more					
8) What	is your sexual orienta	ation?			
_	Heterosexual (a	ttracted to	women)		
_	Homosexual (at	tracted to r	nen)		
	Bisexual (attrac	ted to both	women and men	n)	
9) What	is your relationship s	tatus? (Che	eck more than or	ıe if appropri	ate.)
	Single				
	Single, but in a re	elationship	For how long?	(yrs) _	(mos)
	Married		For how long?	(yrs) _	(mos)
	Separated		For how long?	(yrs) _	(mos)
	Divorced		For how long?_	(yrs)	(mos)
	Other (Please des	cribe)			
10) How	many children do yo	ou have?			
	None	1 or 2	3 to 5	more	than 5
11) Are	you currently employ	ed?	Yes	No	
If	es, what is your curr	ent occupa	tion? (Please list	t only one occ	cupation and
be	as specific as				
pos	ssible.)				

12) What has your main occupation been	during the past five
years?	
13) What is your current income level?	
less than \$10,000 a year	between \$35,001 & \$45,000 a year
between \$10,001 & \$15,000 a year	between \$45,001 & \$65,000 a year
between \$15,001 & \$25,000 a year	between \$65,001 & \$75,000 a year
between \$25,001 & \$35,000 a year	more than 75,001 a year
15) Age?	

Strongly

Strongly Disagree

Take a few moments to think about specific violent or abusive conflicts you have had with your partner. Now, based on these memories, please indicate the extent to which you agree or disagree with each of the following statements.

Disagree

Slightly

Agree

Agree

Slightly

Disagree

Agree	, Disagree	2350	giee ingie	•	
1	2	3	4	5	6
1.	Conflicts as	re mainly my par	tner's fault.		
2	I am totally	responsible for	my past and pre	esent violence.	
3	When I'm w	upset, there is ver	ry little my part	ner can do to a	void a
4	In a conflic	t with my partner	r, I usually get	what I want.	
5	My violenc	e and abuse caus	ed my loved on	es to not trust:	me.
6	I am depend	dent on my partn	er.		
7	Conflicts an	re generally cause	ed by something	g my partner sa	ays or do
8	During a co	onflict, my partne ier.	er's behavior of	ten causes me t	o becom
9	I feel out of	f control during c	onflicts with m	y partner.	
10	Time outs a	are an effective w	ay to manage n	ny anger.	
11	People in manage.	ny life have been	strongly impac	ted by my viol	ence and
12	My partner	is the only perso	n with whom I	have a close re	lationshi
13	I am respon	sible for starting	most conflicts	between us.	
14	I am concer	med about reducion others.	ing the effects o	of my past abus	e and
15	I can contro	ol my behavior du	uring conflicts v	with my partne	r.
16	I am the one	e in control in the	e relationship w	rith my partner	

17. My violence and abuse has long term effects on my loved ones.

18.	I don't know what I would do without my partner.
19.	Positive self-talk is an effective way to manage my anger.
20.	I'm able to express anger in non-abusive ways.
21.	I forgive myself for the pain my abuse has caused others.
22.	Thinking about losing my relationship with my partner makes me feel
	worried.
23.	I forgive others whose abuse has caused me pain.
24.	I can easily sense through physical and behavioral warning signs when
	I'm becoming angry.
25.	I feel that I can end the cycle of violence in my life.
26.	If my partners gets angry with me, I feel desperate.
27.	I've been hurt by other's violence toward me.
28.	My violence and abuse sometimes caused my loved ones to feel badly
	about themselves.
29.	My abusive behavior hurt me as well as my partner.
30.	What have been some of the effects of your abusive behavior and violence?
(Ple	ease list)

Please read each statement carefully and indicate in the space to the left of the item, using the numbers provided in the key below, how many times these things happened in the past six months. For example, if something happened 7 times in the past six months, you would write "4", because 4 equates to an event that happened 6-10 times. If one of these things did not happen in the past six months, but it happened before that, write 7.

1= Once in the past six months	5= 11-20 times in the past six months
2= Twice in the past six months	6 = More than 20 times in the past six
months	
3=3-5 times in the past six months	7= Not in the past six months, but before
4= 6-10 times in the past six months	0 = This has never happened

1.		I showed my partner I cared even though we disagreed.
2.		I explained my side of a disagreement to my partner.
3.		I insulted or swore at my partner.
4.	distribute of the same of the	I threw something at my partner that could hurt.
5.		I twisted my partner's arm or hair.
6.		My partner had a sprain, bruise, or small cut because of a fight with
		me.
7.		I showed respect for my partner's feelings about an issue.
8.		I made my partner have sex without a condom.
9.		I pushed or shoved my partner.
10.		I used force (like hitting, holding down, or using a weapon) to make
		my partner have oral or anal sex.
11.	-	I used a knife or gun on my partner.
12.		My partner passed out from being hit on the head in a fight with me.
13.		I called my partner fat or ugly.
14.		I punched or hit my partner with something that could hurt.
15.		I destroyed something belonging to my partner.
16.		My partner went to a doctor because of a fight with me.

17	I choked my partner.
18	I shouted or yelled at my partner.
19	I slammed my partner against a wall.
20	I said I was sure we could work out a problem.
21	My partner needed to see a doctor because of a fight with me, but
	didn't.
22	I beat up my partner.
23	I grabbed my partner.
24	I used force (like hitting, holding down, or using a weapon) to make
	my partner have sex.
25	I stomped out of the room or house or yard during a disagreement.
26	I insisted on sex when my partner did not want to (but did not use
	physical force).
27	I slapped my partner.
28	My partner had a broken bone from a fight with me.
29	I used threats to make my partner have oral or anal sex.
30	I suggested a compromise to a disagreement.
31	I burned or scaled my partner on purpose.
32	I insisted my partner have oral or anal sex (but did not use physical
	force).
33	I accused my partner of being a lousy lover.
34	I did something to spite my partner.
35	I threatened to hit or throw something at my partner.
36	My partner still felt physical pain the next day because of a fight we
	had.
37	I kicked my partner.
38	I used threats to make my partner have sex.
39	I agreed to try a solution to a disagreement my partner suggested.

Please read each statement carefully and indicate, in the space to the left of the item, your closest estimate of how often things happened in the past six months using the key provided below. For example, if something happened occasionally, you would write a 3 and if it occurred very frequently, you would write a 5.

1 = Never, 2 = Rarely, 3 = Occasionally, 4 = Frequently,

	$5 = \mathbf{Very}$ frequently, $\mathbf{NA} = \mathbf{Not}$ applicable
1.	 I gave my partner angry stares or looks.
2.	 I used the children to threaten my partner ( example: told her that
	she/he would lose custody, said that I would leave town with the
	children).
3.	 I became very upset with my partner because dinner, housework, or
	laundry was not ready when I wanted it or done the way I thought it
	should be.
4.	 I drove recklessly when my partner was in the car.
5.	 I physically attacked the sexual parts of my partner's body.
6.	 I monitored my partner's time and made her/him account for
	whereabouts.
7.	I used our money or made important financial decisions without
	talking to my partner about it.
8.	I was jealous or suspicious of my partner's friends.
9.	 I accused my partner of having an affair.
10.	 I interfered in my partner's relationships with other family members.
11.	 I tried to keep my partner from doing things to help herself/himself.
12	I restricted my portner's use of the telephone

In the space to the left of each sentence below, please write the number that most closely represents the degree to which you <u>Agree</u> or <u>Disagree</u> with the statement. There is no right or wrong answer to each statement; your own reaction is what is asked for.

Strongly Strongly	Disagree	Slightly	Slightly	Agree	
Disagree Agree		Disagree	Agree		
1	2	3	4	5	6

Moving up the career ladder is important to me.

2	I have difficulty telling others I care about them.
3	Verbally expressing my love to another man is difficult for me.
4	I feel torn between my hectic work schedule and caring for my
	health.
5	Making money is part of my idea of being a successful man.
6.	Strong emotions are difficult for me to understand.
7	Affection with other men makes me tense.
8	I sometimes define my personal value by my career success.
9	Expressing feelings makes me feel open to attack by other people.
10	Expressing my emotions to other men is risky.
11.	My career, job, or school affects the quality of my leisure or family
	life.
12	I evaluate other people's value by their level of achievement and
	success.
13.	Talking (about my feelings) during sexual relations is difficult for
	me.
14.	I worry about failing and how it affects my doing well as a man.
15	I have difficulty expressing my emotional needs to my partner.
16	Men who touch other men make me uncomfortable.

17	Finding time to relax is difficult for me.
18	Doing well all the time is important to me.
19	I have difficulty expressing my tender feelings.
20	Hugging other men is difficult for me.
21	I often feel that I need to be in charge of those around me.
22	Telling others of my strong feelings is not part of my sexual
	behavior.
23	Competing with others is the best way to succeed.
24	Winning is a measure of my value and personal worth.
25	I often have trouble finding words that describe how I am feeling.
26	I am sometimes hesitant to show my affection to men because of how others
	might perceive me.
27	My needs to work or study keep me from my family or leisure more than I
	would like.
28	I strive to be more successful than others.
29	I do not like to show my emotions to other people.
30	Telling my partner my feelings about him/her during sex is difficult for me.
31	My work or school often disrupts other parts of my life (home, health,
	leisure).
32	I am often concerned about how others evaluate my performance at work or
	school.
33	Being very personal with other men makes me feel uncomfortable.
34	Being smarter or physically stronger than other men is important to me.
35	Men who are overly friendly to me make me wonder about their sexual preference
	(men or women).
36	Overwork, and stress, caused by a need to achieve on the job or in school,
	affects/hurts my life.
37.	I like to feel superior to other people.
38.	I feel like I am moving up the career ladder.

39	I feel like I do well all the time.
40	I feel like I am in charge of those around me.
41	I feel like I am more successful than others.
42.	I feel like I am physically stronger and/or smarter than other men.

In the space to the left of each sentence below, please write the number that most closely represents how often in the past week, you felt the way described. Please use the scale provided below.

- 1= Rarely or none of the time
  2= Some or a little of the time (1-2 days)
  3= Occasionally (3-4 days)
  4= Most or all of the time (5-7 days)
- 1. \_\_\_\_\_ I was bothered by things that usually don't bother me. 2. I did not feel like eating; my appetite was poor. 3. \_\_\_\_\_ I felt like I could not shake off the blues, even with help from family and friends. 4. I felt that I was just as good as other people. 5. I had trouble keeping my mind on what I was doing. 6. \_\_\_\_ I felt depressed. 7. \_\_\_\_\_ I felt that everything I did was an effort 8. \_\_\_\_\_ I felt hopeful about the future. 9. I thought my life had been a failure. 10. I felt fearful. 11. \_\_\_\_ My sleep was restless. 12. I was happy. 13. \_\_\_\_\_ I talked less than usual. 14. \_\_\_\_ I felt lonely. 15. People were unfriendly. 16. I enjoyed life. 17. I had crying spells. 18. I felt sad. 19. I felt that people dislike me. 20. \_\_\_\_\_ I could not get "going."

In the space to the left of each sentence below, please write the number that most closely represents the degree that you <u>Agree</u> or <u>Disagree</u> with the statement. There is no right or wrong answer to each statement; your own reaction is what is asked for.

Strongly Strongly	Disagree	Slightly	Slightly	Agree	
Disagree		Disagree	Agree		
Agree 1	2	3	4	5	6

1	It sounds worse when a woman swears than when a man does.
2	There should be more women leaders in important jobs in public life,
	such as politics.
3	It is all right for men to tell dirty jokes, but women should not tell
	them.
4	It is worse to see a drunken woman than a drunken man.
5	If a woman goes out to work her husband should share the
	housework, such as washing dishes, cleaning, and cooking.
6	It is an insult to a woman to have to promise to "love, honor, and
	obey" her husband in the marriage ceremony when he only promises
	to "love and honor" her.
7	Women should have completely equal opportunities as men in getting jobs and
	promotions.
8	A woman should be as free as a man to propose marriage.
9	Women should worry less about being equal to men and more about becoming
	good wives and mothers.
10	Women earning as much as their dates should pay for themselves when going
	out with them.

11	Women should not be bosses in important jobs in business and
	industry.
12	A woman should be able to go everywhere a man does or do
	everything a man does, such as going into bars alone.
13	Sons in a family should be given more encouragement to go to college than
	daughters.
14	It is ridiculous for a woman to drive a train or for a man to sew on
	shirt buttons.
15	In general, the father should have more authority than the mother in bringing
	up children.
16	The husband should not be favored by law over the wife when property is
	divided in a divorce.
17	A woman's place is in the home looking after her family, rather than following a
	career of her own.
18	Women are better off having their own jobs and freedom to do as they please,
	rather than being treated like a "lady" in the old-fashioned way.
19	Women have less to offer than men in the world of business and
	industry.
20	There are many jobs that men can do better than women.
21	Women should have as much opportunity to do apprenticeships and
	learn a trade as men.
22	Girls nowadays should be allowed the same freedom as boys, such
	as being allowed to stay out late.
23	Men should be in charge during sex.
24	It's okay for a man to be a little forceful to get sex.
25	Women don't mind a little force in sex sometimes because they
	know it means they must be attractive.
26.	Using alcohol or drugs to convince someone to have sex is wrong.

27. \_\_\_\_\_ If the couple has dated a long time, it's only natural for the man to pressure the woman for sex.

In the space to the left of each sentence below, please write the number that most closely represents the degree to which you <u>Agree</u> or <u>Disagree</u> with the statement. Please use the scale provided below.

Strongly	Disagree	Slightly	Slightly	Agree	
Strongly D	isagree	Disa	gree Ag	gree	
Agree					
1	2	3	4	5	6

1.	I tend to get angry more frequently than most people.
2	I harbor grudges that I don't tell anyone about.
3	I try to get even when I am angry with someone.
4	It is easy to make me angry.
5.	Something makes me angry almost every day.
6	I often feel angrier than I think I should.
7	When I am angry with someone, I take it out on whoever is around.
8.	I am surprised at how often I feel angry.
9	At times, I feel angry for no specific reason.
10	Even after I have expressed my anger, I have trouble forgetting
	about it.
11	When I hide my anger from others, I think about it for a long time.
12	When I get angry, I stay angry for hours.
13	I get so angry, I feel like I might lose control.

Please think about your relationships and experiences in the group at the XXX. In the space to the left of each sentence below, please write the number that most closely represents the degree to which you <u>Agree</u> or <u>Disagree</u> with the statement.

Strongly Strongly	Disagree	Slightly	Slightly	Agree	
Disagree		Disagree	Agree		
Agree 1	2	3	4	5	6

1.		I feel close to the other men in the group.
2.	•	I feel like an important and valued member of the group.
3.	•	The other men in the group support my efforts to become less
		abusive.
4.	•	I have similar experiences and beliefs with the other men in the
		group.
5.	•	The other men in the group count on me for help.
Ρlϵ	struction ease answer ssible.	s: the following questions as honestly and in as much detail as
1)	Why are y	rou coming to the XXX?
2)		we a goal for your work at the XXX? Yes No what is that goal?
3)	Is there an	y feedback that you can give us about this survey?

4) Is there anything else that you would like to say about domestic violence?