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# INDIVIDUAL NEEDS AND PSYCHOSOCIAL HEALTH AMONG VICTIMS OF INTIMATE PARTNER VIOLENCE

Mariana Dufort


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# INDIVIDUAL NEEDS AND PSYCHOSOCIAL HEALTH AMONG VICTIMS OF INTIMATE PARTNER VIOLENCE
# THESIS FOR DOCTORAL DEGREE (Ph.D.)

By


## Mariana Dufort


*Principal Supervisor:*
Clara Hellner Gumpert, M.D., Ph.D.,
Associate Professor
Karolinska Institutet
Department of Clinical Neuroscience
Centre for Psychiatry Research, CPF

*Co-supervisor(s):*
Marlene Stenbacka, Ph.D.,
Associate Professor
Karolinska Institutet
Department of Clinical Neuroscience
Centre for Psychiatry Research, CPF

*Opponent:*
Pekka Santtila, Ph.D., Professor
Åbo Akademi University
Department of Psychology and Logopedics
Division of Behavior Genetics

*Examination Board:*
Gloria Macassa, Ph.D., Professor
University of Gävle
Department of Occupational and Public Health Sciences

Henrik Belfrage, Ph.D., Professor
Mid Sweden University
Department of Social Sciences

Lucie Laflamme, Ph.D., Professor
Karolinska Institutet
Department of Public Health Sciences

# ABSTRACT

Intimate partner violence (IPV) is a pervasive public health concern associated with a range of lifelong health consequences and social adversities. The overall aim of this thesis is to contribute to an improved understanding of how individual and contextual factors are related to social and psychological health among victims of intimate partner violence.

**Methods**: The studies are based on data from two separate data sets which were collected as part of large evaluation projects concerning interventions offered to IPV exposed women; a national survey and a cohort study. Study I has a cross-sectional design and is based on data from the Swedish National Public Health Survey, conducted between years 2004 and 2009, with a total sample of 50,350 individuals including both women and men. Studies II-IV are based on data from three separate cohorts of women exposed to IPV: (1) help seekers recruited from women's shelters, (2) help seekers recruited from the social services, and (3) non-help seekers. Violence exposure, social situation and psychological health were assessed using self-report measures at baseline and at the 12-month follow up.

**Results**: The results from Study I showed that being exposed to domestic violence was associated with similar health related and social adversities among women and men. Of particular importance, suicidal behaviours were strongly linked to domestic violence victimization among both men and women. Study II explored potential differences regarding social and psychological health between two groups of women that had been exposed to IPV; women who had sought formal help and those who had not. The results showed that both groups reported similar lifetime violence exposure, psychological and social impairment, although women in the help seeking group disclosed a higher problem load regarding current social psychological health. Study III explored changes in mental health over a 12-month period among IPV exposed women in relation to childhood violence (CV) exposure and formal help seeking. The results showed that IPV exposed women with a history of CV reported poorer mental health than IPV exposed women without CV exposure. Multivariate analyses showed improvements in mental health specifically in CV exposed women. Some factors reported at baseline (e.g., sexual IPV exposure in latest violent relationship and current access to formal help) were associated with mental health improvements. In study IV, psychometric properties (i.e., concurrent validity and test-retest reliability) of the Decision Making in Abusive Relationships Interview (DIARI) were investigated. DIARI is an interview-based measure developed to collect and structure information concerning violence exposure and associated

factors. Results from the inter-rater reliability tests demonstrated great variability between items. Regarding concurrent validity, DIARI demonstrated associations with self-report measures assessing mental health.

**Conclusions**: Violence is a multifaceted problem with a negative impact on health in the Swedish population. In line with previous research, the results in this dissertation project point towards a holistic approach, where several social and health related factors should be taken into account to support victims of violence. The DIARI could be a promising tool to collect and structure information concerning violence exposure and associated factors.

# LIST OF SCIENTIFIC PAPERS

I. **Dufort, M.**, Stenbacka, M., & Hellner Gumpert, C.H. (2014) Physical domestic violence exposure is highly associated with suicidal attempts in both women and men. Results from the national public health survey in Sweden

   European Journal of Public Health, *25*(3), 413-8

II. **Dufort, M.**, Gumpert, C.H., & Stenbacka, M. (2013) Intimate partner violence and help seeking – a cross-sectional study of women in Sweden

   BMC Public health, 21;13:866

III. **Dufort, M.**, Stenbacka, M., & Gumpert, C.H. Intimate partner violence exposure among adult women: Changes in mental health with regard to previous experience of childhood violence in a Swedish cohort study

   [Manuscript]

IV. **Dufort, M.**, Stenbacka, M., & Gumpert, C.H. Decision making in abusive relationships interview (DIARI): results from a Swedish pilot study of a structured need inventory for battered women

   [Manuscript]

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## LIST OF ABBREVIATIONS

| | |
|---|---|
| ANOVA | Analysis Of Variance |
| AUDIT | Alcohol Use Disorders Identification Test |
| CTS2 | Revised Conflict Tactics Scale |
| CV | Childhood Violence |
| DIARI | Decision Making In Abuse Relationships Interview |
| DV | Domestic Violence |
| GHQ | General Health Questionnaire |
| GSI | Global Severity Index |
| ICC | Intraclass Correlation Coefficients |
| IPV | Intimate Partner Violence |
| NGO | Non-Governmental Organization |
| OQ30.2 | Outcome Questionnaire |
| PTSD | Post Traumatic Stress Disorder |
| SARA | Spousal Assaults Risk Assessment Guide |
| SARA:SV | Spousal Assaults Risk Assessment Guide – Short Version |
| SCL-90 | Symptom Checklist -90-R |
| UN | United Nations |
| WHO | World Health Organization |

# 1 INTRODUCTION

Intimate partner violence (IPV) exposure is associated with multiple adverse outcomes, which negatively affect victims' health and social situation both at a short-term and long-term perspective. Besides the more evident consequences such as physical injuries, trauma and death (J. Campbell, 2002; J. C. C. Campbell, 2002; Golding, 1999; Kaura & Lohman, 2007; Leander, 2007; Walker, 2006), IPV has been associated with substance misuse, psychological harm and different types of stress-related illnesses. IPV may also influence a range of social adversities such as unemployment, social isolation and poor economy (Danielsson, Olofsson, & Gadin, 2005; K. M. Devries et al., 2013; L. M. Howard et al., 2010; Kaura & Lohman, 2007; Trevillion, Oram, Feder, & Howard, 2012; Vos et al., 2006; Zlotnick, Johnson, & Kohn, 2006). Despite severe consequences of IPV, many victims reveal significant barriers to seeking help or reporting the violence to authorities (D. L. Ansara & Hindin, 2010; Beaulaurier, Seff, & Newman, 2008; Fanslow & Robinson, 2010; Schreiber, Maercker, & Renneberg, 2010; Wolf, Ly, Hobart, & Kernic, 2003). At present, knowledge about disclosure and help seeking in IPV victims is mainly based on women who have sought formal help or assistance due to the violence.

An improved understanding of factors (e.g., demographics, psychological health, social situation, help seeking behaviour) that are associated with IPV victimisation can lead to better ability to identify and support individuals exposed to violence and to design tailored interventions. This dissertation project focuses on violence between family members, in particular between intimate partners. It includes the investigation of males' exposure to IPV and also a group of non-help seeking women. These are two populations that remain under researched to date. More specifically, the project focuses on IPV victimisation in relation to psychological health, social situation and help seeking from the victim´s perspective.

Study I investigates exposure to domestic violence (DV) among both men and women from a public health perspective, as measured in the Swedish National Public Health Survey. Studies II-IV are based on data from three cohorts of women exposed to IPV. Study II focuses on help seeking behaviour among IPV exposed women, and its association with social and psychological characteristics (e.g., demographics, psychological distress, alcohol use), but also the current relationship to the violent partner. Study III explores whether there are any changes in mental health over a one-year period among IPV exposed women, with or without previous experience of childhood violence (CV). Finally, in Study IV, we aimed to assess

some of the psychometric properties of the DIARI, a checklist developed to assist professionals to evaluate battered women's needs.

# 2 BACKGROUND

Violence is a global and pervasive concern that has gained a position in the public health agenda (E. Krug, Mercy, Dahlberg, & Zwi, 2002; Watts, 2005; Watts & Zimmerman, 2002; WHO, 2014). Violence can be broadly grouped into self-inflicted (i.e., self-harm or suicide) and interpersonal (i.e., physical, psychological or sexual violence between individuals). Besides causing great human suffering, violence constitutes one of the leading causes of mortality in the world (NCK, 2014; WHO, 2013b). In 2003, interpersonal violence caused an estimated 73,000 deaths in Europe, and it has been ranked the third cause of death among young people in the European region annually (WHO, 2013b). Global estimations have ranked violence against women as the main cause of ill health among women aged 15 to 44 (Davis & Harsh, 2001). Moreover, women are more likely to be victims of rape or stalking, compared to men (Tjaden & Thoennes, 2000). According to global estimates, one in three women worldwide is exposed to violence sometime during her life and one in five experiences a sexual assault at some point in their life (WHO, 2013a).

The World Health Organization (WHO) describes violence against women both as an issue of human rights and as a public health matter, suggesting that policy makers and the public health sector should take action against it (Garcia-Moreno, Jansen, Ellsberg, Heise, & Watts, 2005). Moreover the United Nations (UN) has called on national governments' political commitment to counteract this problem (UN, 2010). An increased awareness concerning IPV as a pervasive threat to health and individual suffering has in several countries led to legal actions and social interventions intended to assist the victims (Gondolf, Fisher, & McFerron, 1988).

## 2.1 VARYING PREVALENCE

Estimating IPV prevalence is inherently difficult due to various measurement problems including the fact that it mostly occurs in the private sphere leaving few or no witnesses besides the victim and perpetrator of the crime (E. Krug et al., 2002). Overall, the hidden numbers are considered high (Brottsförebyggande rådet, 2008).

Varying prevalence estimates could also occur due to differences in data collection methods and definitional issues (A. Coker, Smith, McKeown, & King, 2000; Esquivel-Santoveña & Dixon, 2012; Garcia-Moreno, 2006). At present, several methodologies are used to study violence. In some cases, estimations are based on information from patient records or official statistics such as criminal records or public health data (NCK, 2014). Exposure to violence can also be

measured through interviews or population-based victimisation surveys or specific prevalence studies investigating exposure to violence in the general population or particular groups in society (NCK, 2014). Overall however, research is lacking on representative community samples, where individuals (both females and males) are followed during longer time periods (Lovestad & Krantz, 2012). Commonly, research studies are limited in the sense that they specifically include certain age groups or other specific subgroups and only include either one or both sexes. Moreover, violence exposure is studied during varying time periods and may relate to shorter or longer episodes of an individual's life, such as the vulnerability of the past month, the past year or ever in life. Overall, these methodological differences make comparing across studies challenging.

### 2.1.1 International Surveys

The WHO has conducted several global studies on violence against women (WHO, 2013b). In these studies, estimations vary given that some contexts specifically concern community violence against women (i.e., such violence that is perpetrated in the context of armed conflicts within or between states), whereas other estimations use a narrower definition focusing only interpersonal violence. In addition, the definitions of interpersonal violence vary in terms of broadness; in some contexts it includes genital mutilation, trafficking, honour killing and forced and early marriages whereas in other contexts it specifically refers to physical violence within intimate heterosexual relationships.

A multi-country study conducted by the WHO demonstrated varied prevalences of male IPV against women ranging from 15 to 71%, depending on the country and region (Garcia-Moreno et al., 2005; E. Krug et al., 2002). The study was conducted in 15 settings from 10 different countries. Different rates could partly be due to true prevalence differences between populations. Several international studies have shown that violence against women is more prevalent in countries where women's rights are more restricted and where social and economical inequalities between women and men are greater (WHO, 1997; E. Krug et al., 2002; L. Wilson & Miller, 2015). These inequalities may affect attitudes and conceptualisations of violence in a society and consequently what is permitted in different situations, which in turn may affect bystander's reactions but also how authorities respond to certain violent incidents. An example may be such violence that occurs between family members e.g. towards children or within intimate relationships. Also, general attitudes in a society regarding different types of violence including childhood violence (CV) and IPV might influence victim's coping strategies

and their propensity to disclose the violence or report it to authorities (Häggblom M. & R. Möller, 2010).

In addition to studies conducted by international agencies such as the WHO, international research on violence exposure has demonstrated great variation in prevalence estimates of violence against women (Alhabib, Nur, & Jones, 2010) and highlighted that exposure to IPV is prevalent among men as well (Chan, 2011; Tjaden & Thoennes, 2000). Self-reports of IPV tend to underestimate true prevalences among both women and men. Studies that have investigated prevalence rates without taking contextual factors and motives into account have demonstrated similar prevalence rates among women and men (Chan, 2011). It is plausible, however, that associations between violence exposure and different outcome factors differ between women and men. As previously mentioned, IPV against men is currently under-researched.

### 2.1.2 Swedish Surveys

In Sweden, there are three recurrent national surveys commissioned by the government that to some extent highlight the prevalence of exposure to violence in the general population. The National Council of Crime Prevention conducts annual national surveys with the purpose to measure vulnerability to different types of crime and to measure the individual's sense of security and degree of trust in the national justice system. A sample of 20 000 individuals aged 16 to 79 years are interviewed by telephone concerning experiences of different types of crimes and circumstances around those experiences. The survey encompasses questions about abuse, with complementary questions about whether the perpetrator was known by the victim. In 2009, the National Council of Crime Prevention published a separate report based on data from years 2006 to 2008 focusing specifically on IPV crimes. The results indicated a prevalence of 0.7% of IPV victimisation in the population, with the majority of the exposed being women, Moreover, the majority (80%) of IPV exposed women reported repeated victimisation (Brottsförebyggande rådet, 2008).

Statistics Sweden is an administrative agency assigned to support and coordinate the Swedish system for official statistics and also to provide the government and different agencies with statistics for decision-making or research. As part of this assignment, Statistics Sweden conducts an annual survey concerning the living conditions among the Swedish population. Results are based on telephone interviews to a random sample of 12,000 to 13,000 Swedish residents aged 16 or older covering issues like housing, income, health, leisure, civic activities, social relationships, occupation and safety (Färdeman, Hvitfeldt, & Irlander, 2014; SCB, 1995).

The interview also includes questions concerning exposure to physical violence during the previous year, and threats of violence or other intimidation with consecutive questions about the severity of the incident and where it occurred. The survey from the years 2008-2009 demonstrated that 1.3 % of respondents (both female and male) reported exposure to physical violence or threats in their home, with the highest prevalence among younger women (SCB, 2011).

The Institute of Public Health in Sweden (former Swedish National Institute of Public Health) has a governmental assignment to follow the Swedish population's health status over time and identify trends (SCB, 2009). Since 2004 this is accomplished through an annual national public health survey to a representative sample of the Swedish population aged 18 to 84 (16-84 year 2004). The questionnaire comprises approximately 75 questions covering health, physical and mental well-being, use of medicines, use of health care, dental health, diet, smoking, alcohol use, gambling, financial situation, occupation, social relations and living habits (Boström & Nyqvist, 2010). Studies on data from the Swedish public health survey have mainly focused on physical violence exposure in general, showing that violence victimisation is not equally distributed throughout society. A regional study conducted in four northern regions in Sweden found a strong association between physical violence exposure and poor health among women and men (Danielsson et al., 2005). These results were partly replicated in a national study on non-lethal violent victimization, which demonstrated higher degree of social and economical adversities among violence exposed women and men (Stickley & Carlson, 2010). Another study on violence victimisation in Stockholm County found that violence exposed women in low socioeconomic positions suffered from more health adversities than other women (Winnersjo, Ponce de Leon, Soares, & Macassa, 2012). Furthermore, a regional study in Scania (i.e., the southern part of Sweden) showed similar findings with differences in violence exposure between foreign-born and native Swedish women indicating that women born abroad were more likely to be exposed to domestic violence (DV). The authors suggested that the results might partly be explained by socioeconomic disadvantages among foreign-born (Fernbrant, Essén, Östergren, & Cantor-Graae, 2011).

Some research studies that can be generalised to the general Swedish population have been conducted during the past decades. The first one was published in 2001 (Lundgren, Heimer, Westerstrand, & Kalliokoski, 2001) and it concerned violence against women. This study demonstrated markedly high prevalence rates of violence against women (46% reported exposure to violence by a man sometime after their 15$^{th}$ birthday). The definition of violence in

that study was intentionally comprehensive and included physical, psychological and sexual violent acts perpetrated by a partner, ex-partner, other family members or someone unknown to the victim. Critics claimed that such definition was too comprehensive, thus leading to overestimations of violent victimisation. Contemporary figures of violence estimated by the National Council of Crime Prevention, Statistics Sweden and The Public Health Agency of Sweden have been substantially lower. Yet, some studies conducted in other Scandinavian countries have demonstrated high prevalences; Norway 51% (Haaland, Clausen, & Schei, 2005), and Finland 40% (Heiskanen & Ruuskanen, 2010). Similarly high prevalences have also been found in other European countries (Costa et al., 2013; Watts & Zimmerman, 2002).

Recently, two nationally representative research studies focusing on violence among women and men in Sweden have been published. The first one is a cross-sectional survey study conducted by a research group in Gothenburg based on questionnaires from a random sample of Swedish women (n=573) and men (n=399) (Nybergh, Taft, Enander, & Krantz, 2013). This study revealed similar figures of IPV exposure among women and men during a one-year period (23.2% among women and 25.6% among men), even though the lifetime exposure was higher among women (26 vs.15.3%). Results on the prevalence patterns of IPV exposure in women and men were in line with previous findings from Norway (Haaland et al., 2005). Both patterns of violence exposure (i.e., including physical, psychological and sexual violence) and also the associated health consequences were similar in both sexes (Nybergh et al., 2013). Authors suggest that violence experiences earlier in life should be taken into account when assessing gender differences in relation to IPV.

The second study was based on information from 5,681 women and 4,654 men randomly recruited from the Swedish population (NCK, 2014). Results from this study showed lifetime violence exposure prevalences of 46 % among women and 38 % among men. In addition, women and men who reported sexual, physical or psychological violence victimisation during childhood reported higher prevalence of violence exposure in adulthood than those without childhood violence experiences. Findings revealed different patterns of victimisation where women to a larger extent were exposed to sexual and psychological violence whereas for men, physical violence was the most common type.

In contrast to the official reports mentioned above, research studies focusing on violence exposure have demonstrated higher prevalence rates of exposure. The fact that the latter studies also included violence against men reflects that victimisation in males is gaining increased

research attention (Krahé, Bieneck, & Möller, 2005). The subject of IPV against women and men has been characterised by a debate on gender explanations to the problem (Gerstenberger & Williams, 2013; M. A. Straus, 2008, 2011; Valor-Segura, Expósito, & Moya, 2014; Whitaker, Haileyesus, Swahn, & Saltzman, 2007). On one side, scholars argue that there are similar rates of IPV among women and men (i.e., gender symmetry). In contrast, other scholars argue that consequences of violence differ between genders (Caldwell, Swan, & Woodbrown, 2012). Results from these latter surveys have intensified this debate regarding gender in relation to partner violence exposure in Sweden.

## 2.2 DEFINITIONS

Interpersonal violence may be physical, psychological or sexual and may be perpetrated by men, women, family members or someone unknown to the victim (WHO, 2014). As mentioned above, the term violence may include different acts depending on the context and the purpose of its use. The WHO uses a comprehensive definition of violence:

”Violence is the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, which either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment, or deprivation.” (E. G. Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002)

When referring to violence that occurs between family members or ex-partners, several terms can be found in the literature. Different terms may emphasise different aspects of this type of violence. Terms like “wife abuse/battering” or “gender based violence” primarily refer to men’s violence against women and gender differences in terms of vulnerability factors. On the other hand, terms like “domestic violence”, “family violence” and “intimate partner violence” may be considered more comprehensive and include men’s vulnerability to violence as well.

In this dissertation project, the terms Domestic violence (DV), Intimate Partner Violence (IPV), and Childhood Violence (CV) are used. The term DV is used when referring to violence experiences occurring in the home. IPV comprises physical, psychological, and/or sexual violence by a present or former partner. The term CV refers to direct exposure to physical violence/neglect or having witnessed physical/psychological violence between parents during childhood.

## 2.3 THEORETICAL PERSPECTIVES OF IPV

### 2.3.1 Individual and Psychological Explanations

Individual and psychological theories seek explanations to IPV in individual pathology and violence is understood as something marginalized, conducted by individuals that deviate from social norms (Corvo & Johnson, 2013). The use of violence is therefore seen as a manifestation of individual dysfunction (i.e., personality disorder) or other deviation caused by earlier traumatic events. Violence may also occur due to low self-esteem or personal crisis. Individual and psychological explanations have been criticised for reducing men's violence against women to an individual rather than a social problem and for failing to explain why women with personality disorders do not use violence the same way men may do.

### 2.3.2 Gender Perspectives

According to this theory, IPV and violence against women in particular, are seen as a result of gender inequalities and a patriarchal ideology (Krahé et al., 2005; Kwesiga, Bell, Pattie, & Moe, 2007). This theory posits that men use violence against women to exercise power and control and that this behaviour is a result of socialisation in patriarchal societies where men's violence is condoned. Violence is not seen as isolated events but is rather associated with society's values and norms and thus present in any manifestation of male superiority; the judiciary, health care, education system and society at large. Violence is thus defined as a continuum of actions intended to exercise power and inhibiting women's autonomy. Criticism to this theory concerns deficiencies to explain violence in same-sex relationships, violence committed by women towards men and why some men abuse and rape, while others do not. Another critique concerns failure to acknowledge the relevance of individual factors for the causes of violence.

### 2.3.3 The Ecological Model

According to the ecological model, no single factor can explain why violence occurs and why some groups are at higher risk of violence than others. The model aims to combine several theories and explanations by using a comprehensive approach that includes four perspectives of interpersonal violence: structural, community, relationship and individual level. According to this model, violence is caused by the interaction between factors at different levels or within a single level. The inner circle (figure 1) describes factors at the individual level and corresponds to the individual psychological perspective regarding personal history but also biological factors

that may influence an individual's behaviour. The second circle represents relational factors such as family and friends. The third circle refers to the community level, which includes social environment such as neighbourhood. The fourth circle concerns social structures, which includes gender perspectives (Ellsberg, Peña, Herrera, Liljestrand, & Winkvist, 2000; Heise, 1998).

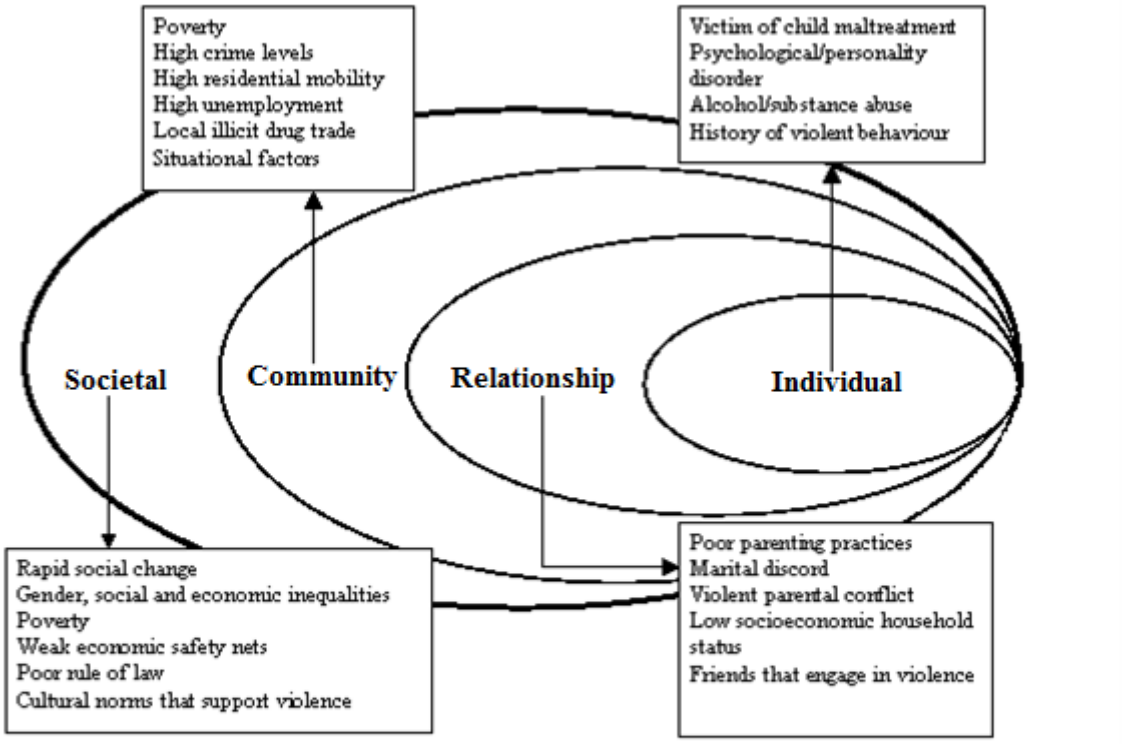


Figure 1. Ecological model of violence.

One critique of the ecological model has been that it may be too comprehensive and consequently risk becoming an "all-or-nothing perspective", by failing to differentiate between different and conflicting theoretical models.

### 2.3.4 Johnson's Violence Typology

Michael P Johnson's theory on violence typology is an important contribution to the debate on gender differences in relation to IPV (Johnson, 2011; Johnson & Leone, 2005). In essence, the theory proposes that different views on the perceived symmetry of partner violence are a product of the method used to measure it. His research suggests that there are three different typologies of violence that are differently gendered: (*i*) intimate terrorism (also referred to as

coercive controlling violence) which refers to violence used to exercise power and control over the other, (*ii*) violent resistance, which is violence used as self-defence from intimate terrorism and (*iii*) situational couple violence, which refers to isolated violent acts that may occur during specific conflicts and that are not intended to exert control over the other. According to Johnson, this distinction clarifies that domestic violence is not symmetric. Overall, the proposed typologies differ with regards to contextual factors (i.e., intentions, degree and nature of control) rather than type (i.e. whether the violence is physical, psychological or sexual). IPV is not conceived as a unitary phenomenon and these typologies cannot be differentiated merely by taking the specific violent act into account. The context in which the violence takes place and stipulated reasons for it must be considered in order to determine typology. A violent act may change the dynamics of other non- violent acts in a relationship, turning them into threatening acts and adding a terrorising dimension to them. For example, an apparently harmless act may in a certain context (and partly induced by previous violence) be part of a controlling tactic from one partner to the other. These specific controlling tactics vary from case to case and need therefore to be accounted for carefully.

Johnson states that both general population surveys and studies conducted in different sites (i.e. clinical populations) may be biased with respect to gender symmetry. Surveys on general populations tend to be biased towards situational provoked violence, which, according to Johnson, is equally perpetrated by women and men (Johnson, Leone, & Xu, 2014). In contrast, studies on clinical populations could be biased towards coercive controlling violence, which is more commonly perpetrated by men (Johnson, 2011). Coercive controlling violence typology has usually more serious consequences and concerns higher risks, although situational provoked violence can lead to serious consequences as well. Differentiating between different typologies of violence make it possible to explain contradictive results about its prevalence and reconcile disagreements regarding its symmetry.

Several empirical studies have lent support for Johnson's typologies, by demonstrating higher exposure to intimate terrorism and higher use of violence resistance among women and also by demonstrating similar prevalence of situational couple violence among women and men (Friend, Cleary Bradley, Thatcher, & Gottman, 2011; Graham-Kevan & Archer, 2005; Johnson, 2006; Johnson & Leone, 2005; Nybergh et al., 2013).

## 2.4 FACTORS ASSOCIATED WITH IPV VICTIMISATION

IPV is associated with a range of social and health adversities affecting victim's lives both short-term and long-term (J. Campbell, 2002; K. Devries et al., 2011; Dutton et al., 2006; Helweg-Larsen & Kruse, 2003; Howard, Trevillion, & Agnew-Davies, 2010; Humphreys & Thiara, 2003; Watkins et al., 2014). Short-term consequences may comprise physical injuries, trauma or mortality either as a direct cause of lethal violence or self-inflicted, i.e. suicide as a victim's reaction to the intensity and severity of the violence (McLaughlin, O'Carroll, & O'Connor, 2012; Zlotnick et al., 2006) Long-term effects include psychological impairments such as depression, anxiety, Post Traumatic Stress Disorder (PTSD) or substance misuse but also lack of social resources in terms of unemployment, social isolation or poor economy (K. M. Devries et al., 2013). These associations may be bidirectional, however, increasing the risk of violence exposure. Several studies have demonstrated that some factors may act both as risks and consequences of IPV exposure. For example, substance abuse can occur as a consequence of violence exposure but could also increase the risk of victimisation (Cole, Logan, & Shannon, 2008). Health impairments, limited social networks and financial strain have also been associated with an increased vulnerability to violence exposure (Goodkind, Gillum, Bybee, & Sullivan, 2003; Humphreys & Thiara, 2003; Kiss et al., 2012; Olofsson, Lindqvist, Shaw, & Danielsson, 2012).

Although violence affects individuals of all ages and social groups, several studies have shown that its prevalence is not equally distributed in society. More specifically, some individuals are more vulnerable to violence exposure including individuals with disabilities, substance abuse problems, women of childbearing age, elderly and individuals with other sexual orientation than heterosexual (Costa et al., 2013; Socialstyrelsen, 2009). In addition, previous violence exposure has been associated with higher risk of future victimization. Traumatic events such as experiencing violence as a child may increase the risk of developing depressive symptoms but also have serious implications for an individual's functioning and interpersonal relationships in adulthood (Chartier, Walker, & Naimark, 2007; Evans, Davies, & DiLillo, 2008; Moylan et al., 2010; Russell, Springer, & Greenfield, 2010; Springer, Sheridan, Kuo, & Carnes, 2007; van Delft, Finkenauer, & Verbruggen, 2015; van Vugt, Lanctot, Paquette, Collin-Vezina, & Lemieux, 2014). CV exposure has also been associated with greater vulnerability to IPV exposure in adulthood (Bensley, Van Eenwyk, & Wynkoop Simmons, 2003; Cui, Durtschi, Donnellan, Lorenz, & Conger, 2010; Hetzel-Riggin & Meads, 2011; K. F. Kuijpers, van der Knaap, & Lodewijks, 2011) and the cumulative impact of CV and IPV has been associated with

greater adversities among its victims (J. C. C. Campbell, 2002; Lindhorst & Oxford, 2008; Scott-Storey, 2011; Vos et al., 2006; Zlotnick et al., 2006).

IPV is more often recidivistic compared to other types of violence such as that perpetrated by strangers (A. L. Coker, 2002; K. F. Kuijpers et al., 2011; K. Kuijpers, van der Knaap, & Winkel, 2012; Whitaker et al., 2007). Furthermore, some studies suggest that the severity of the violence usually increases along with the duration of the relationship (D. Ansara & Hindin, 2011; Fanslow & Robinson, 2010). Thus, IPV victims are at increased risk of continued or re-victimisation and of suffering aggravated adversities since repeated victimisation has been associated with more severe consequences compared to single violent events (Johnson & Leone, 2005; Vives-Cases et al., 2011).

## 2.5 IPV AND HELP SEEKING

Prior research indicates that women exposed to IPV consume more health care than non-exposed women (Lundgren et al., 2001; Shannon, Logan, Cole, & Medley, 2006). Still, several studies show that most victims of IPV remain undetected by the health care system (Chang et al., 2005; Rhodes et al., 2011; Sundborg, Saleh-Stattin, Wändell, & Törnkvist, 2012) and to authorities (D. Ansara & Hindin, 2011; Chang et al., 2005; Frenzel, Wallin, Hvitfeldt, & Strid, 2015). Formal and informal social support has been found beneficial for victims' attempts to achieve non-violence. Studies have shown that social support may increase a victim´s coping strategies in terms of leaving and recovering from the traumatic experience (Bauman, 2009; A. Coker, 2003; Mburia-Mwalili, Clements-Nolle, Lee, Shadley, & Wei Yang, 2010; Subadra Panchanadeswaran & McCloskey, 2007; Sullivan & Bybee, 1999). Social support has also been identified as an important protective factor against re-victimisation (Briere & Jordan, 2004; Domhardt, Münzer, Fegert, & Goldbeck, 2014; Liang, Goodman, Tummala-Narra, & Weintraub, 2005; van Delft et al., 2015).

Even though IPV exposure might result in injury and trauma, disclosure and seeking professional help may implicate several barriers. It is common among battered women to feel guilt or shame in association with being exposed to violence (Hensing, 2004; Valor-Segura et al., 2014). These feelings may make them unwilling to seek formal assistance. In addition, fear of the abuser or distrust in authorities may be further reasons to avoid help seeking (Moe, 2007; Montalvo-Liendo, 2009; K. S. Wilson, Silberberg, Brown, & Yaggy, 2007). Other contextual factors that may present obstacles for formal help seeking and that has been shown relevant for women's decision to seek help or disclose the violence to authorities is the individual's informal

social environment including reactions from family and friends. Moreover, factors such as lack of financial resources, substance misuse and the woman's relationship with the abusive partner can negatively influence her decision to leave her partner or to seek help (Hien & Ruglass, 2009; Popescu, Drumm, Dewan, & Rusu, 2010). Studies concerning whether having children with the abuser influences help seeking have shown mixed results. On the one hand, fear of losing child custody might prevent women from contacting authorities (Wolf et al., 2003), and on the other hand, concerns over children's safety might increase the use of formal support (Fugate, Landis, Riordan, Naureckas, & Engel, 2005). However, most research on help seeking behaviour has mainly been conducted on women who already have sought help from authorities due to IPV. Therefore, knowledge about those who do not seek formal help due to IPV is limited.

## 2.6 THE SWEDISH CONTEXT

As a welfare state, Sweden offers a broad scope of public services run by the state, county councils and municipalities as well as the civil sector (Fernbrant et al., 2011; Winnersjo et al., 2012; Zorrilla et al., 2010). There are several facilities where women can turn for help due to IPV; the police, social services and non-governmental run (NGO) women's shelters. In addition to services specifically commissioned to work with IPV victims, the health care system plays an important role in that victims may have increased needs for support due to direct or indirect consequences of violence exposure.

### 2.6.1 Social Services

The social services have a comprehensive responsibility to ensure that victims of crime and their families receive support and assistance (SFS2001:453 [Social Service Act]). When needed, victims are to be offered shelter accommodation, financial support and assistance in their contact to other authorities. The social services are responsible for assessing and addressing the needs of an individual that has been exposed to violence in terms of protection and support, immediately as well as in a long-term perspective (SFS2001:453 [Social Service Act]). In addition, the social services are assigned to offer victims advice, counselling and treatment or refer to other adequate facilities that can meet the victim's needs (SOU, 2006). Whenever possible, assessment and treatment methods used within the social services should be evidence based and build on reliable methods (Socialstyrelsen, 2009, 2011).

### 2.6.2 Nongovernmental Women's Shelters

In Sweden, women's shelters were initially developed by the feministic movement in the mid-1970s (Pajak, Ahmad, Jenney, Fisher, & Chan, 2014). These shelters were initially run by volunteers providing help and protection to the victims and continue to play a crucial part in the help offered to battered women in Sweden today (Antilla et al., 2006; Pajak et al., 2014). There are currently approximately 190 women shelters in Sweden offering hotlines, counselling, support and housing to IPV victims. Women can turn directly to, or be referred by the social services to an NGO women's shelter.

### 2.6.3 Health Care

The Swedish health care has an explicit public commitment to provide equal access to care to the Swedish population. A specified ambition of the Swedish health care (including dental care) is good health and care for the entire population (Dahlin, Leviner, Kaldal, & Gumpert, 2010; SFS1982:763 [Health Care Act]). Services can include everything from telephone consultations on self-care to advanced specialist care. In addition, health care staff is expected to refer patients to other caregivers when there is a need for additional support. Good healthcare implies that relevant information regarding possible causes of the symptoms a patient is seeking care for is gathered (SFS1982:763 [Health Care Act]). Unlike the social services, there is no specific regulation in the legislation for the health care regarding victims of IPV. However, an increased knowledge of and ability to identify signs of domestic violence among healthcare staff has been requested and emphasised as important in order to accomplish a good care since many victims of violence seek care for other symptoms, without disclosing the violence as a possible cause (Burns, Conroy, & Mattick, 2010).

### 2.6.4 The Police

The Swedish police are assigned to reduce crime and increase people's security. In Sweden, an increased societal awareness of violence between family members has led to reforms of the legislation such as the criminalisation of spousal abuse and of corporal punishment against children (Annerbäck, Wingren, Svedin, & Gustafsson, 2010; Broberg et al., 2011; Dahlin et al., 2010; WHO, 2014). Crimes such as physical assault and sexual assault apply under public prosecution meaning that a case investigation can be carried out without the victim's participation. When a case of IPV is reported to the police, an investigation should be initiated where the police are assigned to collect evidence and conduct interrogations with the victim, the

suspected offender and potential witnesses. During this process, the police are required to assess the offender's risk of committing repeated violence. A commonly used tool for this purpose is the SARA-protocol (Spousal Assaults Risk Assessment Guide) (P. R. Kropp, Hart, Webster, & Eaves, 1995), a checklist that comprises 20 factors considered to influence an abuser's risk of reoffending their partner. In a further developed short version of the checklist, SARA:SV (Spousal Assaults Risk Assessment Guide - Short Version) (P.R. Kropp, Hart, & Belfrage, 2005), ten factors from the original version were retained and five additional factors were added specifically concerning vulnerability factors of the victim. An evaluation of SARA:SV, demonstrated that victim vulnerability factors are important to assess when evaluating risk of future violence among abusive partners (Belfrage & Strand, 2008).

Besides working with offenders and conducting investigations, the police have the responsibility to inform the victim about their legal rights and other support facilities, including different alternatives for protection.

### 2.6.5 Identifying Needs of IPV Victims

A core feature of the welfare state is to assist individuals in need of changing lifestyle or own behaviours. The ability of society to provide appropriate interventions for IPV victims requires knowledge about which factors and circumstances may reduce the risk of continued victimisation and facilitate recovery. At present, knowledge is lacking about the efficacy of specific interventions for victims of IPV (Antilla et al., 2006; Warshaw, Sullivan, Rivera, 2013). Interventions targeting the victim's social situation, including practical assistance in urgent situations are important but may be insufficient in terms of facilitating recovery over longer periods (D. Bybee & Sullivan, 2005; DeborahI Bybee & Sullivan, 2002; Postmus, Severson, Berry, & Yoo, 2009; Walker, 2006). In addition to assistance in acute situations, a victim may need to cope with multiple consequences of currently being or having been in an intimate relationship with a violent partner (Edwards, Gidycz, & Murphy, 2011). As mentioned above, victims of IPV commonly have a wide range of social and mental health adversities but also a variety of previous life experiences. Due to this heterogeneity, there is no single treatment model that will fit the needs of all.

The Swedish National Board of Health and Welfare is commissioned by the government to work towards high-quality health care and social services. This assignment includes assisting professionals within the health care system and social services and to continuously improve the quality of care. It also includes encouraging the use of evidence-based methods (i.e. methods

that have gained empirical support through scientific evaluation). This is partly accomplished by publishing handbooks on "best practice" based on contemporary research on successful interventions and by supporting the development of methods that improve the efficacy of care. As part of this work, standardised measures developed to assess risks and potential needs which need to be identified for the design of adequate interventions, are being introduced. Risk assessment tools are a form of standardized assessment methods, developed to assist practitioners when designing interventions. Standardised assessment instruments are generally considered to contribute to increased transparency of the assessment process and conclusions of an individual's situation and needs. Such assessments should be based on current evidence and be scientifically tested to ensure its validity.

The Swedish National Board of Health and Welfare has recently developed a structured risk assessment, FREDA (Socialstyrelsen, 2014b). This assessment is aimed to assist social workers within the social services achieve relevant information about the victim's violent experiences in order to allocate appropriate acute interventions to secure safety. FREDA encompasses three complementing parts; short questions, description and danger assessment. The short questions aim to introduce the topic of IPV and to support professionals in daring to ask questions about violence. The descriptive part aims to pose questions that define characteristics of the violence the victim has experienced. The last part, which consists of the Danger Assessment instrument originally developed by Jacquelyn Campbell (Campbell, 1986; Campbell, Webster, & Glass, 2009), evaluates the risk of further victimisation and victim's need of protection. The FREDA assessment has been implemented at several service sites within the social services in Sweden. A disadvantage with this assessment, however, is that victim's long-term needs are not addressed which could impact on the individual's chance to maintain safety and facilitate recovery (Iyengar & Sabik, 2009). Evaluations of lethal IPV have shown that in many cases, the victims have had some kind of contact with authorities (Socialstyrelsen, 2014a; Strandell, 2013). This implies that some cases of victimisation can be identified throughout the course of the violence exposure, which ultimately could save lives. Therefore, focusing on improving skills and resources for professionals required to meet the individual needs of victims in a longer perspective is of great importance (Antilla et al., 2006; Domino et al., 2005).

## 2.7 RATIONALE OF THIS THESIS

IPV and DV can be studied from various perspectives and at different levels (e.g. interview-based, self-reports on national population representative samples or selected groups in society,

through official records). Consequently, findings from different studies may have different implications depending on the specific studied population and at what level the study is conducted (national or selected sample such as a certain region or setting). Official statistics may put pressure on policy makers to take actions in terms of legislation reforms or information campaigns whereas studies concerning specific groups increase the understanding of individual variations within a society and may be relevant to professionals as guidance in their work. In Sweden, studies on a national level concerning domestic violence (DV) among both women and men are few. DV and its relation to social and health outcomes among women and men within the framework of the Swedish Public Health Survey have remained unexplored. Study I focuses on physical domestic violence exposure and its associations with social situation and health status among women and men.

Although many women subjected to partner violence are repeatedly exposed and sometimes also in several relationships (Cole et al., 2008), the number of unreported cases is considered high. The negative consequences of the violence may increace along with the duration of the victimisation and possibly also make it more difficult for women to cope and exit the destructive situation they are living in. Most research on IPV exposed women has been conducted on women who have sought some kind of formal help from authorities (Nerøien & Schei, 2008). Therefore, knowledge about women who are not seeking help due to IPV is limited. Information about social and psychological characteristics of non-help seeking IPV exposed women is essential in order to explore alternative coping strategies, understand possible barriers to help seeking and optimise prevention of future victimisation (Cole et al., 2008). In addition, few longitudinal studies have focused on IPV exposed women in relation to social support and mental health over time.

In the present dissertation project, we were able to include IPV exposed women not seeking help due to the violence. Study II explores social and psychological factors in relation to help seeking among IPV exposed women seeking help due to the violence and women who never sought help due to IPV. Study III focuses on potential changes in mental health over a 12-month period among IPV exposed women with and without experiences of violence during childhood.

In addition to the individual suffering, lack of efficient and effective assistance for IPV victims can be expensive for society (Iyengar & Sabik, 2009; Pajak et al., 2014; Socialstyrelsen, 2006; Varcoe et al., 2011). Developing risk and need assessments to target relevant factors within the victim's sphere of influence that can be addressed to prevent further victimisation can be a

feasible way to motivate professional's choices of action regarding safe management. One attempt to develop a structured method to identify the needs of victims is the Decision Making In Abusive Relationships Interview (DIARI) (Nicholls, Hilterman, & Tengstrom, 2010). The DIARI is a comprehensive checklist focusing on the victim's needs and it includes 31 factors identified in the research literature to be related to a battered woman's decisions in terms of seeking help, thinking in security terms or leaving the violent partner (Nicholls et al., 2010). The individual factors are grouped into five categories reflecting the woman's situation and experiences of the abusive relationship: nature of relationship, social context, nature of abuse, characteristics woman and characteristics man. An objective of the DIARI is to assist professionals in their evaluations of battered women's needs with the purpose to ensure that relevant information is not disregarded when allocating interventions. The DIARI is intended to be used with women in both pre-separation (i.e. women cohabiting with the violence partner) and post-separation (i.e. with women who recently left the violent partner or who previously ended the relationship but are ambivalent towards its future). Even though the DIARI is a promising tool, its psychometric properties have not yet been empirically tested. Study IV explores psychometric properties (i.e. concurrent validity and test-retest reliability) of the DIARI in a Swedish context, where it has not previously been tested.

# 3 AIMS

**Overall Aim**

The overall aim of this study is to contribute to an improved knowledge of how individual and contextual factors are related to social and psychological health among victims of intimate partner violence (IPV). A further aim is to investigate the relationship between victim´s social and psychological health and help seeking due to IPV exposure. Subsequently, the aims of respective studies included in this thesis are:

**Study I**

To compare women and men regarding their social situation and health status in relation to self-reported exposure to physical DV as measured in the Swedish National Public Health Survey.

**Study II**

To examine IPV exposed women in relation to help seeking versus non-help seeking from the social services or women's shelters with regard to social and psychological characteristics, current relationship with the perpetrator and type of violence exposure.

**Study III**

To study change in mental health during a 12-month period among women exposed to IPV with regard to previous CV exposure, and to explore the possible impact of access to formal help.

**Study IV**

To explore the DIARI interview with regard to inter-rater reliability, to compare DIARI ratings between pre and post separation victims, and explore its concurrent validity in relation to other measures.

# 4 MATERIAL AND METHODS

## 4.1 PARTICIPANTS

This dissertation project is based on data from two separate data sets which were collected as part of large evaluation projects concerning interventions offered to IPV exposed women: dataset I, which is retrieved from a national survey study (Study I) and dataset II, which is a cohort study (Study II-IV), see figure 2 below.

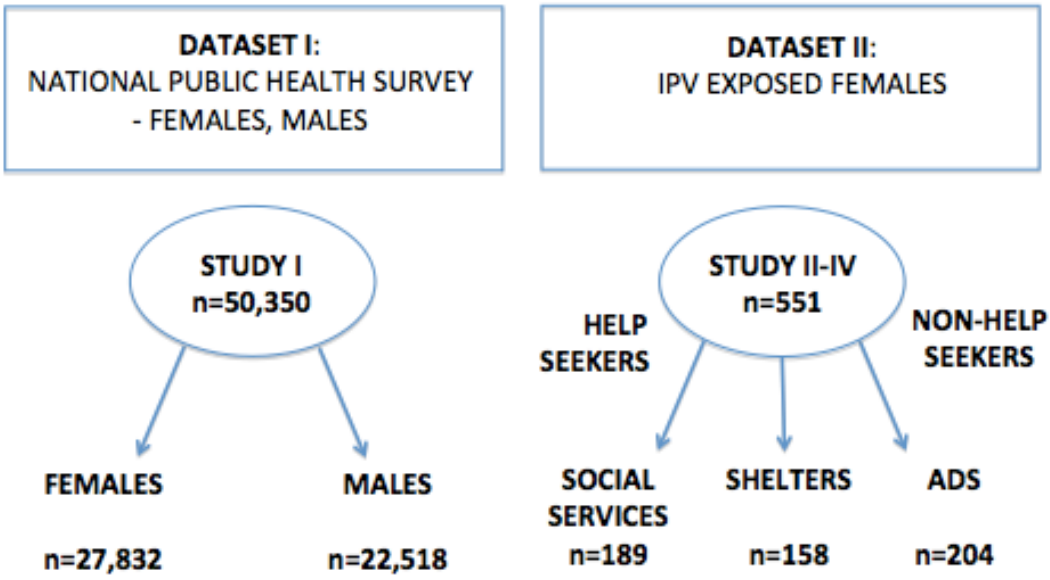


Figure 2. Description of datasets included in this dissertation project.

## 4.2 SAMPLING AND PROCEDURE

### 4.2.1 Study I

**Study I** uses data from a yearly cross sectional survey study; the Swedish National Public Health Survey conducted by the Public Health Agency of Sweden (previously the Swedish National Institute of Public Health), conducted between 2004 and 2009. The survey includes information about various domains including participants' physical health, mental wellbeing, social and financial circumstances, alcohol use and violence exposure. These variables are further described below.

Beginning in 2004, the public health survey is conducted annually. Each year, a random sample of 20 000 individuals (10 000 individuals, the years 2005-2007) aged 16-84 (18-84

years in 2004) are invited to participate. Data is collected through questionnaires and national register variables concerning socio-demographic information linked through citizens' civic registration number. The number of non-responders has increased for each year, from 39 % in 2004 to approximately 48 % in 2009. The total sample, which Study I was based on, was 50,350 respondents (Figure 2).

### 4.2.2 Studies II-IV

Studies II-IV are based on data from three separate cohorts (dataset II) of women exposed to IPV by a male partner or ex-partner (Figure 2). The first and second cohorts include help seeking women (recruited from social services and women's shelters, respectively). The third cohort includes women who had not been in contact with women's shelters or the social services due to IPV during the year preceding study inclusion.

Recruitment to the help seeking group was carried out at four community-based social service sites and twenty non-governmental women's shelters around Sweden. Inclusion criteria were: being 18 years of age or older, and currently being exposed to violence by an intimate male partner. The staff at each site asked women if they were interested in obtaining information regarding the present study. Women who were interested in study participation were contacted by the research staff for further information about the project. Some of the respondents did not have Swedish as natural language, and therefore informed consent and questionnaires were translated to the seven most common languages reported by staff (i.e., Somali, Spanish, Bosnian, Arabic, English, Persian, Turkish and Thai). There was some degree of selection bias in the offer to participate, since not all help seeking women at the included facilities were informed about the study. According to the staff, the two most common reasons for not providing information were if the woman's situation was considered very urgent or if the woman only attended the facility once or alternatively did not stay in the shelter for more than a few days. Some of those who were informed chose not to participate and women who did not understand any of the available languages were excluded. In total, 347 women from the various sites were recruited between January 2009 and February 2010 (see Figure 3).

The non-help seeking group consists of 204 women. Inclusion criteria were: being at least 18 years old and having been exposed to IPV in a heterosexual relationship at least once during the past five years. Another criteria was that participants should not have had been in contact with the social services or women shelters due to violence exposure during the year preceding study inclusion.

Recruitment to the non-help seeking group was done through ads in national and regional daily newspapers as well as various women's magazines. The ads were published at least three consecutive times within a two-week period in each of the newspapers. The ad included a question about violence exposure targeting our study group and also the address to a webpage where women could read more about the study and leave their contact information.

In line with the inclusion criteria for the help seeking group, participants should be at least 18 years of age and having been exposed to IPV at least once during the past five years. Furthermore, they should not have been in contact with the social services or a women shelter due to IPV during the year preceding study inclusion.

Initially, a total of 397 women demonstrated interest for the study and left contact information through the webpage. They were contacted by e-mail or by telephone for further information and a short screening to ensure study eligibility. Contacts were attempted for up to 376 women in a consecutive order until the desired number of respondents was reached (approximately 200). Of these, 72 women did not meet the inclusion criteria for participation, six did not want to continue after obtaining further information about the study, and 86 women could not be reached through the contact information they had left via the website. In total, 212 women agreed to participate. Among these, eight did not return the baseline questionnaire, leaving a total of 204 respondents. For the purpose of this study, participants were divided into two groups; those who had been in contact with the social services or women's shelters some time during the year preceding inclusion (n=75) and those who had never sought such help (n=128). One woman could not be classified according to these groups due to contradictory answers and was therefore excluded. The final sample of non-help seekers comprised 204 women (Figure 3). Inclusion to the non-help seeking group was carried out from March 2009 to November 2009.

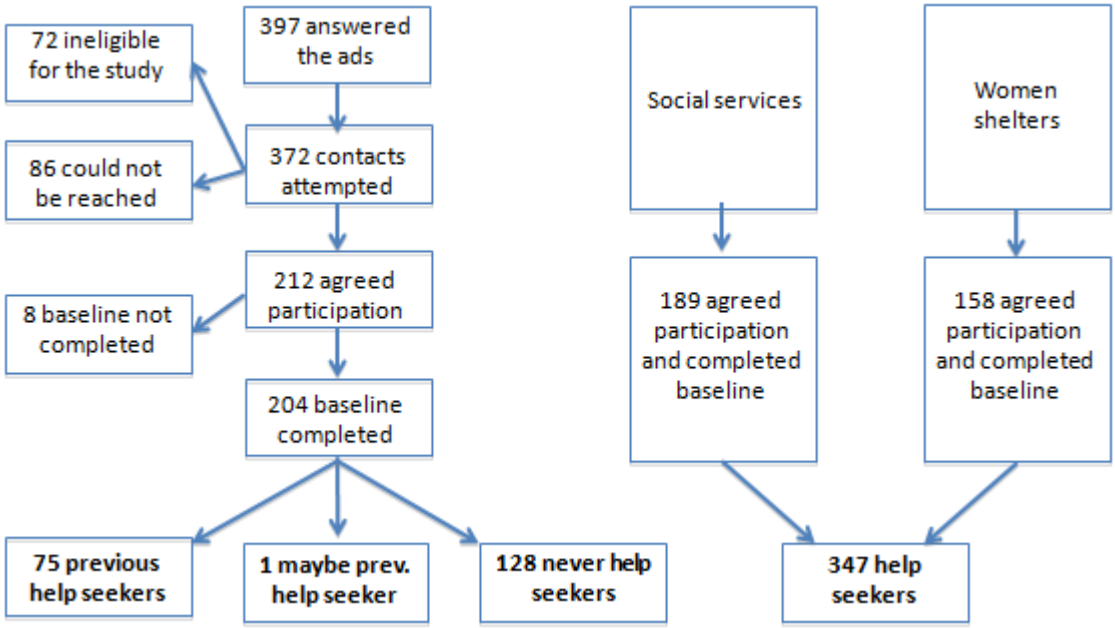


Figure 3. Overview of inclusion, dataset II.

At baseline, participants were assessed with a questionnaire concerning violence exposure, psychological health, socioeconomic situation and help seeking. To facilitate participants' security, women in the non-help seeking group were offered two different response formats: a web-based survey (n=54) with information provided through e-mail or a paper-based survey (n=74). Help seekers completed paper-based forms and handed them in to research staff.

After filling out the questionnaires, the non-help seekers (n=204) were interviewed with the DIARI checklist by a researcher. For practical reasons and with regard to the potential vulnerable situation of the participants (e.g., living on a secret address), the DIARI interviews were performed over the telephone. Twenty-five randomly selected interviews were recorded for inter-rater reliability purposes. Due to technical problems with some of the recordings, only 19 interviews could be used for this analysis. A second researcher overheard the interviews post inclusion and performed independent DIARI ratings. Since the help seekers already had established contact with either social services or women's shelters, participants in those groups were not interviewed with the DIARI. Inclusion of participants was carried out from March 2009 to November 2009. At the 12-month follow-up, participants completed the same questionnaires used at baseline. The average time to follow-up was 377 days for help seekers and 429 days for non-help seekers.

## 4.3 MEASURES

The following measures were used in this dissertation project:

### 4.3.1 National Public Health Survey (Study I)

For the purpose of Study I, the following information was extracted from the National Public Health Survey:

#### 4.3.1.1 **Violence Exposure**

**Domestic Violence (DV)**

Participants were asked whether they had been exposed to physical violence sometime during the past year (yes/no). Those who gave an affirmative answer to this question were further asked where the violence took place with the home as an alternative answer. The variable DV specifically refers to participants who had been exposed to violence at their home.

#### 4.3.1.2 **Demographic and Socioeconomic Characteristics**

**Education**

Information concerning participants' highest level of education was obtained from the education register at Statistics Sweden (which differentiates between primary school/secondary school/university). The variable education was coded as either low (i.e., completed secondary school) or high (i.e., completed university studies).

**Employment Status**

Current employment status was coded as unemployed or employed. Employment encompassed being employed or having one's own company.

**Financial Problems**

Current financial difficulties was based on information from two questions: being unable to acquire 14,000-15,000 SEK (approximately USD 2140/2000 in one week, which is equivalent to a typical worker's salary according to Statistics Sweden) or having difficulties to cover current expenses during the previous year. The variable was dichotomous, so participants who endorsed any of these questions were classified as having financial problems.

**Social Support**

Social support in the part year was defined by merging two questions concerning emotional support and access to practical help. The questions were classified as yes or no.

**Children**

The respondents were asked whether there were any children under the age of 18 living in the respondent's household. The question was coded as yes or no.

#### 4.3.1.3 Health Status

**Psychosomatic Symptoms**

Twelve questions concerning current psychosomatic symptoms (e.g., pain in shoulders/neck/back, headache, fatigue, anxiety or sleeping problems) were coded as present or absent and then merged into a summary variable indicating the number of symptoms reported.

**Psychological Distress**

Psychological distress was measured using the 12-item short version of the General Health Questionnaire (GHQ12) (Boström & Nyqvist, 2010). These questions focus on two problem areas during the past weeks; the inability to cope with daily functions and the level of anxiety. Answers are coded as 0 or 1 and then summarised into a global score where high scores indicate a higher problem load. The summary variable psychological distress was coded as high or low based on the recommended cut-off score (i.e., 3, reflecting impaired mental wellbeing (Boström & Nyqvist, 2010).

**Suicidal Behaviour**

Suicidal behaviour was based on information from two questions: whether the participant reported serious thoughts of suicide or suicide attempts sometime during their life. The answers were merged into a single variable with three levels: no suicidal ideation or attempts; suicidal ideation (referring to thoughts of suicide) and suicide attempts (referring to reporting suicide attempts only, or reporting both suicidal thoughts and suicide attempts).

**Hazardous Drinking**

Hazardous drinking habits during the past year was measured using the short version of the AUDIT (Alcohol Use Disorders Identification Test), which consists of the three first

questions from the original version (H. Bergman, Källmén, & Hermansson, 2002). Each question was scored on a scale from 0 to 4 and summed into a global score, where high scores indicate higher alcohol consumption. Based on recommended cut-off scores for hazardous consumption (women≥4, men≥5) the sum variable was dichotomised and coded as yes or no (Hans Bergman & Källmén, 2002).

**Medicine Use**

Medicine use was based on eleven questions regarding use of different kinds of medications such as painkillers, blood pressure, sleep-/asthma-/gastritis-medicine and anti-depressives. Answers were scored 0-1 and merged into a sum variable indicating the number of medications consumed by participants during the past three months.

### 4.3.2 The Cohort Study (Study II-IV)

The following measures regarding violence exposure, social situation and mental health were used in the cohort study:

Table I. Overview of the measures included in Study II-IV.

| **Measures** | **Baseline** | | **12-month follow-up** | |
|---|---|---|---|---|
| **Self-report** | **Help seekers** | **Non-help seekers** | **Help seekers** | **Non-help seekers** |
| **Violence exposure** | | | | |
| IPV in latest relationship (CTS2) [a] | x | x | x | x |
| Previous history of IPV | x | x | | |
| CV | x | x | | |
| Social situation and mental health | | | | |
| Demographics | x | x | | |
| Psychological distress (SCL-90) [b] | x | x | x | x |
| Psychosocial function (OQ30.2) [c] | x | x | x | x |
| Alcohol use (AUDIT) [d] | x | x | x | x |
| **Interview** | | | | |
| DIARI [e] | | x | | |

a) Measured with the Revised Conflict Tactics Scale

b) Measured with the Symptom Checklist-90-R

c) Measured with the Outcome Questionnaire

d) Measured with the Alcohol Use Disorders Identification Test

#### 4.3.2.1 **Violence Exposure**

**Intimate Partner Violence: CTS2**

The frequency and type of IPV was measured with the Revised Conflict Tactics Scale (CTS2) (M. Straus, Hamby, Boney-Mc Coy, & Sugarman, 1996), a 78-item self-report questionnaire that has been validated in different contexts and is commonly used in research to measure IPV (M. A. Straus, Hamby, & Warren, 2003; Vega & O'Leary, 2007). The questionnaire encompasses five scales; negotiation, psychological aggression, physical assault, injury and sexual coercion. Since our focus was on women's exposure to violence, the subscales dealing with physical, sexual and psychological violence were used in this study. These scales have demonstrated good internal consistency with a Cronbach's alpha ranging between .79 and .86 (M. Straus et al., 1996). For each item, respondents were asked to note down the number of times the violent act had occurred during the past year, with the following response options: never to more than 20 times, sometime earlier in life, sometime during the past year (asking the respondent to specify number of times). According to instructions in the test manual, the CTS2 items can be organized into minor and severe acts (M. Straus et al., 1996). Minor physical violence comprises throwing something, slapping, punching, shoving or grabbing. Severe physical violence includes acts like biting, kicking, hitting with a fist or threatening with weapon (e.g., knife or fire gun). Minor psychological violence includes acts such as insults or shouting whereas severe psychological violence refers to threats of violence or destroying a partner's belongings. Minor sexual violence encompassing insisting on having sex and severe sexual violence includes using threats or forcing someone to have sex (see Strauss et al., 2003).

**Childhood Violence (CV)**

The questionnaire included questions about violence exposure during childhood (psychological/physical violence by adults and between parents) and violence exposure in previous relationships (psychological, physical and sexual). The answers were coded dichotomously (yes/no).

**Previous IPV**

Being exposed to IPV by an intimate partner from a previous relationship (i.e., not the relationship that prompted study participation) was assessed using three single questions concerning psychological, physical and sexual violence. The variable was coded as absent or present.

#### 4.3.2.2 **Demographic and Socioeconomic Characteristics**

The questionnaire included single questions regarding demographic characteristics, including: age (years), place of birth (i.e. if born in Sweden, yes/no), highest level of education (differentiating between high school and university), financial problems (yes/no), relationship to latest violent partner (no relationship/still together/other) and occupation. The variable occupation encompassed the following options: having a part- or fulltime job, being a student, being retired or on sick leave, being unemployed, being on a long holiday and other.

**Social Support**

Participants recruited though ads were coded as not receiving current specialised formal help (i.e., specialised in violence victimisation). Women recruited from specialised settings (i.e. women's shelters and the social services) were coded as receiving current specialised formal help at baseline. Single questions about other types of social support such as unspecialised formal (e.g. health care) or informal help at baseline and follow-up were included in the questionnaires. Baseline questions focused on current support whereas follow-up questions concerned the twelve months between baseline and follow-up. Four variables were created regarding formal and informal help at baseline and follow-up. The variable formal help at baseline was based on the initial pathway for inclusion in the study whereas categorisation of help during follow-up was merely based on self-reports. Both variables concerning formal help were created by merging data about specialised and unspecialised formal help and coded as no, unspecialised, specialised or both.

#### 4.3.2.3 **Health Status**

**Psychosocial Function**

Psychosocial function was assessed with the Outcome Questionnaire (Lambert, Finch, Okiishi, & Burlingame, 2005) (OQ-30.2), a 30 item self-report questionnaire. Each item is scored on a five-point Likert scale (from 0 to 4) and a total score is calculated summing the ratings across all 30 items. A high score indicates low social functioning and a low score indicates high social functioning. In order to differentiate between normal and impaired functioning (i.e., clinical patients), Lambert and colleagues calculated a cut off score of 44, where higher scores indicate a reduced psychosocial functioning (Lambert et al., 2005).

**Psychological Distress**

Psychological distress was measured with the 90-item self report measure Symptom Checklist-90-R (Derogatis, 1994). This measure was developed to reflect an individual's psychological symptom patterns. Each item is rated on a five-point scale of distress (between 0 and 4) ranging from not at all to extremely. We used the total mean score, Global Severity Index (GSI), which shows an individual's level of psychological distress. A Swedish validation study of the instrument has suggested that a score of 1.21 corresponds to a clinical population and a score of 0.49 to the general population (Fridell, 2002).

**Alcohol Consumption**

To estimate alcohol consumption, the Alcohol Use Disorders Identification Test (AUDIT) was used. It is a 10 item self-report questionnaire developed to screen for excessive drinking (Saunders, Aasland, Babor, De La Fuente, & Grant, 1993). Each item response is scored and summed giving a total score between 0 and 40. For women, a score of 6 or above has been recommended as an indication of harmful alcohol use (H. Bergman et al., 2002). This test has been validated in a Swedish context and has shown good results in differentiating between normal and problematic alcohol consumption (Hans Bergman & Källmén, 2002).

#### 4.3.2.4 Baseline Interview with the DIARI

**DIARI – Decision Making In Abusive Relationships Interview**

The DIARI is a structured evaluation interview designed as a checklist that includes 31 factors divided into five categories: (1) nature of relationship; (2) social context; (3) pattern of abuse; (4) characteristics woman; and (5) and characteristics man (Nicholls et al., 2010). The test manual contains a brief description of each factor referencing scientific literature explaining its relevance. Each item is scored (and rated as low, middle or high), based on the interview with the woman.

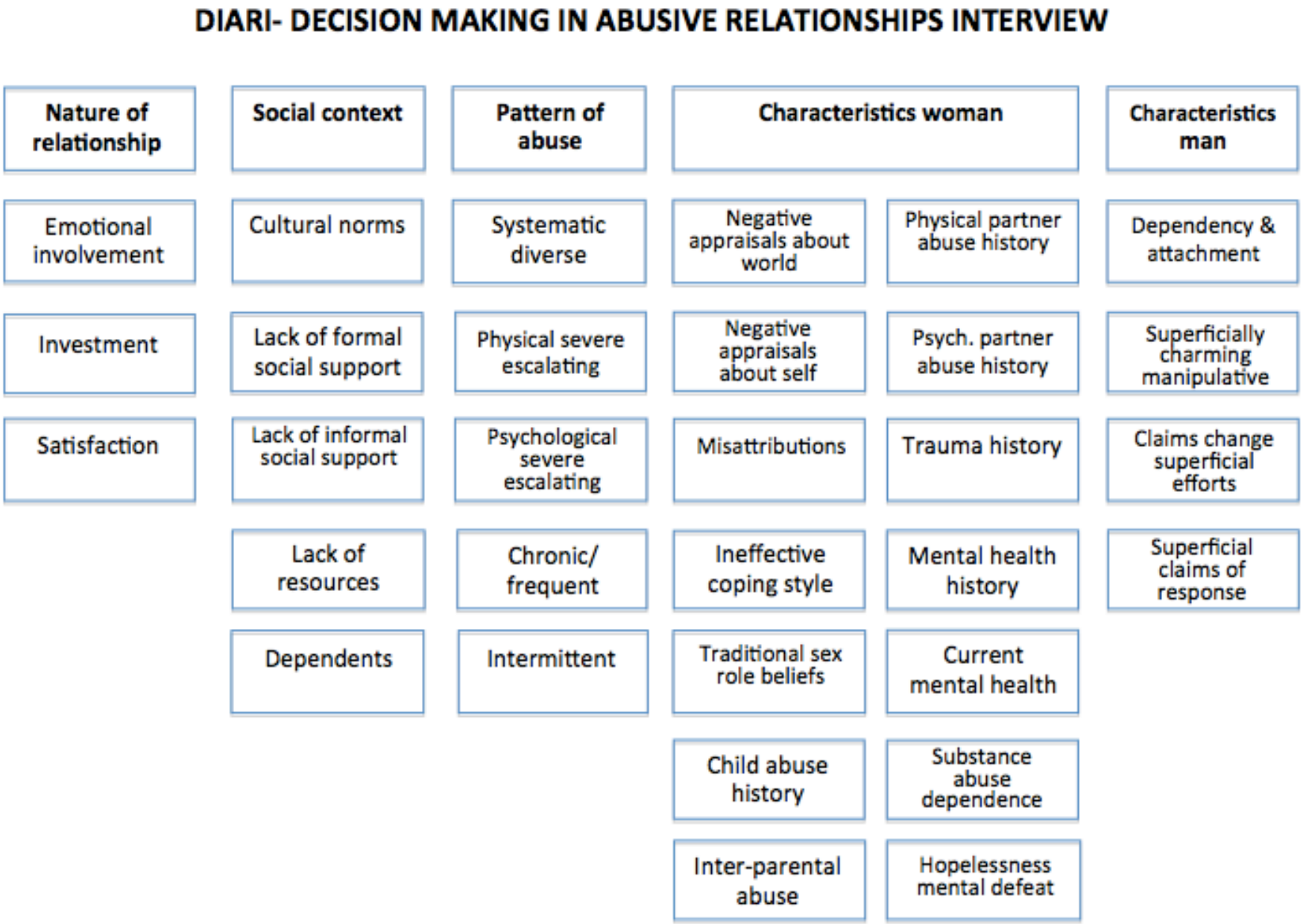


Figure 4. Overview of the categories and individual factors in the DIARI measure.

Brief description of the DIARI categories and individual factors

Nature of the relationship: This category encompasses three items: the woman's emotional involvement with the abuser; investment in terms of duration of the relationship and financial or material boundaries; and satisfaction which refers to the level of redeeming qualities in the relationship of the partner, as perceived by the victim.

The category social context encompasses the item cultural norms, which refers to the influence of friends, family, culture or religion regarding attitudes or values that may influence the woman's response to the abuse. The remaining items in this category are: financial resources, presence of dependent children and lack of formal and informal support referring to support by family, friends or professionals.

Pattern of abuse: Five items address different aspects of abuse; systematic/diverse abuse such as different types of violence (physical, psychological, sexual or financial), physical severe/escalating abuse, psychological severe/escalating abuse, chronic/frequent (i.e. frequent or serial in nature) and intermittent abuse irregular, lacks a pattern.

Characteristics woman: Fourteen items focus on the woman's current mental health, mental health history, substance abuse, experience of violence during childhood and in previous intimate relationships along with history of other traumatic events. This category also includes items referring to the respondent´s expectancies of the future (negative appraisals of world) and self-esteem (negative appraisals of self), hopelessness (e.g. burnout symptoms due to distress) and misattributions like minimising the abuse or excusing the abuser by blaming herself for circumstances around the abuse. Lastly, coping style (or ineffective coping style) that refers to problem solving abilities and sex role beliefs (e.g., attributes where she has inferior status as a woman or puts her needs as secondary to the family) are addressed.

Characteristics man: The final category includes four items that refer to the woman's perception of her partner. Dependency and attachment focus on the degree to which the woman perceives the abuser as needy and feels responsible for him or compelled to remain in the relationship. Finally, personality aspects like the presence of superficially charming or manipulative traits, superficiality, remorse and efforts to change, are included.

#### 4.3.2.5 **Ethical Considerations**

The Regional Ethical Review Board of Stockholm approved the included studies (DNR2008/1269/5, DNR2009/223/5).

# 5 OVERVIEW OF THE STUDIES

This section presents an overview of the included studies.

## 5.1 STUDY I

Study I is cross-sectional study, which is based on data from the Swedish National Public Health Survey (n=50,350). Physical domestic violence exposure is examined in relation to social and psychological adversities among women and men separately. Multivariate logistic regressions were use to explore demographics, socioeconomic situation and health status in relation to DV exposure.

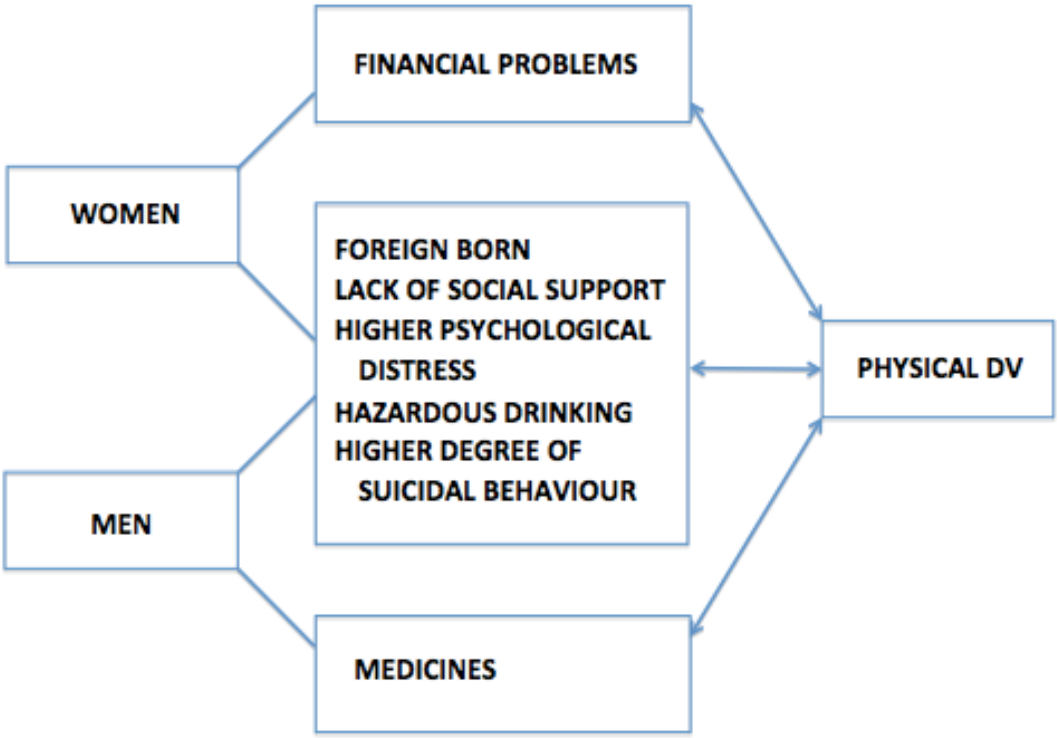


Figure 5. Overview of the variables and the results in Study I.

Findings from Study I showed that 0.7% of women and 0.4% of men reported physical DV exposure. DV exposure was associated with being foreign born, and reporting lack of social support, psychological distress and hazardous drinking. For women, having financial problems was also associated with DV whereas DV exposed men reported higher use of medicines compared to non-exposed men. In addition, suicidal thoughts and attempts were associated with DV exposure among women. Among men, suicidal attempts were associated with more than eight times higher odds of DV exposure.

## 5.2 STUDY II

Study II is a cross-sectional study that uses baseline data from three cohort samples: help seekers, referring to women recruited from facilities (i.e., social services or women's shelter; n=347) and non-help seekers referring to women who had never been in contact with the social services or women's shelter (n=128). Descriptive statistics and binary logistic regressions were used to explore potential differences between help seekers and non-help seekers concerning violence exposure, social and psychological health.

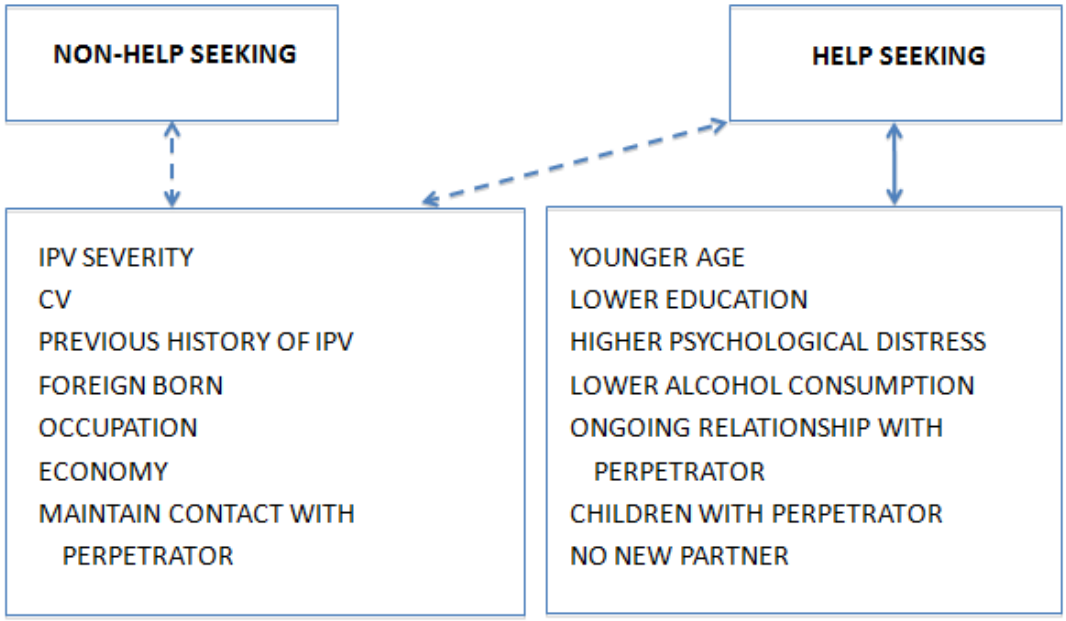


Figure 6. Overview of the variables and results in Study II. Dotted lines represent bivariate association and solid lines represent multivariate association.

Participants in both the help seeking and non-help seeking group reported severe and varied lifetime violence exposure (i.e. the majority had experienced severe physical, psychological or sexual IPV in their latest violent relationship, had a history of violence exposure during childhood or in prior relationships). Women in both groups reported psychological and psychosocial impairments, even though women in the help seeking group reported a higher problem load. Help seeking women were on average younger and had a lower education, compared to non-help seekers. More women in the help seeking group were still in a relationship with and had children together with the perpetrator. Moreover, fewer women in the help seeking group had a new partner.

Data from the Swedish National Public Health Survey reveals associations between several adversities and physical DV exposure. Prevalence rates were low in comparison to similar

previously conducted surveys focusing violence exposure, indicating an underestimation of DV cases in the results.

## 5.3 STUDY III

Study III has a longitudinal prospective design and uses baseline and follow-up data from the cohort samples. The three data samples were merged and compared with regards to self-reported CV exposure in relation to changes in mental health during follow-up (n=551). Descriptive statistics, $chi^2$ and t-tests, were conducted to compare CV exposed with non-exposed women. Multi-factor repeated measures ANOVA was used to explore potential changes in mental health stratified by CV exposure.

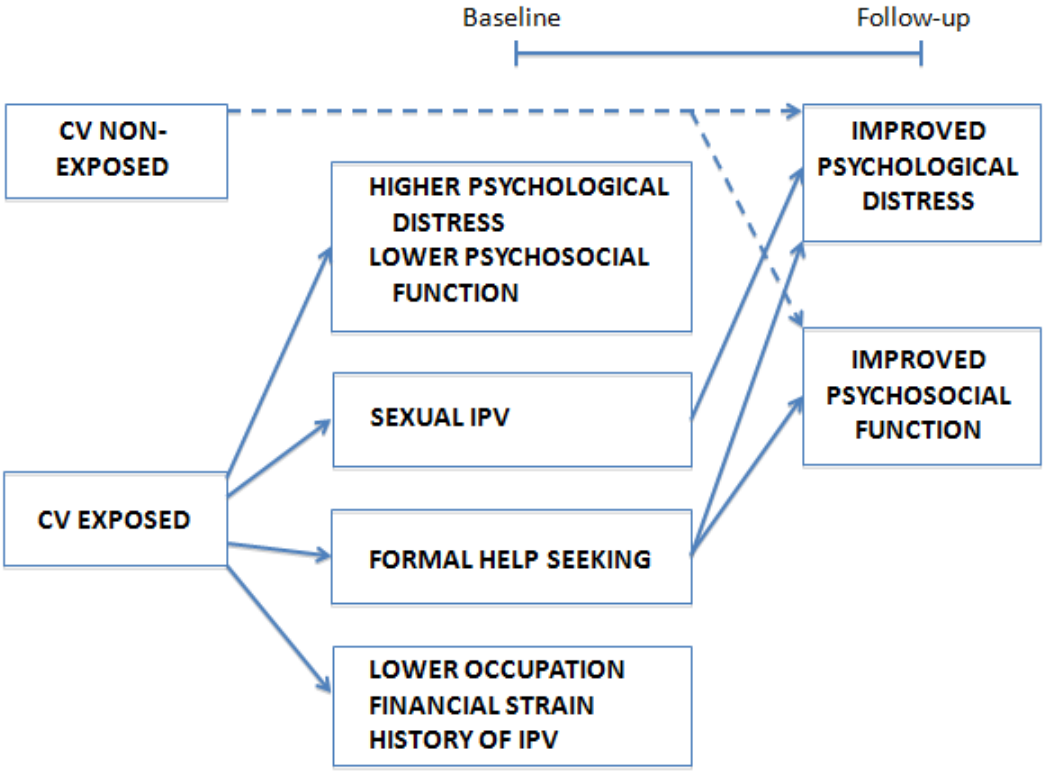


Figure 7. Overview of the variables and results in Study III. Dotted lines represent bivariate association and solid lines represent multivariate association.

IPV exposed women with a history of CV exposure reported higher levels of psychological distress and lower psychosocial function than did women without CV exposure. Moreover, it was more common among CV exposed women to report access to specialized formal help at baseline (i.e. a women's shelter or social services). The bivariate analyses demonstrated that both groups reported significant improvements in mental health to follow-up although in the multivariate analyses, when group differences were taken into consideration, only CV exposed women's improvement remained statistically significant. Two factors reported at

baseline (i.e., sexual IPV exposure in latest violent relationship and access to formal help) were related to CV exposed women's mental health improvements.

## 5.4 STUDY IV

Study IV is a cohort study that uses data from two sources: questionnaires completed at baseline and follow-up, as well as a baseline interview using the DIARI. In this study, only the third cohort (non- help seekers) was included (n=204). For the purpose of studying concurrent validity, items included in the DIARI categories 2 (social context) and 4 (characteristics woman) were analysed in relation to respondents' self-reported mental health, assessed with OQ and GSI. Inter-rater reliability was investigated using Intraclass correlation coefficients (ICCs) and Cohen's Kappa (Sim & Wright, 2005). Pearson's correlations were computed to explore concurrent validity of the DIARI in relation to measures included in the baseline questionnaires.

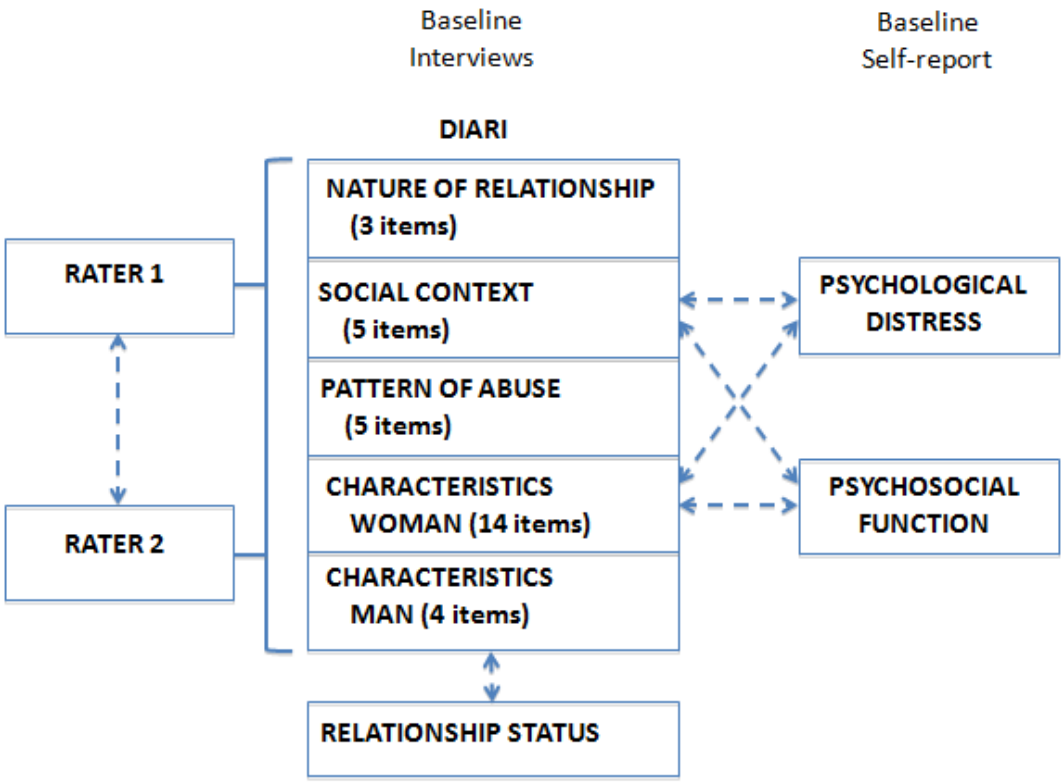


Figure 8. Overview of the variables and results in Study IV. Dotted lines represent bivariate association and solid lines represent multivariate association.

The investigation of concurrent validity generated mixed results. The group level problem profiles generated with the DIARI interview were similar overall to those obtained using the previously validated self-reported measures. Most DIARI items included in the categories

social context and characteristics women demonstrated associations with self-report information regarding women's mental health (i.e. psychological distress and psychosocial function). Further, differences were found in some item estimations in relation to women's relationship status. Divergences between the instruments were found however specifically for some items assessing relationship status. Regarding inter-rater reliability, great variation was found between single items.

# 6 DISCUSSION

## 6.1 STUDY I

In the Swedish National Public Health Survey (conducted between the years 2004 to 2009), an average of 0.7% of women and 0.4% of men reported exposure to physical DV during the preceding year. Both women and men that had been subjected to physical DV reported a higher degree of adverse factors in comparison to participants that had not been exposed to DV. Previous DV exposure was associated with being foreign born, lacking social support, and reporting higher levels of psychological distress and hazardous drinking. There were also some gender specific associations. Among women, having financial problems was associated with DV exposure. Among men, current use of medicines was associated with higher odds of being exposed to DV. Suicidal behaviours were associated with DV exposure among both women and men.

Rates of fatal and non-fatal suicidal behaviour are proposed to be important indicators of the public health status in a population (Group, 2007). In Study I, strong associations were found between DV exposure and non-fatal suicidal behaviours. Among women, reports of suicidal ideation was associated with two times higher odds of DV exposure and having attempted suicide with almost six times higher odds of DV. For men, suicide attempts were associated with more than eight times higher odds of DV exposure. The association between suicidal behaviours and partner violence exposure has previously been established by several studies, however, few studies to date have examined suicidal behaviour in relation to DV or IPV among men (McLaughlin et al., 2012). General violence and suicidal behaviours are more frequent among men compared to women (Hawton & van Heeringen, 2009; Stickley & Carlson, 2010), The results from Study I indicate even higher risks of suicidal behaviour in DV exposed men as compared to non exposed. One possible explanation for this stronger association could be that lower rates of DV exposure among men make them more vulnerable to this type of victimisation. On the other hand, the low rates of DV in this sample may lead to biased results if the exposed group represents a more severely victimised population. Previous research has indicated that general questions about violence exposure tend to underestimate respondents' victimisation since many do not see themselves as exposed. In contrast, specific questions regarding different violent acts are considered to obtain more accurate responses (Schacht, Dimidjian, George, & Berns, 2009).

Moreover, being foreign born and reporting lack of social support was associated with DV exposure (Alvarez-del Arco et al., 2013; Breiding, Black, & Ryan, 2008). Previous research has suggested that associations between immigrant status and vulnerability to violence may be explained by social and economic inequalities rather than place of birth (Breiding et al., 2008). In our study, both DV exposed women and men reported higher levels of psychological distress and hazardous drinking which is in line with previous research (Romito & Grassi, 2007; Tjaden & Thoennes, 2000).

The prevalence rates of DV were low in comparison to population-based studies that have specifically focused on violence exposure. This could indicate an underestimation of DV cases in the current data. Although the National Public Health Survey is not a prevalence study, the potential underestimation of DV may hamper the investigation of its associations with social and health results. Adding specific questions regarding DV or IPV to this survey could help detect associations with social and health adversities, which are important to assess from a public health perspective.

## 6.2 STUDY II

Results from this study showed that most IPV exposed women reported having been exposed to repeated violence and also reported high levels of psychological distress along with low psychosocial functioning. Help seeking was associated with younger age, having a lower education and having children with the perpetrator. In addition, it was more common among help seeking women to remain in the relationship with the perpetrator.

In line with the results for the help seekers, non-help seeking women displayed severe and extensive lifetime violence exposure but also social and mental health impairments. Both help seeking and non-help seeking women reported psychological and psychosocial impairment. Women who did not seek help were often older, had higher education and were in better social, economical and psychological conditions than help seekers. This indicates that regardless of the type of violence, non-help seekers may have a richer network of family, friends or others that support them. At the same time, social problems and psychological distress were more severe within this group in comparison to help seekers, regardless of when the last incident of violence had occurred. Long-term IPV exposure and a particular risk associated with the leaving process might negatively affect the level of distress. Leaving a violent partner has previously been related to an increased risk of victimisation among IPV exposed women (Ekbrand, 2006).

In line with previous research, a higher alcohol consumption was associated with lower odds of help seeking due to IPV among foreign born women (Vatnar & Bjorkly, 2010). This association could indicate that women born outside Sweden to a greater extent relate alcohol use to feelings of shame compared to their native counterparts. Another finding replicating previous research (Fanslow & Robinson, 2010; Fugate et al., 2005; Moe, 2009) was that having children together with the perpetrator was associated with help seeking. In contrast to studies demonstrating that custody disputes prevent women from seeking help (Plichta & Falik, 2001; Wolf et al., 2003), our results indicate that having children with the perpetrator is an incentive to help seeking. A possible explanation is the high access to family social support and maternal care, which can help to identify victims of IPV as well as encourage women to seek help (Anell, Glenngård, & Merkur, 2012; Lundberg, Åberg Yngwe, Stjärne, Björk, & Fritzell, 2008).

In contrast to some previous studies (e.g., Popescu and colleagues, 2010), our study did not demonstrate an association between CV exposure and help seeking (Popescu et al., 2010). Another finding was that having been subjected to IPV in previous relationships was not associated with help seeking.

### 6.3 STUDY III

Many of the IPV exposed women included in this study had also experienced violence during their childhood. Moreover, CV exposed and non-exposed women reported psychosocial impairment and high psychological distress although women with a history of CV reported poorer mental health than non-CV exposed. In addition, both CV exposed and non-exposed women reported similar improvements in their mental health during follow-up. However, when group differences where taken into consideration, mental health improvements among non-CV exposed were no longer significant. Factors related to CV exposed women's mental health improvement were access to formal help at baseline and reporting sexual IPV exposure in the latest violent relationship at baseline.

Results from this study found that IPV exposed women with a history of CV exposure suffered greater mental health impairment than women without CV experiences. These findings are in line with previous research which suggests that children are substantially affected by family violence and that consequences for children living with violence within the family are long lasting (K. F. Kuijpers et al., 2011). In addition, our results are also consistent with previously demonstrated associations between CV exposure and later IPV in adulthood (Bensley et al., 2003; Cavanaugh et al., 2012; Lipsky, Caetano, Field, & Larkin, 2005). It is

important to note, however, that the association between CV and IPV is not necessarily causal (Holt, Buckley, & Whelan, 2008). Many children who experience violence do not experience further violence in adulthood. Thus, stressing the relevance of individual interventions that account for children's own active role in forming their own social development (Holt et al., 2008).

The high prevalence of CV exposure (Studies II-III) and health adversities reported by women in the cohort sample, stresses the need of considering previous violence experiences among IPV victims. In addition, group differences in relation to mental health improvement during follow-up point towards the need of developing interventions that considers individual factors and circumstances around the victim that may prevent recovery. Another possibility is that the research design applied in these studies did not capture the possible impact of formal help.

## 6.4 STUDY IV

The concurrent validity tests of the DIARI generated mixed results. Overall, most DIARI items demonstrated similar convergent associations with conceptually similar items in the self report measures. Findings also suggested different estimates regarding women's relationship status with the perpetrator (i.e. whether they remained in the relationship with the abuser or not). However, results from the inter-rater reliability tests showed great variations between single item-estimations.

At a group level, DIARI items described a similar problem profile as well as severity and diversity of violence exposure compared to results from self-reports. However, concurrent validity tests of categories social context and characteristics women revealed greater differences. Analyses of single DIARI items and questionnaire data revealed statistically significant but weak to moderate correlations. Furthermore, many of the DIARI items were prevalent (i.e. score middle or high) among most women possibly indicating their potential relevance in the assessment of victim's situation. In addition, some differences were found between pre and post separation victims. Women who had left the violent partner expressed less satisfaction with the perpetrator and higher violence severity. These results are in line with previous research suggesting risk of increased severity or frequency of the violence in relation to leaving the violent partner (Ekbrand, 2006; Hilbert, Kolia, & VanLeeuwen, 1997). This in turn may influence victims' decision making and coping strategies in relation to the violence (Wolf et al., 2003).

Numerous studies have been done on violent behaviour and risk but have mainly addressed perpetrators of violence and their risk of recidivism (Dixon & Graham-Kevan, 2011; Winkel & Baldry, 2013) resulting in the development of diverse assessments to predict risk for future violence among offenders. As mentioned previously, working with offenders is essential but not sufficient in order to end IPV and manage its negative consequences (Belfrage & Strand, 2008; Cole et al., 2008; S. Panchanadeswaran et al., 2010). Considering factors and circumstances around the victim has been suggested relevant when working with offenders as well (Belfrage & Strand, 2008). The DIARI assessment is an attempt to provide relevant information about women's individual needs to exit the violent situation and maintain safety. Its structured design may contribute to increased transparency regarding the assessment of needs and design of individually adjusted interventions.

## 6.5 OVERALL DISCUSSION AND FUTURE DIRECTIONS

The overall finding of this thesis is that violence is a multifaceted problem with a negative impact on health in the Swedish population. This thesis has a victim's perspective, and it includes different samples (i.e. national population of males and females, and three cohort populations including help seeking and non-help seeking women). From a public health perspective, findings indicate an association between deviant exposures and suicidal behaviour among both women and men. Furthermore, the results indicate that IPV exposure is associated with multiple victimisation (i.e. violent exposure during childhood and in previous relationships). Women in the non-help seeking group displayed similar degree of lifetime victimisation, in relation to the help seeking women. Despite similar levels of violence, adversities associated with the exposure may vary (i.e. between individuals and groups). DIARI was developed with the aim of capturing factors that are relevant to consider when developing individually tailored interventions for victims of IPV.

In order to gain an improved understanding about factors associated with IPV and how they may interplay in different contexts, IPV needs to be studied from different perspectives and at different levels (e.g. individual, societal). Different methodological approaches emphasise different perspectives and implications of violence (Alhabib et al., 2010; Archer, 2000). For example, findings from Study I regarding associations between social and health impairment and DV are in line with results from similar studies on public health data focusing violence in general (Danielsson et al., 2005; Fernbrant et al., 2011; Winnersjo et al., 2012). Even though the patterns of associations are similar in these studies, result implications might differ with regards to different types of violence. The ecological model is an attempt to capture different

perspectives of violence and describe a range of factors operating at different levels, which may influence violence risk. Findings from the present thesis are in line with the fundamental basis of the ecological model, emphasising the relevance of studying violence from several perspectives. Present results may suggest implications at both public health (i.e. societal) and individual level.

As mentioned above, methodological and definitional differences may hamper comparisons between studies regarding violence prevalence but also the investigation of its negative impact on public health (Alhabib et al., 2010; Archer, 2000). The debate on gender symmetry regarding IPV perpetration and victimisation is such an example. Most studies suggesting symmetry have been criticised for failing to consider contextual and motivational factors (i.e. controlling behaviour) associated with violence. On the other hand, some studies indicate gender differences with regards to the consequences of violence. These studies have taken contextual factors and motives into account. Further regarding conceptualisation of violence, different measures capture varying aspects of violence. The CTS2, even though well established and commonly used in research on violence, has been criticised for not contextualising violent acts (Woodin, Sotskova, & O'Leary, 2013). Ignoring contextual factors may lead to a failure to differentiate between self-defence violence and other violence.

Johnson's typology challenges current conceptualisations of violence and the ways in which violence is quantified and analysed. Instead of only differentiating between physical, psychological, and sexual acts, distinctions are based on the context (i.e. intention, degree and nature of control). Emphasising contextual factors could lead to an increased understanding of victim's individual decision-making and coping behaviour in relation to the violence exposure.

At present, research regarding effective methods to facilitate victims' recovery and safety at a longer perspective has not provided conclusive evidence. The lack of efficient methods and the fact that many victims go undetected by authorities (e.g. health care) may contribute to victim's reluctance to seek formal help. Professional guidelines for the development of interventions and a clearer link to evidence based methods could increase violence victim's confidence in professionals. This in turn may reduce the extensive number of unreported victims of violence (Wolf et al., 2003).

In line with previous research, the results in this dissertation project point towards a holistic approach to support victims of violence (Antilla et al., 2006; Pajak et al., 2014). The DIARI is a promising attempt to collect and structure information concerning violence exposure and

associated factors. More research is needed on the psychometric properties of the DIARI in different populations of victims, before any conclusions about its usability can be drawn. In addition, public health interventions should aim to increase the awareness of male exposure to IPV.

Prospective longitudinal studies with several follow-ups, where the participants are studied during longer time intervals, are needed in order to detect potential changes in victims' motivations to make changes with regards to the threatening situation. Future research should also focus on the process that leads to disclosure and seeking help from authorities like the police or social services.

## 6.6 STRENGTHS AND LIMITATIONS

A major strength of Study I is the large sample size including both men and women with and without experiences of DV exposure and information about social and health factors in a nationally representative Swedish sample. A major strength of studies II-IV is the inclusion of IPV exposed women not currently receiving help from the social services or women's shelters, which are services specialised in assisting victims of IPV. Results from these studies provide new knowledge about unreported cases of IPV victims recruited from the general population. Another strength is the longitudinal design of Study III, which allowed comparisons of several factors over time. In studies II-IV, the occurrence of physical, psychological and sexual IPV was measured with the CTS, which is a well validated self-report measure commonly used in research on IPV. The CTS includes specific questions of different violent acts, which are suggested to lead to more accurate responses of violence incidence as compare to generally stated questions. In addition, its extensive usage in research allows comparisons across studies. As mentioned above, the CTS has been criticised for not considering the context or motives of the violence (Woodin et al., 2013). However, only questions concerning women's violence exposure were considered in the included studies.

There are also several limitations related to the included studies. In Study I, questions related to violence exposure were generally stated. Higher incidence of exposure is usually reported when specific questions about violence are asked. In addition, the measure of DV did not provide any further information regarding the severity, frequency or other types of violence such as physical or sexual which are commonly concurrent with physical IPV. These limitations may have led to an underestimation of DV prevalences. Moreover, no information was available concerning the perpetrator of the reported abuse, which may have led to

inclusion of DV cases concerning other perpetrators than a partner. Furthermore, given the cross-sectional design of studies I-II, it is not possible to draw any conclusions regarding the direction of the demonstrated associations.

Another important limitation concerns the non-help seeking cohort including women who were recruited through ads in daily national and regional newspapers. One aim of this procedure was to reach women from all parts of Sweden. Results from Study I suggest that the women included in the non-help seeking sample may represent a relatively socially well-established group. Therefore, generalising the study results to other non-help seeking women is not unproblematic.

# 7 CONCLUSIONS

The following conclusions can be drawn based on the findings in the studies in this dissertation project:

- Domestic violence affects both women and men and is associated with social adversities and psychological problems with some gender specific differences. Being exposed to physical DV is associated with higher odds of having attempted suicide among both women and men. Current public health survey data might underestimate the true prevalence of domestic or intimate partner violence, and could therefore be insufficient in terms of adequately investigating the impact on different aspects of public health.
- IPV exposed women who do not seek help from the social services or women's shelters may suffer from an equally poor social situation with high levels of psychological distress and similar substantial lifetime experiences of violence, as help seeking women. These results point towards the need to identify IPV exposed women outside specialised settings within the social services and women's shelters.
- History of CV is important to consider when designing help and support programs to IPV exposed women. Particular efforts should be dedicated to understand and facilitate for IPV exposed women without CV experiences to benefit from formal support. Using structured evaluations of a victim's individual circumstances may be a feasible way to meet this need. More research is needed on the complex relationships between different types of abuse experiences during the lifespan in relation to health outcomes.
- The DIARI is a promising attempt to gather and structure information regarding the current situation of women who are victims of IPV. More research is needed on the psychometric properties of the DIARI, however, in different populations of victims, before any conclusions about its usability can be drawn. Thus, several of the items need to be more clearly defined.

# 8 ACKNOWLEDGEMENTS

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# 9 REFERENCES


(WHO), World Health Organization. (1997). Violence against women: A priority health issue. Geneva, Switzerland.

Alhabib, S., Nur, U., & Jones, R. (2010). Domestic Violence Against Women: Systematic Review of Prevalence Studies. *Journal of Family Violence, 25*(4), 369-382.

Alvarez-del Arco, D., del Amo, J., Garcia-Pina, R., Garcia-Fulgueiras, A., Rodriguez-Arenas, M. Angeles, Ibañez-Rojo, Vicente, Llacer, A. (2013). Violence in Adulthood and Mental Health: Gender and Immigrant Status. *Journal of interpersonal violence, 28*(11), 2203-2222.

Anell, A., Glenngård, Anna H., & Merkur, S. (2012). Sweden: Health system review *Health Systems in Transition* (pp. 1-159).

Annerbäck, E., Wingren, G., Svedin, C., & Gustafsson, P. (2010). Prevalence and characteristics of child physical abuse in Sweden – findings from a population-based youth survey. *Acta Pædiatrica, 99*(8), 1229-1236.

Ansara, D., & Hindin, M. (2010). Formal and informal help-seeking associated with women's and men's experiences of intimate partner violence in Canada. *Social Science & Medicine, 70*(7), 1011-1018.

Ansara, D, & Hindin, M. (2011). Psychosocial consequences of intimate partner violence for women and men in Canada. *J Interpers Violence, 26*(8), 1628 - 1645.

Antilla, S., Ericson, C., Glad, J., Fredriksson, M., Olofsson, H. , & Smedslund, G. (2006). Utfall och effekter av sociala metoder för kvinnor som utsatts för våld i nära relationer: En systematisk översikt. Stockholm, Sweden: Socialstyrelsen.

Archer, J. (2000). Sex differences in aggression between heterosexual partners: a meta-analytic review. *Psychol Bull, 126*(5), 651-680.

Bauman, E. (2009). *Social support and loss of resources as predictors of mental health and quality of life in battered women over time.* (PhD Doctoral thesis), American University, Washington D.C.

Beaulaurier, R., Seff, L., & Newman, F. (2008). Barriers to help-seeking for older women who experience intimate partner violence: A descriptive model. *Journal of Women & Aging, 20*(3-4), 231-248.

Belfrage, H., & Strand, S. (2008). Structured Spousal Violence Risk Assessment: Combining Risk Factors and Victim Vulnerability Factors. *International Journal of Forensic Mental Health, 7*(1), 39-46.

Bensley, L., Van Eenwyk, J., & Wynkoop Simmons, K. (2003). Childhood family violence history and women's risk for intimate partner violence and poor health. *American journal of preventive medicine, 25*(1), 38-44.

Bergman, H., Källmén, H., & Hermansson, U. (2002). AUDIT - The alcohol use disorders identification test. Manual. Stockholm, Sweden: Karolinska Institutet, Department of Clinical Neuroscience, Clinical Alcohol and Drug Addiction Research Section.

Bergman, H., & Källmén, H. (2002). Alcohol Use Among Swedes and a Psychometric Evaluation of the Alcohol Use Disorders Identification Test. *Alcohol and Alcoholism, 37*(3), 245-251.

Boström, G., & Nyqvist, K. (2010). Objective and background of the questions in the national public health survey. In K. Paulsson, *Health on equal terms* (Vol. 2, pp. 75). Stockholm: The Swedish National Institute of Public Health (SNIPH)

Breiding, M., Black, M., & Ryan, G. (2008). Prevalence and Risk Factors of Intimate Partner Violence in Eighteen U.S. States/Territories, 2005. *American journal of preventive medicine, 34*(2), 112-118.

Briere, J., & Jordan, C. (2004). Violence Against Women. *Journal of interpersonal violence, 19*(11), 1252-1276.

Broberg, A., Almqvist, L., Axberg, U., Grip, K., Slmqvist, K., Sharifi, U., Iversen, C. (2011). *Stöd till barn som bevittnat våld mot mamma - Resultat från en nationell utvärdering*. Göteborg: Psykologiska Institutionen, Göteborgs Universitet.

Brottsförebyggande rådet, BRÅ. (2008). Brottsutvecklingen i Sverige fram till år 2007 (Vol. 2008:23). Stockholm.

Burns, L., Conroy, E., & Mattick, R. (2010). Main reasons for hospital admissions by women with a history of methadone maintenance. *Drug and Alcohol Review, 29*(6), 669-675.

Bybee, D., & Sullivan, C. (2005). Predicting re-victimisation of battered women 3 years after exiting a shelter program. *American Journal of Community Psychology, 36*, 85-94.

Bybee, D., & Sullivan, C. (2002). The Process Through Which an Advocacy Intervention Resulted in Positive Change for Battered Women Over Time. *American Journal of Community Psychology, 30*(1), 103-132.

Caldwell, J, Swan, S, & Woodbrown, VD. (2012). Gender differences in intimate partner violence outcomes. *Psychology of Violence, 2*(1), 42-57.

Campbell, J. (2002). Intimate partner violence and physical health consequences. *Archives of internal medicine, 162*(10`), 1157-1163.

Campbell, J. (1986). Nursing assessment for risk of homicide with battered women. *Advances in Nursing Science, 8*(4), 36-51.

Campbell, J. (2002). Health consequences of intimate partner violence. *The Lancet, 359*(9314), 1331-1336.

Campbell, J., Webster, Daniel W., & Glass, N. (2009). The Danger Assessment: Validation of a Lethality Risk Assessment Instrument for Intimate Partner Femicide. *Journal of interpersonal violence, 24*(4), 653-674.

Cavanaugh, C. E. , Messing, Jill T. , Petras, Hanno , Fowler, Barbara , La Flair, Lareina , Kub, Joan , . Campbell, J. (2012). Patterns of Violence Against Women: A Latent Class Analysis. *Psychological Trauma: Theory, Research, Practice, & Policy, 4*(2), 169-176.

Chan, Ko Ling. (2011). Gender differences in self-reports of intimate partner violence: A review. *Aggression and Violent Behavior, 16*(2), 167-175.

Chang, J., Ranieri, L., Hawker, L., Buranosky, R., Dado, D., McNeil, M., & Scholle, S. (2005). Health care interventions for intimate partner violence: What women want. *Womens Health Issues, 15*(1), 21-30.

Chartier, M., Walker, J., & Naimark, B. (2007). Childhood Abuse, Adult Health, and Health Care Utilization: Results from a Representative Community Sample. *American Journal of Epidemiology, 165*(9), 1031-1038.

Coker, A. (2003). Social support reduces the impact of partner violence on health: application of structural equation models. *Preventive medicine, 37*(3), 259-267.

Coker, A., Smith, P., McKeown, R., & King, M. (2000). Frequency and correlates of intimate partner violence by type: physical, sexual, and psychological battering. *American Journal of Public Health, 90*(4), 553-559.

Coker, Ann L. (2002). Physical and mental health effects of intimate partner violence for men and women. *American journal of preventive medicine, 23*(4), 260-268.

Cole, J., Logan, T., & Shannon, L. (2008). Women's Risk for Revictimization by a New Abusive Partner: For What Should We Be Looking? *Violence and Victims, 23*(3), 315-330.

Corvo, K., & Johnson, P. (2013). Sharpening Ockham's Razor: The role of psychopathology and neuropsychopathology in the perpetration of domestic violence. *Aggression and Violent Behavior, 18*(1), 175-182.

Costa, D, Soares, J, Lindert, J, Hatzidimitriadou, E, Sundin, Ö, Toth, O, Barros, H. (2013). Socioeconomic inequalities in victims of intimate partner violence in Europe. *The European Journal of Public Health, 23*(suppl 1).

Cui, M., Durtschi, J., Donnellan, M., Lorenz, F., & Conger, R. (2010). Intergenerational transmission of relationship aggression: a prospective longitudinal study. *J Fam Psychol, 24*(6), 688-697.

Dahlin, M., Kindström, Leviner, P., Kaldal, A., & Gumpert, C. H. (2010). Swedish legal scholarship concerning protection of vulnerable groups: Therapeutic and proactive dimensions. *International Journal of Law and Psychiatry, 33*(5–6), 398-405.

Danielsson, I., Olofsson, N., & Gadin, K. (2005). [Consequences of violence--a public health issue. Strong connection between violence/threat and illness in both women and men]. *Lakartidningen, 102*(12-13), 938-940, 942.

Davis, R., & Harsh, K. (2001). Confronting barriers to universal screening for domestic violence. *Journal of Professional Nursing, 17*(6), 313-320.

Derogatis, L. (1994). SCL-90-R. Symptom Checklist-90-Revised . Administration, scoring, and procedures manual. San Antonio, Texas, USA.

Devries, K., Mak, Joelle Y., Bacchus, L., Child, J., Falder, G., Petzold, M., Watts, C. (2013). Intimate Partner Violence and Incident Depressive Symptoms and Suicide Attempts: A Systematic Review of Longitudinal Studies. *PLoS Med, 10*(5), e1001439.

Devries, K., Watts, C., Yoshihama, M., Kiss, L., Schraiber, L. Blima, Deyessa, Negussie, Garcia-Moreno, C. (2011). Violence against women is strongly associated with suicide attempts: Evidence from the WHO multi-country study on women's health and domestic violence against women. *Social Science & Medicine, 73*(1), 79-86.

Dixon, L., & Graham-Kevan, N. (2011). Understanding the nature and etiology of intimate partner violence and implications for practice and policy. *Clinical Psychology Review, 31*(7), 1145-1155.

Domhardt, M., Münzer, A., Fegert, J., & Goldbeck, L. (2014). Resilience in Survivors of Child Sexual Abuse: A Systematic Review of the Literature. *Trauma, Violence, & Abuse*.

Domino, M., Morrissey, J., Chung, S., Huntington, N., Larson, M., & Russell, L. (2005). Service use and costs for women with co-occurring mental and substance use disorders and a history of violence. *Psychiatric Services, 56*(10), 1223-1232.

Dutton, M., Green, B., Kaltman, S., Roesch, Darren M., Zeffiro, Thomas A., & Krause, E. (2006). Intimate Partner Violence, PTSD, and Adverse Health Outcomes. *Journal of interpersonal violence, 21*(7), 955-968.

Edwards, K.., Gidycz, C., & Murphy, M. (2011). College Women's Stay/Leave Decisions in Abusive Dating Relationships: A Prospective Analysis of an Expanded Investment Model. *Journal of interpersonal violence, 26*(7), 1446-1462.

Ekbrand, H. (2006). *Separationer och mäns våld mot kvinnor.* (PhD Doctoral thesis), University of Gothenburg, Gothenburg. Retrieved from http://hdl.handle.net/2077/546 (28)

Ellsberg, M., Peña, R., Herrera, A., Liljestrand, J., & Winkvist, A. (2000). Candies in hell: women's experiences of violence in Nicaragua. *Social Science & Medicine, 51*(11), 1595-1610.

Esquivel-Santoveña, E., & Dixon, L. (2012). Investigating the true rate of physical intimate partner violence: A review of nationally representative surveys. *Aggression and Violent Behavior, 17*(3), 208-219.

Evans, S., Davies, C., & DiLillo, D. (2008). Exposure to domestic violence: A meta-analysis of child and adolescent outcomes. *Aggression and Violent Behavior, 13*(2), 131-140.

Fanslow, J., & Robinson, E. (2010). Help-Seeking Behaviors and Reasons for Help Seeking Reported by a Representative Sample of Women Victims of Intimate Partner Violence in New Zealand. *Journal of interpersonal violence, 25*(5), 929-951.

Fernbrant, Cecilia, Essén, Birgitta, Östergren, Per-Olof, & Cantor-Graae, Elizabeth. (2011). Perceived Threat of Violence and Exposure to Physical Violence Against Foreign-Born Women: A Swedish Population-Based Study. *Women's Health Issues, 21*(3), 206-213.

Frenzel, A., Wallin, L., Hvitfeldt, T., & Strid, Irlander Å. (2015) Nationella trygghetsundersökningen 2014. In BRÅ, (pp. 182). Stockholm.

Fridell, M. (2002). SCL 90. Svensk normering, standadisering och validering av symtomskalan. Stockholm, Sweden: Statens Institutionsstyrelse.

Friend, D., Cleary B., Renay, Thatcher, R., & Gottman, J. (2011). Typologies of Intimate Partner Violence: Evaluation of a Screening Instrument for Differentiation. *Journal of Family Violence, 26*(7), 551-563.

Fugate, M., Landis, L., Riordan, K., Naureckas, S., & Engel, B. (2005). Barriers to Domestic Violence Help Seeking: Implications for Intervention. *Violence against women, 11*(3), 290-310.

Färdeman, E. , Hvitfeldt, T. , & Irlander, Å. (2014). Nationella trygghetsundersökningen 2013, Om utsatthet, trygghet och förtroende (Brottsförebyggande rådet ed., pp. 172). Stockholm: Brottsförebyggande rådet.

Garcia-Moreno, C. (2006). Prevalence of intimate partner violence: findings from the WHO multi-country study on women's health and domestic violence. *The Lancet, 368*, 1260-1269.

Garcia-Moreno, C., Jansen, H., Ellsberg, M. , Heise, L. , & Watts, Ch. (2005). WHO Multi-country study on women's health and domestic violence against women. Initial results on prevalence, health outcomes and women's responses. Geneva, Switzerland: WHO World Health Organization.

Gerstenberger, C. Bell, & Williams, K. (2013). Gender and Intimate Partner Violence: Does Dual Arrest Reveal Gender Symmetry or Asymmetry? *Journal of interpersonal violence, 28*(8), 1561-1578.

Golding, J. (1999). Intimate Partner Violence as a Risk Factor for Mental Disorders: A Meta-Analysis. *Journal of Family Violence, 14*(2), 99-132.

Gondolf, E., Fisher, E., & McFerron, J. (1988). Racial differences among shelter residents: A comparison of anglo, black, and hispanic battered. *Journal of Family Violence, 3*(1), 39-51.

Goodkind, J., Gillum, T., Bybee, D., & Sullivan, C. (2003). The impact of family and friends' reactions on the well-being of women with abusive partners. *Violence against women, 9*(3), 347-373.

Graham-Kevan, N, & Archer, J. (2005). Investigating three explanations of women's relationship aggression. *Psychol Women Q, 29*(3), 270 - 277.

Group, Lancet Global Mental Health. (2007). Scale up services for mental disorders: a call for action. *The Lancet, 370*(9594), 1241-1252.

Haaland, T. , Clausen, S.E. , & Schei, B. (2005). Vold i parforhold - ulike perspektiver Resultater fra den første landsdekkende undersøkelsen i Norge *NIBR-rapport 2005:3* (pp. 235). Oslo: Nordberg A.S.: Oslo.

Hawton, K., & van Heeringen, K. (2009). Suicide. *The Lancet, 373*(9672), 1372-1381.

Heise, L. (1998). Violence against women: an integrated, ecological framework. *Violence against women, 4*(3), 262-290.

Heiskanen, M, & Ruuskanen, E. (2010). Helsinki: The European Institute for Crime Prevention and Control, affiliated with the United Nations (HEUNI).

Helweg-Larsen, K., & Kruse, M. (2003). Violence against women and consequent health problems: a register-based study. *Scandinavian Journal of Public Health, 31*(1), 51-57.

Hensing, G. (2004). Mäns våld mot kvinnor i nära relationer – omfattning, hälsokonsekvenser och prevention (Violence of men against women in close relationships – Extent, health consequences and prevention). Gothenburg, Sweden: Västra Götalandsregionens folkhälsokommitté, Socialmedicinska avdelningen vid Sahlgrenska Akademin, Göteborgs Universitet. .

Hetzel-Riggin, M., & Meads, C. (2011). Childhood Violence and Adult Partner Maltreatment: The Roles of Coping Style and Psychological Distress. *Journal of Family Violence, 26*(8), 585-593.

Hien, D., & Ruglass, L. (2009). Interpersonal partner violence and women in the United States: An overview of prevalence rates, psychiatric correlates and consequences and barriers to help seeking. *International Journal of Law and Psychiatry, 32*(1), 48-55.

Hilbert, J., Kolia, R., & VanLeeuwen, Dawn M. (1997). Abused Women in New Mexican Shelters: Factors That Influence Independence on Discharge. *Affilia, 12*(4), 391-407.

Holt, S., Buckley, H., & Whelan, S. (2008). The impact of exposure to domestic violence on children and young people: A review of the literature. *Child Abuse & Neglect, 32*(8), 797-810.

Howard, L., Trevillion, K., Khalifeh, H., Woodall, A., Agnew-Davies, R., & Feder, G. (2010). Domestic violence and severe psychiatric disorders: prevalence and interventions. *Psychological Medicine, 40*(06), 881-893.

Howard, L., Trevillion, K., & Agnew-Davies, R. (2010). Domestic violence and mental health. *International Review of Psychiatry, 22*(5), 525-534.

Humphreys, C., & Thiara, R. (2003). Mental Health and Domestic Violence: 'I Call it Symptoms of Abuse'. *British Journal of Social Work, 33*(2), 209-226.

Häggblom, A., & R. Möller, A. (2010). Fighting for survival and escape from violence: Interviews with battered women. *2010, 2*(3), 10.

Iyengar, R., & Sabik, L.. (2009). The Dangerous Shortage Of Domestic Violence Services. *Health Affairs, 28*(6), w1052-w1065.

Johnson, M.P. (2006). Conflict and Control: Gender Symmetry and Asymmetry in Domestic Violence. *Violence against women, 12*(11), 1003-1018.

Johnson, M.P. (2011). Gender and types of intimate partner violence: A response to an anti-feminist literature review. *Aggression and Violent Behavior, 16*(4), 289-296.

Johnson, M.P., & Leone, Janel M. (2005). The Differential Effects of Intimate Terrorism and Situational Couple Violence: Findings From the National Violence Against Women Survey. *Journal of Family Issues, 26*(3), 322-349.

Johnson, M.P., Leone, J.M., & Xu, Y. (2014). Intimate Terrorism and Situational Couple Violence in General Surveys: Ex-Spouses Required. *Violence against women, 20*(2), 186-207.

Kaura, S., & Lohman, B. (2007). Dating Violence Victimization, Relationship Satisfaction, Mental Health Problems, and Acceptability of Violence: A Comparison of Men and Women. *Journal of Family Violence, 22*(6), 367-381.

Kiss, L., Schraiber, L. B., Heise, L., Zimmerman, C., Gouveia, N., & Watts, C. (2012). Gender-based violence and socioeconomic inequalities: Does living in more deprived neighbourhoods increase women's risk of intimate partner violence? *Social Science & Medicine*(0).

Krahé, B., Bieneck, S., & Möller, I. (2005). Understanding Gender and Intimate Partner Violence from an International Perspective. *Sex Roles, 52*(11-12), 807-827.

Kropp, P. R. , Hart, S. D. , Webster, C. W. , & Eaves, D. . (1995). Manual for the Spousal Assault Risk Assessment Guide (2 ed.). Vancouver, Canada: The British Columbia Institute of Family Violence.

Kropp, P.R. , Hart, S.D. , & Belfrage, H. . (2005). Brief spousal assault form for the evaluation of risk (B-SAFER). User manual. Vancouver.

Krug, E, Mercy, J, Dahlberg, L, & Zwi, A. (2002). The world report on violence and health. *Lancet, 360*, 1083 - 1088.

Krug, Etienne G., Dahlberg, L., Mercy, James A., Zwi, A.B., & Lozano, R. (2002). *World report on violence and health* (W. H. O.). Geneva: World Health Organization.

Kuijpers, K., van der Knaap, L., & Lodewijks, Ilse A. J. (2011). Victims' Influence on Intimate Partner Violence Revictimization: A Systematic Review of Prospective Evidence. *Trauma, Violence, & Abuse, 12*(4), 198-219.

Kuijpers, K.F,, van der Knaap, L.M., & Winkel, F.W. (2012). Risk of Revictimization of Intimate Partner Violence: The Role of Attachment, Anger and Violent Behavior of the Victim. *Journal of Family Violence, 27*(1), 33-44.

Kwesiga, E., Bell, Myrtle P., Pattie, Marshall, & Moe, Angela M. (2007). Exploring the Literature on Relationships Between Gender Roles, Intimate Partner Violence, Occupational Status, and Organizational Benefits. *Journal of interpersonal violence, 22*(3), 312-326.

Lambert, M. J., Finch, M. A., Okiishi, J., & Burlingame, G. M. (2005). *Administration and Scoring Manual for the OQ-30.2. A Brief Outcome and Tracking Questionnaire for Adults.* Salt Lake City, UT: OQ Measures, LLC.

Leander, K. (2007). Mäns våld mot kvinnor: Ett folkhälsoproblem (Violence of men against women: A public health problem).

Liang, B., Goodman, L., Tummala-Narra, P., & Weintraub, S. (2005). A Theoretical Framework for Understanding Help-Seeking Processes Among Survivors of Intimate Partner Violence. *American Journal of Community Psychology, 36*(1), 71-84.

Lindhorst, T., & Oxford, M. (2008). The long-term effects of intimate partner violence on adolescent mothers' depressive symptoms. *Soc Sci Med, 66*(6), 1322-1333.

Lipsky, S., Caetano, R., Field, C., & Larkin, G. (2005). Psychosocial and substance-use risk factors for intimate partner violence. *Drug and Alcohol Dependence, 78*(1), 39-47.

Lovestad, S, & Krantz, G. (2012). Men's and women's exposure and perpetration of partner violence: an epidemiological study from Sweden. *BMC Publ Health, 12*, 945.

Lundberg, O., Åberg Y., Monica, Stjärne, M., Björk, L., & Fritzell, J. (2008). The Nordic experience: welfare states and public health (NEWS). Stockholm.

Lundgren, E., Heimer, G., Westerstrand, J., & Kalliokoski, A.-M. (2001). *Slagen dam*. Stockholm, Sweden: Fritzes.

Mburia-Mwalili, A., Clements-Nolle, K., Lee, William, Shadley, Meri, & Wei Yang. (2010). Intimate Partner Violence and Depression in a Population-Based Sample of Women: Can Social Support Help? *Journal of interpersonal violence, 25*(12), 2258-2278.

McLaughlin, J., O'Carroll, R., & O'Connor, R. (2012). Intimate partner abuse and suicidality: A systematic review. *Clinical Psychology Review, 32*(8), 677-689.

Moe, A. (2007). Silenced voices and structured survival - Battered women's help seeking. *Violence against women, 13*(7), 676-699.

Moe, A. (2009). Battered Women, Children, and the End of Abusive Relationships. *Affilia-Journal of Women and Social Work, 24*(3), 244-256.

Montalvo-Liendo, N. (2009). Cross-cultural factors in disclosure of intimate partner violence: an integrated review. *Journal of Advanced Nursing, 65*(1), 20-34.

Moylan, C., Herrenkohl, T., Sousa, C., Tajima, E., Herrenkohl, R., & Russo, M. (2010). The Effects of Child Abuse and Exposure to Domestic Violence on Adolescent Internalizing and Externalizing Behavior Problems. *J Fam Violence, 25*(1), 53-63.

NCK. (2014). Våld och Hälsa - En befolkningsundersökning om kvinnors och mäns våldsutsatthet samt kopplingen till hälsa *NCK-rapport*. Uppsala: Nationellt Centrum för Kvinnofrid.

Nerøien, A., & Schei, B. (2008). Partner violence and health: Results from the first national study on violence against women in Norway. *Scandinavian Journal of Public Health, 36*(2), 161-168.

Nicholls, T., Hilterman, E., &, & Tengstrom, A. (2010). Decision-making in Abusive Relationships Interview (DIARI). Consultation Version 1.0. : Port Coquitlam, BC: Forensic Psychiatric Services Commission.

Nybergh, L., Taft, C., Enander, V., & Krantz, G. (2013). Self-reported exposure to intimate partner violence among women and men in Sweden: results from a population-based survey. *BMC Public Health, 13*(1), 845.

Olofsson, N., Lindqvist, K., Shaw, Benjamin, & Danielsson, I. (2012). Long-term health consequences of violence exposure in adolescence: a 26-year prospective study. *BMC Public Health, 12*(1), 411.

Pajak, C. R., Ahmad, F., Jenney, A., Fisher, P., & Chan, L. (2014). Survivor's Costs of Saying No: Exploring the Experience of Accessing Services for Intimate Partner Violence. *Journal of interpersonal violence, 29*(14), 2571-2591.

Panchanadeswaran, S., Ting, L., Burke, J. G., O'Campo, P., McDonnell, K. A., & Gielen, A. C. (2010). Profiling Abusive Men Based on Women's Self-Reports: Findings From a Sample of Urban Low-Income Minority Women. *Violence against women, 16*(3), 313-327.

Panchanadeswaran, S, & McCloskey, L. (2007). Predicting the Timing of Women's Departure From Abusive Relationships. *Journal of interpersonal violence, 22*(1), 50-65.

Plichta, S., & Falik, M. (2001). Prevalence of violence and its implications for women's health. *Women's Health Issues, 11*(3), 244-258.

Popescu, M., Drumm, R., Dewan, S., & Rusu, C. (2010). Childhood victimization and its impact on coping behaviors for victims of intimate partner violence. *Journal of Family Violence, 25*(6), 575-585.

Postmus, J., Severson, M., Berry, M., & Yoo, J. (2009). Women's Experiences of Violence and Seeking Help. *Violence against women, 15*(7), 852-868.

Rhodes, K.., Kothari, C., Dichter, M., Cerulli, C., Wiley, J., & Marcus, S. (2011). Intimate Partner Violence Identification and Response: Time for a Change in Strategy. *Journal of General Internal Medicine, 26*(8), 894-899.

Romito, P, & Grassi, M. (2007). Does violence affect one gender more than the other? The mental health impact of violence among male and female university students. *Social Science & Medicine, 65*(6), 1222-1234.

Russell, D., Springer, K., & Greenfield, E. (2010). Witnessing domestic abuse in childhood as an independent risk factor for depressive symptoms in young adulthood. *Child Abuse Negl, 34*(6), 448-453.

Saunders, Jo., Aasland, O., Babor, T., De La Fuente, J., & Grant, M. (1993). Development of the Alcohol Use Disorders Identification Test (AUDIT): WHO Collaborative Project

on Early Detection of Persons with Harmful Alcohol Consumption-II. *Addiction, 88*(6), 791-804.

SCB. (1995). *Levnadsförhållanden - Teknisk rapport*. Stockholm: Statistiska centralbyrån [Statistics Sweden].

SCB. (2009). Hälsa på lika villkor? Enkätundersökning 2009, det nationella urvalet. Teknisk Rapport. Örebro, Sweden.

SCB. (2011). Offer för våld och egendomsbrott 2008-2009: [Victims of violence and of property crimes 2008-2009]. In S. centralbyrån, (pp. 88). Stockholm.

Schacht, R., Dimidjian, S., George, William H., & Berns, S. (2009). Domestic Violence Assessment Procedures Among Couple Therapists. *Journal of Marital and Family Therapy, 35*(1), 47-59.

Schreiber, V., Maercker, A., & Renneberg, B. (2010). Social influences on mental health help-seeking after interpersonal traumatization: a qualitative analysis. *BMC Public Health, 10*(1), 634.

Scott-Storey, K. (2011). Cumulative Abuse: Do Things Add Up? An Evaluation of the Conceptualization, Operationalization, and Methodological Approaches in the Study of the Phenomenon of Cumulative Abuse. *Trauma, Violence, & Abuse, 12*(3), 135-150.

SFS1982:763. Hälso- och sjukvårdslag. Stockholm:Socialdepartementet

SFS2001:453. Socialtjänstlag. Stockholm:Socialdepartementet

Shannon, L., Logan, T., Cole, J, & Medley, K. (2006). Help-Seeking and Coping Strategies for Intimate Partner Violence in Rural and Urban Women. *Violence and Victims, 21*(2), 167-181.

Sim, J., & Wright, C. (2005). The Kappa Statistic in Reliability Studies: Use, Interpretation, and Sample Size Requirements. *Physical Therapy, 85*(3), 257-268.

Socialstyrelsen. (2006). Kostnader för våld mot kvinnor: en samhällsekonomisk analys. Stockholm, Sweden.

Socialstyrelsen. (2009). Våldutsatta kvinnor och barn som bevittnat våld - Alla kommuners ansvar. Stockholm, Sweden.

Socialstyrelsen. (2011). Våld - Handbok om socialnämndens ansvar för våldsutsatta kvinnor och barn som bevittnat våld (pp. 198).

Socialstyrelsen. (2014a). Dödsfallsutredningar 2012–2013 – Socialstyrelsens utredningar av vuxna och barn som avlidit med anledning av brott (pp. 36).

Socialstyrelsen. (2014b). *Manual för FREDA. Standardiserade bedömningsmetoder för socialtjänstens arbete mot våld i nära relationer*. Stockholm: Socialstyrelsen.

SOU. (2006). *Att ta ansvar för sina insatser: socialtjänstens stöd till våldutsatta kvinnor*. Stockholm, Sweden: Regeringskansliet.

Springer, K., Sheridan, J., Kuo, D., & Carnes, M. (2007). Long-term physical and mental health consequences of childhood physical abuse: Results from a large population-based sample of men and women. *Child Abuse & Neglect, 31*(5), 517-530.

Stickley, A., & Carlson, P. (2010). Factors associated with non-lethal violent victimization in Sweden in 2004-2007. *Scandinavian Journal of Public Health, 38*(4), 404-410.

Strandell, P. (2013). Dödligt våld mot kvinnor - Om myndigheters förutsättningar att förhindra brott i nära relationer (Vol. 1, pp. 32). Stockholm: Stiftelsen Tryggare Sverige.

Straus, M, Hamby, S., Boney-Mc Coy, S , & Sugarman, D (1996). The revised conflict tactics scale (CTS2): Development and preliminary psychometric data. *Journal of Family Issues, 17*, 283-316.

Straus, Murray A. (2008). Dominance and symmetry in partner violence by male and female university students in 32 nations. *Children and Youth Services Review, 30*(3), 252-275.

Straus, Murray A. (2011). Gender symmetry and mutuality in perpetration of clinical-level partner violence: Empirical evidence and implications for prevention and treatment. *Aggression and Violent Behavior, 16*(4), 279-288.

Straus, Murray A., Hamby, Sherry L., & Warren, Louise W. (2003). *The Conflict Tactics Scales handbook*. Los Angeles, CA: Western Psychological Services.

Sullivan, C. M., & Bybee, D. I. (1999). Reducing violence using community-based advocacy for women with abusive partners. *J Consult Clin Psychol, 67*(1), 43-53.

Sundborg, E., Saleh-Stattin, Nouha, Wändell, P., & Törnkvist, L. (2012). Nurses' preparedness to care for women exposed to Intimate Partner Violence: a quantitative study in primary health care. *BMC Nursing, 11*(1), 1-11.

Tjaden, P, & Thoennes, N. (2000). Prevalence and consequences of male-to-female and female-to-male intimate partner violence as measured by the National Violence Against Women Survey. *Violence against women, 6*, 142 - 161.

Trevillion, K., Oram, S., Feder, G., & Howard, L. (2012). Experiences of Domestic Violence and Mental Disorders: A Systematic Review and Meta-Analysis. *PLoS ONE, 7*(12), e51740.

UN. (2010). *Handbook for Legislation on Violence against Women*. New York: United Nations.

Valor-Segura, I., Expósito, F., & Moya, M. (2014). Gender, Dependency and Guilt in Intimate Relationship Conflict Among Spanish Couples. *Sex Roles, 70*(11-12), 496-505.

van Delft, I., Finkenauer, C., & Verbruggen, J. (2015). Child Maltreatment and Social Connectedness Among Formerly Institutionalized Females: Links With Depression. *J Interpers Violence*.]

van Vugt, E., Lanctot, N., Paquette, G., Collin-Vezina, D., & Lemieux, A. (2014). Girls in residential care: from child maltreatment to trauma-related symptoms in emerging adulthood. *Child Abuse Negl, 38*(1), 114-122.

Varcoe, C. Hankivsky, O., Ford-Gilboe, M., Wuest, J., Wilk, P., Hammerton, J., & Campbell, J. (2011). Attributing Selected Costs to Intimate Partner Violence in a Sample of Women Who Have Left Abusive Partners: A Social Determinants of Health Approach. *Canadian Public Policy, 37*(3), 359-380.

Vatnar, S., & Bjorkly, S. (2010). An Interactional Perspective on the Relationship of Immigration to Intimate Partner Violence in a Representative Sample of Help-Seeking Women. *Journal of interpersonal violence, 25*(10), 1815-1835.

Vega, E., & O'Leary, K. (2007). Test–Retest Reliability of the Revised Conflict Tactics Scales (CTS2). *Journal of Family Violence, 22*(8), 703-708.

Vives-Cases, C., Torrubiano-DomÍnguez, J., Escribà-Agüir, V., Ruiz-Pérez, I., Montero-Piñar, M.I., & Gil-González, D. (2011). Social Determinants and Health Effects of Low and High Severity Intimate Partner Violence. *Annals of Epidemiology, 21*(12), 907-913.

Vos, T., Astbury, J., Piers, L. S., Magnus, A., Heenan, M., Stanley, L., Webster, K. (2006). Measuring the impact of intimate partner violence on the health of women in Victoria, Australia. *Bulletin of the World Health Organization, 84*(9), 739-744.

Walker, L. (2006). Battered Woman Syndrome. *Annals of the New York Academy of Sciences, 1087*(1), 142-157.

Warshaw, C., Sullivan, C.M., Rivera, E.A., National Center on Domestic Violence, Trauma, & Health, Mental. (2013). *A Systematic Review of Trauma-focused Interventions for Domestic Violence Survivors*: National Center on Domestic Violence, Trauma & Mental Health.

Watkins, L., Jaffe, A., Hoffman, L., Gratz, K., Messman-Moore, T., & DiLillo, D. (2014). The longitudinal impact of intimate partner aggression and relationship status on women's physical health and depression symptoms. *Journal of Family Psychology, 28*(5), 655-665.

Watts, C. (2005). Public health. Violence against women. *Science, 310*(5752), 1282-1283.

Watts, C., & Zimmerman, C. (2002). Violence against women: global scope and magnitude. *Lancet, 359*(9313), 1232-1237.

Whitaker, D., Haileyesus, T., Swahn, M., & Saltzman, L. (2007). Differences in Frequency of Violence and Reported Injury Between Relationships With Reciprocal and Nonreciprocal Intimate Partner Violence. *American Journal of Public Health, 97*(5), 941-947.

WHO. (2013a). *Global and regional estimates of violence against women: prevalence and health effects of intimate partner violence and non-partner sexual violence*. Geneva, Switzerland: World Health Organization.

WHO. (2013b). Launch of the new WHO mortality estimates, including deaths due to violence. Retrieved 2014-03-20, from http://www.who.int/violence_injury_prevention/violence/en/

WHO. (2014). Global Status Report on Violence Prevention 2014.

Wilson, K., Silberberg, M., Brown, A., & Yaggy, S. (2007). Health needs and barriers to healthcare of women who have experienced intimate partner violence. *J Womens Health (Larchmt), 16*(10), 1485-1498.

Wilson, L., & Miller, K. (2015). Meta-Analysis of the Prevalence of Unacknowledged Rape. *Trauma, Violence, & Abuse*.

Winkel, F., & Baldry, A. (2013). *Domestic Assault Risk Assessment*: Wolf Legal Publishers.

Winnersjo, R., Ponce de Leon, A., Soares, J. F., & Macassa, G. (2012). Violence and self-reported health: does individual socioeconomic position matter? *J Inj Violence Res, 4*(2), 87-95.

Wolf, MarshaE, L., Uyen, H., M., & Kernic, M. (2003). Barriers to Seeking Police Help for Intimate Partner Violence. *Journal of Family Violence, 18*(2), 121-129.

Woodin, E, Sotskova, A., & O'Leary, K. D. (2013). Intimate Partner Violence Assessment in an Historical Context: Divergent Approaches and Opportunities for Progress. *Sex Roles, 69*(3-4), 120-130.

Zlotnick, C., Johnson, D., & Kohn, R. (2006). Intimate Partner Violence and Long-Term Psychosocial Functioning in a National Sample of American Women. *Journal of interpersonal violence, 21*(2), 262-275.

Zorrilla, B., Pires, M., Lasheras, L., Morant, C., Seoane, L. Sanchez, L., . Durbán, M. (2010). Intimate partner violence: last year prevalence and association with socio-economic factors among women in Madrid, Spain. *The European Journal of Public Health, 20*(2), 169-175.