The Damage Done

Children Exposed to Intimate Partner Violence and their Mothers—Towards empirically based interventions in order to reduce negative health effects in children

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Preface & Acknowledgements

In one of the gloomiest winter days in 2008 I visited you Ingela, and over a cup of tea, sitting in your couch chatting about life, love, and work, the decision to move on from clinical work to research suddenly seemed less scary. In fact, in my work at the Child and Adolescent Psychiatric unit in Umeå, I had often reflected over the outcomes of our treatment efforts. Do the treatments work out? Do our clients get any better? What are the empirical base for our judgments, choices, and decisions? I wasn’t sure.

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Violence in intimate relationships occurs in all societies, and intimate partner violence (IPV) is a prevalent and serious social problem. Mothers of young children are particularly often victims of IPV, the consequences of which often have long-lasting effects. Research has convincingly brought to light the detrimental effects of IPV on women’s psychological and physical health.

Too many children are raised in homes where IPV occurs. There is now a substantial body of research of the harm that IPV exposure can inflict on children’s health and development.

Nationally and internationally there have been calls for research evaluating support services for children and their mothers in the aftermath of IPV. Since 2007, the Social Services Act has prescribed the responsibility of social services for ensuring that children who witness violence receive the support and help they need. International knowledge is limited about the effectiveness of most methods developed within and outside social services to support children who have witnessed violence against their mothers. In Sweden, empirically based knowledge is almost nonexistent.

The data presented in this thesis comes from a national project evaluating the support available to children exposed to IPV and to their mothers, and from an earlier pilot project. After receiving support, children (9 to 13 years of age) in the national evaluation study reported reduced symptom levels of post-traumatic stress and general psychological problems, and their mothers reported significant reductions in the children’s behavioral problems. However, despite the statistically significant results, the majority of children were unchanged following support, and many children with clinical levels of problems at study entry continued to have elevated symptoms following support. The same pattern, with significant treatment effects at the group level of analysis, but more modest results at the individual level of analysis, were found for the self-rated mental health of mothers subjected to IPV and their perceptions of their children’s behavioral problems after they and their children attended concurrent 15-week group support programs. The treatment results point to the need to monitor treatment progress in order to detect those who are unchanged or even worsened during treatment.

As a group, children 9 to 13 years old who were exposed to IPV evidenced lower quality of life and more recurrent health complaints than other Swedish children in the same age range. However, there was great variability among the children, and a large proportion of the children rated their quality of life to be as good as other children of the same age and did not have recurrent symptoms of headache, stomach-ache, or difficulties sleeping. Higher quality of life in children was associated with higher attachment security to both parents, better capacity for emotion regulation, and lower negative emotionality, whereas more
recurrent health complaints were associated with higher exposure to IPV and higher negative emotionality. These results point up the importance of looking at the individual characteristics of children to better understand their adjustment after exposure to IPV, and to determine the best factors to target in individual interventions.
Sammanfattning

Våld i nära relationer, på engelska intimate partner violence (IPV), förekommer i alla samhällen och mammor med yngre barn är en speciellt utsatt grupp. Konsekvenserna av att utsättas för våld av sin nuvarande eller före detta kärlekspartner, har ofta både långvariga, och ibland bestående, effekter på psykisk och fysisk hälsa, något som forskning inom området övertygande har visat.

En stor andel barn tvingas växa upp i en familj där våld mellan föräldrarna, eller från den ena föräldern mot den andra (IPV), förekommer. Även här finns forskning som har visat på den risk det medför för barnets hälsa och utveckling att utsättas för IPV.

Såväl nationellt som internationellt har utvärderingar efterfrågats rörande effekterna av stöd- och behandlingsinsatser som rikts till barn som levt med IPV. Sedan 2007 är Socialtjänsten ansvarig för att ge stöd till den här gruppen barn. De stöd- och behandlingsinsatser som erbjuds barn i Sverige är dock i allmänhet inte utvärderade.


De barn i den nationella utvärderingen som var tillräckligt gamla (9 - 13 år) deltog själva i undersökningen genom att svara på intervjufrågor och fylla i frågeformulär. Dessa barn rapporterade som grupp sämre livskvalité (quality of life), och fler återkommande psykiska och fysiska symtom på ohälsa i jämförelse
med barn i allmänhet i samma ålder i Sverige. Det var dock en stor variation i hur barnen skattade sin livskvalité och hälsa. Många barn tyckte att deras livskvalité var lika god som andra barn i motsvarande ålder och besvärades inte av återkommande huvudvärk, magont eller svårigheter att sova. En högre upplevd livskvalité var kopplat till en högre grad av anknytningstrygghet till båda föräldrarna, en bättre förmåga att reglera känslor och en lägre grad av negativ emotionalitet (hur stark och intensivt man reagerar). Återkommande psykiska och fysiska symtom på ohälsa var däremot kopplat till en högre grad av upplevt våld mot deras mamma och högre negativ emotionalitet. Resultaten tyder på att det är motiverat att fortsätta undersöka hur enskilda barns personlighet och situation påverkar barnets anpassning och mående efter att barnet har utsatts för IPV.
List of papers

This dissertation is based on the following studies, which will be referred to by their Roman numerals in the text:


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Abbreviations

IPV – Intimate partner violence
PTSD – Post-traumatic stress disorder
RCI – Reliable Change Index

Definitions

Victim – target of violence
Perpetrator – person who inflicts harm/violence
Aggression – acts intended to harm
Violence – acts inflicting actual harm
Something is going to happen. The worst you can think, regarding your parents: something has already happened. What?

That night. I lie awake listening. No. I am not listening. It’s thunder, pelting rain. Mixed with my dreams.

In another part of the house. Muffled, through the walls. A raised voice. Dad’s voice. Controlled, reasonable. Why can’t you, Why won’t you, I’m warning you.

The words are indistinct, but the rhythm of the voice is unmistakable. The second voice, the weaker voice. High-pitched, a women’s voice. I feel scorn for it. The deeper voice rolls over it, obliterates it. Like thunder rolling across the sky.

I’m awake, sitting up in bed. Kicking at the covers. It was nothing, only thunder. . .

It was nothing. Only thunder. . .

. . . The scarfs Mom began wearing. Beautiful bright-colored scarfs. And shawls. And long-sleeved shirts, pullovers. Sometimes the sleeves dropped to her wrists, hiding her wrists. Hiding what? Bruises on her wrist, on her neck and upper arms? Angry red welts made by a man’s strong fingers?

I could not ask. The words gathered in my throat but stuck there. In Mom’s presence I began to be very quiet. And Mom was becoming ever more quiet with me (Oates, 2004, p. 44-45, 53).

Violence in intimate relationships is an everyday occurrence. Newspapers frequently report physical violence against women, and this abuse take place too often in the context of the family, to mothers of young children. Thus many children grow up in a family environment characterized by aggression and violence. Emotional, physical, or sexual abuse in the home, experienced as either a victim or a witness, violates the essence of close family relationships, as what should be a source of protection, care, and intimacy becomes instead the source of pain and fear.

Violence in intimate relationships produces significant costs for victims, perpetrators, communities, health care organizations and law enforcement agencies. Since 2007 communities in Sweden have been bound by law (chapter 5. 11 § SoL, Lag 2007:225) to provide support to help mothers and children cope in the aftermath of violence. This legislation has led to a bourgeoning of interventions, but the methods used in everyday practice are rarely evaluated. In fact, most of the intervention methods provided in Sweden were designed by dedicated clinicians inspired by different methods, mostly from the fields of trauma, grief, or substance abuse. The lack of an empirical basis for the
methods in use resulted in the National Board of Health and Welfare appointing a commission to investigate the effects of interventions used in various communities. Informed by the Swedish Government’s “Action plan for combating men’s violence against women, violence and oppression in the name of honor and violence in same-sex relationships” (Government Office of Sweden, 2007), the commission formed a multidisciplinary research group to evaluate the existent support measures for children who had witnessed violence against their mothers. This thesis builds on data from that research project and from a pilot project preceding the national evaluation study.

The thesis is divided into four main sections. Section one concerns women and mothers subjected to IPV. The topic of IPV is introduced with a broad definition of aggression and violence, followed by a review of definitional issues in the field of aggression and IPV. Next, international and Swedish prevalence rates are provided, followed by common theoretical viewpoints and an attempt to structure the relationships of commonly cited risk factors for victimization by IPV within a theoretical framework. Possible and common consequences of IPV are then described, and the section is brought to a close with a short review of interventions for women subjected to IPV.

Section two concerns children’s exposure to violence between their parents and is introduced with relevant passages of the UN Convention on the Rights of the Child. An overview of terminology used to describe children’s experiences follows, along with prevalence rates for child exposure to interparental aggression and violence. Different theoretical viewpoints on the effects of such exposure are then presented, followed by possible factors related to the effects of child exposure. Finally, the consequences of exposure to interparental aggression and violence and empirically supported interventions for exposed children are presented.

The third section concerns the reporting of evaluations of interventions on both the group and the individual level. The importance of reporting clinically significant changes at the individual level in addition to traditional statistical significance and estimates of effect sizes is specifically addressed, and the Reliable Change Index (RCI) is reviewed. The RCI is one of the most used and recommended measures of clinical significance as it can show the proportions of clients who benefit from treatment, who remain unchanged, and who might be worse off after treatment.

Section four summarizes the four empirical studies (aims, methods, results, and discussion) on which this thesis is based. It concludes with a general discussion of the studies and their findings.
Section I
Aggression and violence

Aggression, like love, fear, and sorrow, is a fundamental human emotional experience. Both aggression and restraint of aggression can be seen as normative and adaptive responses (Ferguson, 2008). Aggression, however, encompasses a wide variety of behaviors that differ in severity and societal acceptance, ranging from socially sanctioned forms of self-defense and protection of others, through competitive play, sports, and competitions in work, school, or business to less approved behaviors such as gossiping and bullying, to criminal behavior such as vandalism and violence against others, including abuse of an intimate partner.

Psychoanalytic theory proposes that aggression is innate and emerges as a consequence of frustration induced by conflict between the principles of pleasure and reality (Freud, 1958). Bowlby’s formulation of attachment theory conceptualizes anger and aggression as protest behavior responses to threats of separation from an attachment figure, which function to maintain or increase closeness with the caregiver (Bowlby, 1984). This constructive form of anger, “anger of hope”, contrasts with the dysfunctional, over-intense, and exaggerated “anger of despair” that risks injuring or destroying the relationship (Bowlby, 1973).

From the standpoint of evolutionary psychology aggression serves a survival function and can be seen as an adaptive response, under certain environmental circumstances, especially to situations of threat (Buss & Shackelford, 1997). Aggression can be considered as innate insofar as evolution has equipped humans with psychological mechanisms that have allowed them to cope with and solve adaptive problems. Such adaptive problems include defending against attack, co-opting resources, negotiating status and power, minimizing the cost of same-sex rivals (Buss & Duntley, 2011), and deterring rivals from future aggression. Whether or not an aggressive act is adaptive depends upon the context (Buss & Shackelford, 1997).

Aggression and violence are not synonymous. Aggression can be thought of as any behavior that is executed with the immediate goal of causing psychological or physical harm to another individual (Andersson & Bushman, 2002; Bandura, 1973; Berkowitz, 1993). Under the definition of aggression as “intent to hurt” psychologically or physically, accidental harm, caused, for example, by a thoughtless coarse remark or the inadvertent closure of a door on a partner’s finger would not be recognized as aggression, a deliberately cruel comment or rough physical behavior may be aggressive even if no actual harm ensues. Definitions of violence, on the other hand, are often restricted to intentional behaviors that inflict physical, rather than psychological, harm (Reiss & Roth, 1993, p. 35). Physical violence has been defined to encompass behaviors such as use of weapons, hitting, kicking, biting, choking, burning, pushing, or other
acts that result in injury or death to a victim (Crowell & Burgess, 1996). If only behaviors that result in physical harm to the victim are considered to be violent, psychologically aggressive behaviors are excluded, even if they cause psychological trauma to the victim.

Such a narrow definition of violence might be appropriate in other contexts, but it is not sufficient for the study of aggression and violence in intimate relationships. Adapting the definition of physical violence to psychological violence, behaviors intended to hurt the victim that do cause psychological harm are seen as psychological violence. Hence, all violent acts can be seen as aggressive (intent to harm) but not all aggressive acts are considered violent (actual harm inflicted) (Andersson & Bushman, 2002). When to consider physical aggression as violence is fairly straightforward, as there are physical indicators of harm. Defining psychological aggression as violence is not so clear. How should the harm caused by psychologically aggressive behaviors be measured? Indeed, not all psychologically aggressive acts are necessarily violent (Follingstad, 2007; 2009). Psychological aggression “ranges from boorish and inept relationship behavior through [to] interpersonal terrorism” (Jordan, Campbell, & Follingstad, 2010, p. 610). How, therefore, to distinguish psychologically aggressive behaviors common among couples in conflict (spiteful remarks, angry stares, etc.), which have minimal or no long-lasting effects, from psychological violence remains to be clarified:

Psychological aggression is much more likely to occur between dating or marital partners than the use of physical force, and has a higher probability of occurring than not occurring at all. Therefore, normative data regarding psychological tactics during conflict and expressions of anger, as well as the impact (or lack of impact) of milder intimate conflict is needed to reduce serious errors of labeling any form of psychological aggression as “abusive” (Follingstad, 2007, p. 445).

Furthermore, how should the absence of positive behaviors, ignoring a partner’s feelings, or withholding approval and appreciation — sometimes used as self-report measures of “psychological abuse”— be evaluated?

In conclusion, aggression is often seen as different from violence, in that aggression does not necessarily result in physical or psychological harm to the victim, while violence, by definition, does. The distinction is likely of vital importance in differentiating psychological aggression from psychological violence, although it is complex and difficult to operationalize. To label all forms of aversive relationship behaviors as psychologically abusive is to risk being very misleading.
Conceptual and definitional issues in the field of violence in intimate relationships

It is evident that aggression in intimate relationships consists of more than one type of aggression. Both men and women may engage in aggression and violence towards their partner. Sometimes the violence is unilateral, typically male-to-female directed, other times bidirectional, and perpetration is understood to differ in context, relationship dynamics, and consequences (Johnson, 2011; Kelly & Johnson, 2008). Aggression and violence in intimate relationships are heterogeneous phenomena that can be driven by a wish to control the partner, a reaction to separation, a desire for self-defense, or the result of escalating conflicts in which one or both partners have poor problems-solving strategies (Kelly & Johnson, 2008). The debate regarding symmetry or asymmetry in men’s and women’s violence perpetration in intimate relationships (Hamby, 2009; Straus, 2011; Winstok, 2011), although an interesting and challenging topic, will be touched upon only briefly, as it is not central to this thesis.

This study concerns violence in families with a heterosexual parent couple. Violence in relationships between homosexual couples, bisexual, and transgendered people will not be covered because information about violence in non-heterosexual relationships is limited by the strong research focus, until recently, on heterosexual couples.

The research field of violence in intimate relationships has been characterized as “uncohesive” (Berscheid & Regan, 2005, p. 52), and a variety of concepts and labels have been suggested to describe the problem: intimate partner violence, domestic violence, relationship abuse, partner violence, spousal violence, and marital violence to mention a few. Presently, domestic violence often encompasses violence between heterosexual cohabiting and married adults, but it can also include all types of violence occurring in the family (Harway et al., 2006). Originally, domestic violence was used by the feminist movement for male violence against women, and the word domestic signaled that it was at home that women were subjected to violence. Intimate partner violence (IPV) is also a broad and common concept, which sometimes includes only male-to-female violence, but at other times is also used for female-to-male violence or violence in homosexual relationships (Arias & Ikeda, 2006). From a feminist perspective some researchers consider the term intimate partner violence inappropriate, since a relationship characterized by unbalanced power relations (such as the relation between a woman and a man) cannot be considered intimate (Winstok, 2011). Other terms used instead are, for example, violence against women (Dobash & Dobash, 2004) or men’s violence against women and these terms include other forms of violence against women besides violence within an intimate relationship (e.g. rape or stalking by men other than partners).
Several agendas have set as a priority the development of a standardized terminology concerning violence against women in intimate relationships (Koss & White, 2008), but so far researchers have been unable to agree on a definition. Definitions have often included three primary forms of violence: physical violence (e.g. slaps, pushes, throwing objects, damaging property, hitting, grabbing, kicking, choking, threatening with a weapon), psychological violence (e.g. insults, threats, withholding money, intimidation and control, or checking-up behavior), and sexual violence (e.g. sexual coercion, rape, physically painful sex) (Dutton & Gondolf, 2000). A fourth type of violence, economic violence, is sometimes included in IPV (Enander, 2008), and it concerns “behaviors that control a woman’s ability to acquire, use, and maintain economic resources, thus threatening her economic security and potential for self-sufficiency” (Adams, Sullivan, Bybee, & Greeson, 2008, p. 564).

Definitions of aggression and violence in intimate relationships differ in their scope; some are more inclusive, others more restricted. More narrow definitions often include only physical violence that causes pain or injury and ignore controlling and intimidating behaviors such as humiliation, verbal abuse, and denial of access to money or services. Criminal definitions of violence are often more narrow in scope because violent behaviors that do not meet legal thresholds for crime are not included. Researchers who define violence in intimate relationships more broadly often include different forms of psychological aggression such as degradation, intense criticism, belittlement, ridicule, and sadistic forms of controlling behavior along with physical and sexual violence (DeKeseredy, 2000). Moreover, definitions of violence in intimate relationships vary according to whether or not they include the intent or consequences of the acts or whether the focus is strictly on the actual behaviors per se.

The United Nations (UN) has agreed upon a definition of violence towards women:

Any act of gender-based violence that results in, or is likely to result in, physical, sexual, or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or private life (United Nations, 1993).

The UN definition is rather broad and covers aggression and violence against women outside as well as inside the home, whether from a spouse or a stranger. The definition emphasizes consequences and violence against women that is rooted in gender inequalities between males and females. Because it includes gender-based phenomena including violence such as genital mutilation, forced prostitution, trafficking and selective sex abortion, the definition is too broad to be useful in studying aggression and violence in intimate relationships.

Another broad definition often used in the treatment of abused women and
their children in Norway and Sweden is that of Alternative For Violence (ATV) (Alternative For Vold, 2012).

Violence is any act directed against another person, where this act either harms, hurts or offends in a way that makes the person do something against his/her will or stop doing something that he/she would like to do (Isdal, 2002).

There can be a problem, however, with a definition that does not include the intent of the act. A seemingly hurtful action need not be aggressive. However, to include the intent of an act in a definition of violence raises another problem because the intent is not easily observable.

A more narrow definition of physical assaults, operationalized through the widely used measurement of aggressive and violent acts between partners, is the Revised Conflict Tactics Scales (CTS2) (Straus, Hamby, BoneyMcCoy, & Sugarman, 1996). The authors explicitly state:

The CTS measures the extent to which specific tactics, including acts of physical violence, have been used. The CTS is not intended to measure attitudes about conflicts or violence nor the causes or consequences of using different tactics (Straus et al., 1996, p. 284).

A definition of physically aggressive and violent acts that excludes consequences can also be problematic and has been controversial (Dobash & Dobash, 2004), given the greater number of IPV-related injuries from violence committed by men towards women than violent acts perpetrated by women against men (Archer, 2000; Caldwell, Swan, & Woodbrown, 2012; Straus, 2011). Family interaction researchers commonly rely on the behavioral act per se in defining physical violence in intimate relationships (Archer, 2006; Winstok, 2011). Aggression and violence are conceptualized as the dual endpoint of a continuum of conflict tactics used in a relationship. However, physically aggressive and violent acts can have very different meanings and effects. A woman is generally physically smaller and weaker and has less physical power than a man, and women also report greater fear of aggressive or violent male partners than men do of aggressive or violent female partners (Caldwell et al., 2012; Phelan et al., 2005). An experiment with college students using vignettes of different violent interactions showed that both men and women perceived male-to-female violence as more frightening than female-to-male violence, and this was due to men’s greater physical strength and size (Hamby & Jackson, 2010).

In contrast, there are definitions in the field that see aggression and violence in intimate relationships as a continuum of power and control tactics:
Woman abuse is the misuse of power by a husband, intimate partner (whether male or female), ex-husband, or ex-partner against a woman, resulting in a loss of dignity, control, and safety as well as a feeling of powerlessness and entrapment experienced by the woman who is the direct victim of ongoing or repeated physical, psychological, economic, sexual, verbal, and/or spiritual abuse. Woman abuse also includes persistent threats of forcing women to witness violence against their children, other relatives, friends, pets, and/or cherished possessions by their husband, partners, ex-husbands, or ex-partners (DeKeseredy & MacLeod, 1997, p. 5, cited in DeKeseredy, 2000).

This definition stresses power and control and specifically concerns different forms of aggression and violence by someone the women is or was involved with intimately. A definition of aggression and violence in intimate relationships along a continuum of power and control tactics emphasizes efforts to create, sustain, or maintain dominance and control over women. Male violence against females within intimate relationships is often seen as mirroring the subordinate position of women as a whole in most societies and as an example of different power tactics used to maintain this larger subordinate position (Dragiewicz, 2008; Winstok, 2011).

Striking by its absence in IPV definitions is the perspective of the possible child victim, since aggression and violence in intimate relationships often extend beyond the adult relationship. Whether the cause of the violent acts—control tactics or poor conflict resolution skills—matters to the child is worth questioning. Living with caregivers whose relationship is marked by shouting, arguing, fighting, and violence—regardless of the gender of the perpetrator and or the motives—can be very frightening and put the child’s health and development at risk, both from an attachment point of view and from a trauma perspective. This topic will be elaborated further in section two.

The appropriate definition to use depends partly upon the theoretical standpoint and partly upon the purpose of the work. The definition to be used in a crime victimization survey, for example, might differ from that used in a prevalence study or in a political agenda for reducing all forms of violence against women in intimate relationships. Broad definitions are sometimes preferable because they tend to acknowledge the victims’ subjective experiences of psychological and economic, as well as physical and sexual, forms of aggression and violence. It is important to note, however, that the definition used will likely influence the prevalence rate found, and broad definitions often render higher prevalence rates than do narrow definitions (Centers for disease control and prevention & National center for injury prevention and control, 2003; DeKeseredy, 2000; The Swedish National Council for Crime Prevention, 2009).
The definition of violence used in the national evaluation project

The term intimate partner violence (IPV) will be used from here on, primarily because it emphasizes the love relationship (past or current), in which one is supposed to feel safe, valued, and treasured, as the setting for aggression and violence. The definition used during the evaluation project was broad; it neither distinguished between aggression and violence nor included intentions or consequences of violence. Violence was defined as self-reported “behaviors directed to the mother by a current or former male partner of hers that threatened, attempted, or actually inflicted psychological or physical harm.” This can be seen as a shortcoming in light of the previous discussion of the weakness inherent in not including consequences and intentions in a definition of IPV. However, as stated, a definition for use in measuring the prevalence of IPV likely needs to be different than a definition used in a study evaluating outcomes. No claims are made based on the evaluation project and the studies included in this thesis regarding prevalence rates of IPV or the nature of violence in intimate relationships. It would be impossible to measure the intentions behind the different behavioral acts to which these mothers had been subjected, but one consequence for the majority of the mothers was that they sought help for themselves and their children.

Prevalence of IPV in heterosexual women

Throughout the world the estimated prevalence of violence against women in current or former intimate heterosexual relationships is high, and such violence has sometimes been referred to as epidemic. Rates of physical and sexual IPV range from 15% to 71%, in population-based surveys of lifetime exposure, to 4% to 54% for exposure during the last 12 months (Garcia-Moreno et al., 2006). In a population-based survey from the U.S. 26% of women reported life-time physical or sexual IPV and slightly more than 1% reported being victimized during the preceding year (Breiding, Black, & Ryan, 2008). In Europe, the overall rate of life-time experience of physical IPV was 30% (Alhabib, Nur, & Jones, 2010), in Madrid, 10% of women reported being subjected to physical, sexual, or psychological IPV during the preceding twelve months (Zorrilla et al., 2010), and in Germany 17% of women were subjected to physical or sexual abuse by a current partner. The rate of IPV including threats, physical abuse, or sexual violence during the preceding year in Finland was nearly 8% (Pispa, Heiskanen, Kääriäinen, & Sirén, 2006), while in an earlier study in Sweden, 46% of women reported having been subject to physical, psychological, or sexual violence at any time and 11% by a current partner or husband (Lundgren,
Heimer, Westerstrand, & Kalliokoski, 2001). This Swedish survey has been criticized for using a very inclusive definition of violence. A more recent national crime survey covering battery, sexual violence, harassment, and threats found that only 1% of women had been victimized by a current or former partner in the last year (The Swedish National Council for Crime Prevention, 2009). Some groups are disproportionately affected by violence in their intimate relationships. Psychiatric patients (Howard et al., 2010), teenagers, and young adult couples have high prevalence rates (Glass et al., 2003; Gover, Kaukinen, & Fox, 2008), and immigrant Swedish women also report significantly higher rates of physical violence than Swedish-born women (Fernbrant, Essen, Östergren, & Cantor-Graae, 2011).

Theories of violence in intimate relationship

In the field of IPV there are numerous domain-specific theories but few integrative theories (Bell & Naugle, 2008). Some of these domain-specific theories are feminist theories, attachment theory, conflict theory, and social learning theory. They can be broadly categorized into individual, psychosocial, and sociocultural theories (Feldman & Ridley, 1995). A thorough discussion of each theory or of different theoretical standpoints under each category will not be undertaken, but a synopsis of some of the more salient theories and viewpoints in the field are provided in Table 1. Each of these theories contributes a valuable piece towards understanding violence in intimate relationships, but they have all been criticized for their inability to predict and explain the heterogeneity and complexity of violence in intimate relationships (Bell & Naugle, 2008). No single-factor theory can explain the diverse phenomena of IPV, but single-factor theories can give valuable insights towards understanding and conceptualizing the interpersonal dynamics and other factors underlying IPV in a particular relationship.

Table 1. Major theoretical viewpoints for understanding and explaining IPV, p. 13.
<table>
<thead>
<tr>
<th>Theory</th>
<th>Brief description</th>
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<tr>
<td><strong>Attachment theory</strong></td>
<td>Asserts that violence can be caused when partners have conflicting needs and comfort regarding distance and closeness in an intimate relationship. Violence stem from frustrated attachment needs by real or imagined threats of rejection, separation, or abandonment by the partner (Bartholomew &amp; Allison, 2006).</td>
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<tr>
<td><strong>Psychopathology</strong></td>
<td>Emphasizes that violence stems from mental disorder or abnormality i.e. personality disorders with features of decreased impulsive control and antisociality (Dutton, 1995; Dutton, 2010).</td>
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<tr>
<td><strong>Sexual-conflict theory</strong></td>
<td>Stresses that there are predictable conflicts in the &quot;mating arena&quot;, and conflict occurs whenever evolutionary interest are opposing between the two sexes. Conflicts concern &quot;fitness-optima&quot; and points out that aggressive behavior can increase benefits like mating-options and mate-fidelity (Buss &amp; Duntley, 2011; Buss &amp; Shackelford, 1997).</td>
</tr>
<tr>
<td><strong>Alcohol/Drug disinhibition</strong></td>
<td>Points out that alcohol and drugs act as disinhibitors and weaken the internal control (superego) and acquired or inherited potential to be violent are set free (MacAndrew &amp; Edgerton, 1969 cited in Feldman &amp; Ridley, 1995).</td>
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<tr>
<td><strong>Social information processing/ Attributional theory</strong></td>
<td>Anger and violent behavior is conceptualized as the result of malevolent expectations, appraisals, and interpretations of external cues (Andersson &amp; Bushman, 2002; DeWall &amp; Andersson, 2011).</td>
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<tr>
<td><strong>Developmental model</strong></td>
<td>Building on developmental psychopathology and research on family relations and romantic relationships. Asserts that a history of family coercion and aggression put children on a developmental pathway which entangles them in a cycle of disadvantages. Lack of prosocial models for interaction and conflict resolution make deviant youths more vulnerable. When disadvantage youths reach adolescence and starts initiate intimate relationships themselves they associate with other aggressive and disadvantage youths and this &quot;assortative mating&quot;, put them on further risk ( Ehrensaft, 2008; Ehrensaft, Cohen, Smailes, Chen, &amp; Johnson, 2003).</td>
</tr>
<tr>
<td><strong>Biological factors</strong></td>
<td>Head injuries, frontal lobe deficiency as well as hormone levels (e.g. testosterone) are seen as important biological factors in explaining male violence against females in close relationships (Pinto et al., 2010). Looking for endophenotypes or &quot;neural signatures&quot; in perpetrators of IPV (e.g. attention, executive functioning, verbal skills, dysregulated stress response) (Howard, 2012).</td>
</tr>
<tr>
<td><strong>Psychosocial theories</strong></td>
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<tr>
<td><strong>Frustration-Aggression theory</strong></td>
<td>Stresses that all humans have innate or acquired tendencies to act aggressively in response to frustrations when some important goal is blocked. Culture modifies expression of aggression and aggression can be displaced from one situation to another - where it is safer to express aggression ( Berkowitz, 1993).</td>
</tr>
<tr>
<td><strong>Social conflict theory</strong></td>
<td>Asserts that conflict is intertwined with all social relations and there is no relationship without conflict but how the conflict is dealt with varies. Aggressive acts are thought of as tactics in the end of a continuum of other more prosocial tactics to resolve disputes. Violence is the result of a breakdown in conflict tactics or when other options to solve the conflict have failed ( Dahrendorf, 1968; Sprey, 1969 cited in Feldman &amp; Ridley, 1995).</td>
</tr>
<tr>
<td><strong>Social learning theory</strong></td>
<td>Emphasizes the role of learning in acquiring and using aggressive acts. Direct experiences of aggression and observing others behaving aggressively explains the variation in aggressive and violent acts (Bandura, 1973; Patterson, 1982).</td>
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<tr>
<td><strong>Sociocultural theories</strong></td>
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<td><strong>Feminist theories</strong></td>
<td>Stresses that our society is characterized by unequal power relations in favor of the male sex (patriarchy). Women have a subordinate position and status and violence in different forms are used to keep the power balance intact. Violence in intimate relationship is seen as a prism of the societal relations in general between men and women (Dobash &amp; Dobash, 1979; Johnson, 2011; Walker, 1979).</td>
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<tr>
<td><strong>Power theory</strong></td>
<td>Asserts that the root of violence stems from culture and the family structure. Family conflict, social acceptance of violence, and inequalities between men and women are interacting. To handle family conflicts with violence are thought to be learned in childhood by either having been witness to abuse or a victim of abuse. Psychological stresses and power imbalances are thought to increase the risk for tension and conflict in families and heighten the risk for physical aggression ( Straus et. al., 1980).</td>
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<tr>
<td><strong>Resource theory</strong></td>
<td>Asserts that the more resources a person has the more influence the person has. A resourceful person can assert his/her position more forcefully and maintain authority. However, the force needs not to be executed overtly and violence is seen as the last resort to maintain power in the family when other means are lacking (Goode, 1971, cited in Feldman &amp; Ridley, 1995).</td>
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Risk factors associated with women’s IPV victimization

Statements are sometimes made that pose that all women risk being victimized by violence in their intimate relationship (Johansson-Latham, 2008) and that all men are potential perpetrators. Indeed, violence in intimate relationships does strike all ages and social groups, but equally (Ehrensaft, 2008). Younger women, and women with children, particularly young children, are at higher risk of being victimized than older women and women without children (Abramsky et al., 2011; Bair-Merritt, Holmes, Holmes, Feinstein, & Feudtner, 2008; Carpenter & Stacks, 2009; The Swedish National Council for Crime Prevention, 2009) and younger men perpetrate more violence in intimate relationships than older men (O’Leary, 1999; The Swedish National Council for Crime Prevention, 2009). Furthermore, IPV seems to be more prevalent in disadvantaged groups such as those with lower social economic status and lower education, and in the presence of such psychosocial stressors as unemployment and substance abuse (Abramsky et al., 2011).

Numerous risk factors have been tested for associations with IPV, including family and developmental history, personality, and social and biological factors. Research on risk factors for IPV has tended to rely on cross-sectional designs with unrepresentative samples (Ehrensaft, Cohen, Smailes, Chen, & Johnson, 2003). There has been little coherent organization of risk factors regarding how and why they influence IPV victimization and perpetration, and different well-conducted studies have shown different, sometimes, contradictory, results.

Some of the more commonly reported risk factors for women’s IPV victimization in heterosexual relationships will be reviewed. However, since many studies have investigated both IPV victimization and perpetration because they tend to co-occur, risk factors for women’s IPV perpetration will also be provided when reported in cited studies on risks for victimization. The risk factors will be structured according to Bronfenbrenner’s ecological systems theory (Bronfenbrenner, 1986; 1979), which was first developed for studying child development. The ecological systems theory concerns how different characteristic of the individual constantly interact with that individual’s surroundings. The individual and the environment are seen as continually and bidirectionally influencing one another (Figure 1). At the center of this model are the individual, and the individual’s personal characteristics and developmental history on the ontogenic level. Nearest the individual is the microsystem, the individual’s immediate environment, which often includes the family and close friends. The mesosystem (pictured in Figure 1, but not included in the proposed structure of risk factors) concerns interactions between different microsystems, and the exosystem refers to the individual’s relationship or connection with other social
structures or institutions such as the workplace, local government, mass media, the juridical law system, and community social services. Finally, there is the macrosystem that includes cultural and subcultural values and beliefs. These different levels can be seen as a series of interrelated layers. The more proximal (closest to the individual) are usually seen as more immediately influential and those further out (distal) are thought to have a more indirect influence and often to be mediated by more proximal factors. This multifactor framework has been applied to risk for male IPV perpetration (Dutton, 1985) and in a meta-analysis of risk factors for IPV perpetration and victimization (Stith, 2004).

Figure 1. Bronfenbrenner’s ecological systems model.

Ontogenic system level

_History of family of origin_

Violence begets violence. Being the victim of abuse or witnessing violence in the family of origin was proposed as an important risk factor for IPV (the intergenerational transmission or cycle of violence hypothesis) as early as 1963 (Curtis, 1963), and the hypothesis has since been supported to some extent by both cross-sectional and prospective longitudinal studies (Ireland & Smith, 2009; Kwong, Bartholomew, Henderson, & Trinke, 2003; McKinney, Caetano, Ramisetty-Mikler, & Nelson, 2009; McNeal & Amato, 1998; Renner &
Whitney, 2012; Whitfield, Anda, Dube, & Felitti, 2003). Several studies have found that any physical or sexual victimization in childhood increases the risk for being victimized by a partner in adulthood (Coid et al., 2001; Desai, Arias, Thompson, & Basile, 2002). The longitudinal study by Erenshaft and colleagues, with over 500 participants followed repeatedly for 20 years, showed that witnessing violence in the family of origin was the strongest predictive factor for being victimized by violence in an adult intimate relationship (Ehrensaft et al., 2003). Other longitudinal prospective studies found that IPV in the family of origin (Smith, Ireland, Park, Elwyn, & Thornberry, 2011) or documented abuse by a parent during adolescence (Sunday et al., 2011) increased the risks both for committing IPV—and for being a victim of IPV in young adulthood. A meta-analysis of cross-sectional studies supported an association between exposure to IPV or victimization in the family of origin and becoming involved in an adult relationship where IPV occurs, but the variance explained by early experience to violence was small to moderate (Stith et al., 2000). However, even if exposure to violence in the family of origin is a consistent correlate of IPV, most survivors do not become victims or perpetrators of IPV (Widom, 1989). Witnessing or being a victim of abuse is associated with an increased risk at the group level but is not independently predictive of who will be victimized (Figure 2).

**Prior adult victimization**

Earlier partner victimization seems to be associated with increased risk for being subjected to violence by another partner (Krishnan, Hilbert, & Pase, 2001); in samples of women who have been subjected to severe violence, a fifth seem to become involved in a subsequent violent relationship. Sheltered women were followed longitudinally, and three years after the shelter stay more than a third had re-experienced abuse from a former or new partner, 19% of which occurred in a new relationship (Bybee & Sullivan, 2005). Similar results of relatively high rates of revictimization come from a study that followed 700 women for one year after they obtained a protective order against an abusive partner. After one year, 23% of the women were involved in a new relationship in which abused had occurred (Cole, Logan, & Shannon, 2008). Thus, a substantial minority of women who terminate their abusive relationship seem to become involved with a new abusive partner (Figure 2).

Other documented factors associated with women with recurrent experiences of IPV in different relationships are high rates of attachment insecurity (Kuijpers, Van der Knaap, & Winkel, 2012) and experiences of multiple traumas in childhood (most commonly exposure to IPV and sexual abuse) (Alexander, 2009). A review of prospective studies of risk for revictimization found severe post-traumatic stress symptoms to be correlated with further IPV victimization (Kuijpers, van der Knaap, & Lodewijks, 2011; Kuijpers, van der Knaap, & Winkel, 2012). Moreover, the severity and frequency of the partner’s violence is
a strong predictive factor for further abuse. In fact, women’s assessment of future risk for violence seems to be a good predictor for future re-assault (Kuijpers et al., 2011; Riggs, Caulfield, & Street, 2000), even improving the prediction over and above risk assessment with structured instruments (Campbell, 1995).

**Attachment insecurity**

Typically, adult intimate partners serve as each other’s attachment figures (Hazan & Shaver, 1987). Adult attachment relationships differ from attachment relationships in childhood, in that the partners function reciprocally as secure havens for each other in times of need and stress and as secure bases for each other to explore and engage in activities outside the relationship. Insecurely attached adults have more unstable and turbulent relationships than securely attached individuals (Hazan & Shaver, 1987; Mikulincer, Florian, Cowan, & Cowan, 2002). Difficulties with negotiating distance and closeness and conflicting or competing needs for distance or closeness in the relationship are associated with IPV (Allison, Bartholomew, Mayseless, & Dutton, 2008; Bartholomew & Allison, 2006; Bond & Bond, 2004; Doumas, Pearson, Elgin, & McKinley, 2008). Frustrated attachment needs often evoke functional protest behaviors meant to bring the attachment figure closer or to maintain contact. Controlling behaviors, verbal threats or name-calling, and violence can be seen as dysfunctional forms of protest behavior that damage the relationship rather than strengthen it. Such dysfunctional protest behaviors are often triggered by real or imagined threats of rejection, abandonment, or separation. Insecure individuals tend to be more aroused in response to such real or imagined threats (Bartholomew & Allison, 2006), and violence in a close relationship has been characterized as “an anger born of fear” (Dutton, 2011). Insecure attachment seems to be more common among violent couples, and insecurity seems to put individuals at risk of being both victims and perpetrators of violence (Bartholomew & Allison, 2006; Follingstad, Bradley, Helff, & Laughlin, 2002; Godbout, Dutton, Lussier, & Sabourin, 2009; Henderson, Bartholomew, Trinke, & Kwong, 2005) (Figure 2).

**Psychopathology and mental health**

Conduct disorder or early behavior problems (aggression/delinquency or substance abuse) have been singled out as variables with great predictive power for IPV in both women and men in several longitudinal prospective studies with large samples (Andrews, Foster, Capaldi, & Hops, 2000; Ehrensaft et al., 2003; Ireland & Smith, 2009; Magdol, Moffitt, Caspi, & Silva, 1998) (Figure 2).

Negative emotionality (defined as being prone to worry and stress and having a low threshold for feelings of anger, fear, and hostility) is another risk factor for both sexes for becoming involved in an abusive relationship. In a longitudinal study, negative emotionality was associated with committing violence in an intimate relationship (Moffitt, Robins, & Caspi, 2001) (Figure 2).
There are few prospective longitudinal studies on psychopathology in the form of personality disorders and risk for IPV victimization among women. One such study found personality disorders to be strongly associated with IPV perpetration and victimization in both women and men (Ehrensaft, Cohen, & Johnson, 2006). Mental health problems in adolescents also seem to increase their risk for being involved in a violent relationship (Ehrensaft, Moffitt, & Caspi, 2006). The World Health Organization (WHO) world mental health survey of about 1800 couples from 11 high-, medium-, and low-income countries investigated associations between premarital mental health problems (any of 16 different mental health disorders) and risk for physical violence. Among women internalizing disorders (e.g. major depressive episode, anxiety disorders) contributed to a higher risk for being victimized by physical violence in the relationship, but the factor that contributed most was male externalizing disorder (e.g. disruptive behavior disorder, oppositional defiant disorder, intermittent explosive disorder). Premarital mental health disorders explained 17% of the variance in physical violence; hence the contribution was modest, indicating that other variables are important in explaining the etiology of IPV (Miller et al., 2011) (Figure 2).

Alcohol abuse
A 2008 meta-analysis of studies into the association between alcohol use/abuse and IPV perpetration found a small to moderate effect of alcohol use on IPV perpetration by men and a small effect on perpetration by women (Foran & O’Leary, 2008). A longitudinal study by White and Chen found that problem drinking predicted both IPV victimization and perpetration in both women and men (White & Chen, 2002). The WHO multi-country survey of over 15 000 women investigating different risk factors for victimization by IPV during the past year found that alcohol abuse by either the man or the woman was associated with IPV victimization and the risk was even higher when both partners had problems with alcohol (Abramsky et al., 2011) (Figure 2). A Swedish study including over 4000 women with alcohol abuse reported that almost 70% had been subjected to psychological violence and 50% to physical violence during the previous month and/or earlier in their lives (Armelsius & Armelius, 2010). That study concluded that treatment of alcohol abuse must include strategies to help women handle the risks of violence and victimization in close relationships.

Substance abuse seems to increase the risk for victimization, but it is important to note that, as with other risk factors assessed at the group level, the majority of women who are abused are not under the influence of drugs or alcohol (Riggs et al., 2000; The Swedish National Council for Crime Prevention, 2009).
Individual values and beliefs

Attitudes that condone violence in intimate relationships significantly increase the risk for both perpetration of IPV (Flood & Pease, 2009; Stith, Smith, Penn, Ward, & Tritt, 2004) and victimization (Abramsky et al., 2011; Alio et al., 2011). A study among college students, women in shelters, and male prisoners who all had committed at least one physical aggressive act against a partner found a correlation between acceptance of the use of violence and IPV perpetration in all three groups (Archer & Graham-Kevan, 2003) (Figure 2).

Religious beliefs

Religiosity is another factor that has been investigated in relation to IPV victimization and perpetration. The relevance of this factor likely differs widely in different countries depending on the degree of secularization, for example asking Swedish people in general about their attendance to church service and investigating its relationship to IPV has probably not the same relevance as in the U.S.

Religiosity can be defined as “an individual’s beliefs and behavior in relation to the supernatural and/or high-intensity values” (Roof, 1979, cited in Higginbotham, Ketring, Hibbert, Wright, & Guarino, 2007, p. 57). A multinational study of over 13,000 couples in several African countries found that while none of the religious categories (e.g. Muslim, Christian, traditional) was associated with increased risk for IPV, Muslim beliefs protected against IPV (Alio et al., 2011). Religiosity, as measured by attendance at church or religious services (public religiosity) has been associated with less victimization among women in the U.S. (Ellison, Trinitapoli, Anderson, & Johnson, 2007) and less perpetration among both women and men (Ellison & Anderson, 2001). Hence, research seems to indicate that religious beliefs can function as a protective factor against IPV. (Ellison & Anderson, 2001). There are contradictory results, however. One study from the U.S., for example, found that Christianity, measured with indicators of both public religiosity (service attendance, participating in religious rituals) and private religiosity (inner commitment to God, personal prayers, individual scripture study, etc.) found religiosity was associated with a higher risk of IPV perpetration (Higginbotham et al., 2007) (Figure 2).

Microsystem level

Presence of children

Both the presence and number of children have been found to increase the risk for IPV (Stith et al., 2004; Stockl, 2011; The Swedish National Council for Crime Prevention, 2009). One explanation may be that children increase stress and spur conflicts regarding levels of discipline and methods and philosophies of child-rearing.
Violence towards partner

In the meta-analysis by Stith and colleagues, the largest risk factor identified for being physically abused was being violent towards the partner (Stith et al., 2004). Victims who hit their abusers were found to have a greater risk for further victimization in other studies as well (Slep & O’Leary, 2005; Straus, 2008) (Figure 2).

The risk factors for perpetrators (psychopathology and mental health, alcohol abuse, attachment insecurity, and attitudes condoning violence) have been included in the microsystem level of the model employed in this thesis because these risk factors operate in the presumed victim’s immediate environment.

Exosystem level

Socioeconomic hardship

Poverty is a distinctive risk factor for IPV in both the U.S. and non-western countries (Jewkes, 2002). In WHO’s multi-national study, both low education and low income were associated with increased risk for IPV in the preceding year (Abramsky et al., 2011). A German national survey of violence in intimate partner relationships found that when women and their partner were unemployed or did not have any vocational education, the woman had an increased risk of being abused (Stockl, Heise, & Watts, 2011). Another national survey in the U.S. revealed that IPV varied with income and education. Women who not had graduated from high school and those with lower income had a higher prevalence of IPV than women with higher income and graduation from college (Breiding et al., 2008). Similar results were shown in a Spanish study that assessed the relationship between IPV and socio-economic factors. Unemployment and low occupational status were associated with physical and psychological victimization in an intimate relationship (Zorrilla et al., 2010). Finally, a contradictory finding from a meta-analysis of risk factors for female victimization indicated that female employment, income, or education had very little impact on their risk for being abused, and the authors concluded that these risk factors “do not appear to be useful in understanding female victimization” (Stith et al., 2004, p. 87) (Figure 2).

Macrosystem level

Cultural values and beliefs

Risk of intimate partner violence varies between countries. Societies differ in the level and strength of men’s rights to authority in their families and over their female partners. This influences the legal system, the types of violent behaviors that are criminalized or condoned, the ways women’s accusations of violence
against their partners are understood and responded to (Waltermaurer, 2012), and women’s rights to divorce and access to education and economic resources. Societies with more traditional or conservative ideas about the subordinate role of women tend to have higher rates of IPV (Jewkes, 2002). In a cross-national comparison of IPV rates for both men and women in western and non-western countries, the rates of men’s perpetration of physical violence were inversely related to women’s social power and positively associated with social attitudes that approved men’s use of force towards their wives (Archer, 2006). Countries in the western world generally showed lower rates of victimization than nations where women were less empowered (Archer, 2006). Hence, norms of male dominance (patriarchy) promote male violence in intimate relationships toward females. The more egalitarian are the attitudes held by a society, the less likely are those attitudes to overlook or accept violence against women (Flood & Pease, 2009). How strongly a group, culture, or country supports men’s rights to authority in their families and over their female partners can be seen as a meta-factor that influences organizations and communities as well as individuals (Flood & Pease, 2009). Violence in intimate relationships can also vary between regions in the same country, possibly through different levels of its acceptability in local cultures and subcultures (Jewkes, 2002; Marquart, Nannini, Edwards, Stanley, & Wayman, 2007) (Figure 2).
Summary of risk factors

Victimization by IPV likely results from a complex interaction of individual and contextual factors, the relative importance of which varies by situation, person, and time (Harway & O’Neil, 1999). This overview of commonly cited risk factors is not complete and is probably skewed towards psychological explanations. Furthermore, the specific interactions between the respective risk factors of the presumed victim and the perpetrator (interactions between the microsystems) have not been described, although they are illustrated in the figure. For example, insecure attachment may be seen as an ontogenic risk factor, but it also interacts with the partner’s attachment (secure or insecure); when both partners have an insecure attachment their risk for violence likely differs from that a couple in which one partner is secure and the other insecure.

Most studies with large samples investigating different risk factors aim to estimate risk at the group level and take a variable-centered approach. It should be noted that risk factors assessed at the group level do not necessarily explain
or predict violence for any individual woman nor do they indicate whether a woman with several risk factors will be abused. These risk markers only indicate a general risk for IPV, not the risk for a specific incident. Risk factors at the group level can be used to inform policy and to design or improve empirically informed prevention programs. However, to base decisions in individual cases solely upon the presence or absence of general risk factors is to risk overlooking abusers or abused women who do not readily fit overall descriptions of people at risk for perpetrating or suffering IPV. Violence may occur even in the absence of identified risk factors. From a developmental psychopathology perspective, it is important not to overplay the influence of one particular risk factor. It is rather the cumulative weight of several risk factors that have been found important in predicting psychopathology. The heterogeneity of individual responses to risks is also important and is marked by both multifinality (similar histories and experiences may result in different psychological outcomes or problems) and equifinality (similar psychological outcomes or problems may result from different histories and experiences).

How best to use these sometimes contradictory results regarding different risk markers to inform intervention supports for mothers subjected to IPV remains unclear. One step forward may be to investigate whether and how some of these risk factors could influence (moderate or mediate) treatment response in women subjected to IPV. The third section will focus on assessments of outcome research at the individual, not only the group, level.

### Protective factors associated with women’s IPV victimization

Most research on the effects of IPV on children and their mothers has focused on risk- rather than protective factors (Edleson, 2000). In general, protective factors are often seen as individual, family, and/or community qualities that exist prior to the exposure to aversive events, factors that facilitate the individual’s capacity to deal adaptively with adverse experiences (Dutton & Greene, 2010; Luthar, Cicchetti & Becker, 2000). Several personality factors have been identified as protective, among them: hardiness, internal locus of control, trust in others, self-esteem, and sense of humor (Earvolino-Ramirez, 2007). Informal as well as formal/professional social support networks and community characteristics can also promote positive adaptation for individuals exposed to crime victimization, for example by strengthen social support and connectedness, and collective communication about the trauma (Norris & Stevens, 2007).

Closely related to the study of protective factors is resilience (Masten, 2006). Two salient conditions are usually seen as necessary for resilience; (a) a severe
threat to the individual has been or is present, and (b) the individual manages
to adapt to and function in his/her environment (Masten, 2006; Masten, 2007). Resilience has been defined in many ways, as an outcome, a process, or an individual trait. To adapt and function has sometimes been seen as resistance (absence of symptoms or maladaptation), sometimes as recovery after a period of symptoms and malfunctioning. Other times adaptation and functioning following adversity, have been to excel, or to function well in one, or several domains (work, interpersonal relations, education or academic performance, physical health, involvement with criminal justice), or to simply demonstrate normal day-to-day functioning. Moreover, adaptation and functioning have also been measured along external indicators (as in behavior seen by others), or internal indicators such as perceived well-being and happiness (Masten, 2007).

The UN Beijing declaration has recommended economic empowerment for women as a protective factor for violence against women (United Nations, 1995). However, the relationship between higher economic empowerment and decreased risk for IPV does not seem to be straight-forward. In one Iranian study a high level of education in both the woman and her husband and women’s employment were protective factors for IPV occurrence (Abadi, Ghazinour, Nojomi & Richter, 2012). A review of women’s economic empowerment and risk for IPV in low and middle income countries (e.g. India, Bangladesh, Egypt, Turkey, Ukraine, Mexico, Colombia) found that in general higher level of education and access to household assets were protective factors for IPV victimization (Vyas & Watts, 2009). However, high education, especially when the women had a higher education level than her husband, was not protective. To the contrary it increased the risk for IPV. There were mixed findings about employment, probably because of the fact that greater financial status, not only strengthens opportunities to challenge or leave an abusive partner, it may also threaten the status of the partner (Vyas & Watts, 2009). In conclusion, economic empowerment and higher education are not solely protective, rather their possible protective function depends on the cultural norms held about women and women place in a given society. A study including 16 western and non-western nations found that nations characterized by greater gender equality had lower rates of female IPV victimization than nations with gender inequality. Furthermore, relative disapproval of attitudes condoning wife beating and sexist attitudes were also associated with lower victimization rates for women. General levels of violent crime in societies were not associated with either reduced or increased IPV victimization in women (Archer, 2006).

When victimization has occured, factors facilitating adaptation and health among women exposed to trauma and IPV have been investigated. In the trauma field, social support has been identified in several studies as a protective factor or as promoting resilience in the aftermath of trauma (Charuvastra & Clotire, 2008) and for abused women (Canady & Babcock, 2009). Another study pointed
to that it was the perceived quality of social support, which buffered the effects of IPV on physical and mental health in women who had recently given birth (Abadi et al., 2012). In a population-based sample in U.S., higher economic status was found to be a protective factor for moderate and severe PTSD symptoms among women subjected to IPV (Coker, 2005). Social, economic, and personal (knowledge, beliefs, and skills) resources taken together influenced mental health in a Canadian community based sample of women subjected to IPV. The higher the resources, the less were the negative effects of IPV on women’s mental health. Personal, social, and economic resources also mediated the effect between severity of IPV and both physical and mental health outcome. More access to resources had a positive influence on the women’s health (Ford-Gilboe, 2009).

**Documented consequences of IPV victimization**

**Psychological and physical problems**
IPV is an offense that is often repeated and may result in physical injury, psychological trauma, and sometimes even death. In Sweden approximately 17 women are killed each year by a partner or ex-partner (Rying, 2007). The effects of strain and distress on women’s mental and physical health caused by IPV victimization are grave, and there is a large body of research on documented consequences. IPV is associated with anxiety and depression (Golding, 1999), as well as suicidal ideation (Renner & Markward, 2009), and suicide attempts (Devries et al., 2011; Ellsberg et al., 2008). Compromised physical health (e.g. high blood pressure, neck and back pain, gastrointestinal and gynecological problems) are common among victims of IPV (Bonomi, Anderson, Rivara, & Thompson, 2007; Bonomi et al., 2006; Coker et al., 2002; Coker, Smith, Bethea, King, & McKeown, 2000; Ellsberg et al., 2008). A Danish register study reported that women who contacted health service units for injuries or other consequences of IPV had higher rates of visits, more psychological health problems, more somatic complaints, more gynecological problems, and higher abortion rates than women in the general population (Helweg-Larsen, Kjoller, Davidsen, & Rasmussen, 2003). Besides depression, anxiety, and somatic complaints, post-traumatic stress disorder or post-traumatic stress are frequent problems in the aftermath of IPV (Dutton et al., 2006; Johnson, Zlotnick, & Perez, 2008; Jones, Hughes, & Unterstaller, 2001; Lindgren & Renck, 2008; Woods, Hall, Campbell, & Angott, 2008). Often the consequences of IPV victimization are long-lasting and continue years after the abuse has ceased (Ford-Gilboe et al., 2009; Woods et al., 2008).
Head injuries and cognitive functioning
Repeated blows to the head, neck, and face are common in IPV (Sheridan & Nash, 2007), and so are strangulation attempts (Kwako et al., 2011), which risk cause traumatic brain injuries (TBI). One study found that 40% of women subjected to IPV had at least one TBI due to loss of consciousness (Jackson, Philp, Nuttall, & Diller, 2002). A review of neuropsychological consequences in IPV-exposed women found fewer than 10 studies investigating the relationship between IPV and TBI. TBI often results in symptoms including dizziness, headache, irritability, fatigue, depression, and anxiety, all common symptoms reported by women subjected to IPV (Kwako et al., 2011). Neuropsychological functioning seems to be compromised following IPV, but to date only three studies have been found that investigated the relationship between IPV, TBI, and neuropsychological functioning. These studies all indicated reduced functions in verbal memory, learning, and cognitive flexibility in IPV victims with reported TBI (Kwako et al., 2011).

Economy
IPV also incurs economic consequences for women (e.g. costs of medical, psychological, and psychiatric services, lost time from paid work (Ford-Gilboe et al., 2009; Varcoe et al., 2011) and risk for increased unemployment (Kimerling et al., 2009). Current IPV has also been associated with unstable employment (Staggs & Riger, 2005). IPV perpetrators can interfere in numerous ways with their partners’ or ex-partners’ efforts to seek or maintain employment and to stay safe at work. The perpetrator might harass the woman prior to or during her work shift, steal her car keys, destroy work-related documents, or engage in excessive telephoning or emailing, etc. Interviews with women in a domestic violence shelter revealed that more than half of them reported experiences of the perpetrator having obstructed their work or work-related activities (Moe & Bell, 2004). Another study also documented high levels of work-interference abuse in at-risk women (housed or homeless women with histories of child maltreatment and IPV) and over ninety percent of the women who reported work-interference from a former or current partner had also been physically abused (Alexander, 2011). A longitudinal Canadian study of a community sample of women who had left the abusive relationship concluded that the individual economic costs for women subjected to IPV were longstanding and continued years after the abusive relationship ended; one third of these women were on income assistance compared to 4% of women in the general population (Varcoe et al., 2011).
Mothering

Long-term consequences of IPV are especially evident in women who have children with the perpetrator. Breaking up with an abuser is not synonymous with ending the abuse; in fact, violence and abuse can escalate when the relationship ends (Campbell et al., 2002). Having children in common seems to provide an additional arena for continued violence such as threats and controlling behaviors. Children can be used as a way to gain access to and harass the mother (Beeble, Bybee, & Sullivan, 2007) and issues around visitation and custody can be used to threaten the mother in “post-separation” abuse (Jaffe, Crooks, & Poisson, 2003).

When reporting the results of studies concerning mothering in the context of violence, there is a risk of blaming the mothers and holding them accountable for the consequences of IPV. Some researchers argue that the literature is dominated by a model of deficient mothering in the context of IPV. This model of deficiency holds mothers to be determinants of their children’s behavior (Lapierre, 2008), and mothers’ parenting has been shown to be important for at least two reasons. First, post-traumatic stress—a common phenomenon in mothers victimized by IPV—has a negative influence on parenting (Appleyard & Osofsky, 2003; Cohen, Hien, & Batchelder, 2008); second, the mother has an important role in helping children to cope in the aftermath of trauma (AACAP, 1998; Almqvist & Broberg, 2003; Gewirtz, Forgatch, & Wieling, 2008; Schechter et al., 2011). The study by Schechter and associates revealed that the mother’s post-traumatic stress symptoms following IPV were more predictive of pre-school children’s externalizing behavior problems than the children’s exposure to paternal violence (Schechter et al., 2011).

Studies of parenting in mothers subjected to IPV have shown contradictory results. Some studies have pointed to a possible compensatory capacity for some mothers subjected to IPV (Letourneau, Fedick, & Willms, 2007; Levendosky & Graham-Bermann, 2000; Levendosky, Huth-Bocks, Shapiro, & Semel, 2003). A Canadian longitudinal study found that mothers subjected to IPV initially showed less warmth, nurturing, and positive and consistent discipline in their relations with their 2- to 12-year-old children than mothers not subjected to IPV. However, although all mothers increased their positive discipline and reduced their levels of warmth and nurturing as the children got older, mothers subjected to IPV increased their level of consistent parenting more and reduced their levels of warmth and nurturing less than mothers not subjected to IPV (Letourneau et al., 2007).

Other studies have found a compromised quality of parenting in mothers subjected to IPV. One review pointed out that IPV seemed to decrease the parent’s emotional and physical availability (Anderson & Cramer-Benjamin, 1999). Another study found that IPV negatively impact the parents’ mental health and quality of interactions with their child/children (English, Marshall,
Pregnant women subjected to IPV were found to have an increased risk for unbalanced or negative representations of their infants (Theran, Levendosky, Bogat, & Huth-Bocks, 2005), and this in turn might impair these mothers’ ability to respond warmly and sensitively to their infants (Levendosky, Leahy, Bogat, Davidson, & von Eye, 2006). The ability to respond sensitively to the child’s signals and needs can be thought of as a dyadic aspect of caregiving or the attachment caregiving system (Dozier, Grasso, Lindheim, & Lewis, 2007). In situations involving outside threat and danger, however, the triadic aspects of attachment becomes important. The triadic aspect of attachment concerns the caregivers’ ability to protect the child from threat and assault in the surrounding environment (Dozier, et al., 2007). Caregivers can differ in their ability to sustain the dyadic and triadic aspects of attachment. Some caregivers can be very sensitive to their children’s needs in less threatful situations, but unable to protect the child in more dangerous situations or vice versa. To be subjected to IPV from the child’s father possibly constitute a threat to both the dyadic and triadic aspects of attachment.

Other studies have documented increased levels of parental stress (Edleson, 2003) and elevated use of physical aggression towards the children in mothers subjected to IPV (Edleson, 2003; Holden & Ritchie, 1991). Higher self-reported physical and psychological aggression and neglectful discipline practices were found in a cross-sectional study of U.S. mothers victimized by IPV compared to non-abused mothers (Kelleher et al., 2008). In a longitudinal study IPV was associated with increased spanking, which in turn was related to children’s internalizing and externalizing problems later on (Huang, Wang, & Warrener, 2010).

Gewirtz and colleagues examined the short-term effects (three months) of parenting on child self-reported internalizing problems after an episode of severe IPV-exposure. The mother’s observed parenting capacity (use of problem solving strategies, positive involvement, skill encouragement and inept discipline) significantly predicted child recovery from stress. Children with mothers with higher parenting capacity had lower self-rated trauma and depressive symptoms approximately three months after the severe IPV episode after controlled for amount of earlier IPV exposure, prior maltreatment, and presence of perpetrator (Gewirtz, DeGarmo, & Medhanie, 2011). The positive influence on parenting after child exposure to trauma was also evident in another study of post-traumatic stress reactions. Preschool children with post-traumatic stress who had a mothers high in positive discipline (e.g. emotional responsiveness, positive affect, less irritability/anger and depression/withdrawal), showed increased level of activity in the parasympathetic nervous system (often used as an indicator of psychophysiological emotion regulation) compared to children with mothers with less positive discipline practice (Scheeringa, Zeanah, Myers, & Putnam, 2004).

In summary, IPV seems connected to a high risk for reduced parenting
capacity in mothers. Some studies have found IPV to influence parenting capacity directly (Huang, 2010); while others have found that parenting stress is partially mediated by the mother’s mental health (Renner, 2009). IPV clearly risks impairment of the mother’s mental health, and mental health problems can reduce parenting quality and lead to children’s behavior problems. This line of thought is consistent with the “spillover hypothesis” that suggests that conflicts and strain in one family system (e.g. the partner system) impacts functioning in other family systems such as the mother-child system (Erel & Burman, 1993).

**Intervention research in women subjected to IPV**

If there is one consistency in reviews of clinical outcome research related to IPV, sexual assault, and other forms of violence against women, it is that the extant literature is inadequate (Jordan et al., 2010, p. 617). Internationally as well as nationally there has been a call for trials and research to evaluate the efficacy and effectiveness of interventions for IPV (Abel, 2000; Anttila et al., 2006; Wathen & MacMillan, 2003). One of the first reported evaluations of a psychosocial intervention for women subjected to IPV is from the 1980s. In a review of psychosocial interventions from 2000, Abel and colleagues found nine evaluation studies (Abel, 2000) but were unable to draw any firm conclusions regarding the effectiveness of different interventions because of the methodological shortcomings of the studies. Another review of interventions for women subjected to IPV concluded that interventions such as shelter stay or counseling showed moderate at best, but in most cases insufficient, effectiveness (Wathen & MacMillan, 2003). Wathen & Macmillan’s results are consistent with a later review that concluded that many common treatments for mothers subjected to IPV lack long-term effectiveness (Stover, Meadows, & Kaufman, 2009). A more recent systematic review and meta-analysis of advocacy and counseling services for women subjected to IPV concluded that the effects were weak; in general, the services evaluated did not improve depression, anxiety, or psychosocial functioning (Ramsay et al., 2009). However, more specialized therapy interventions for women subjected to IPV, for example cognitive trauma therapy for battered women (CTT-BW) (Kubany, Hill, & Owens, 2003; Kubany et al., 2004) and HOPE (Helping to Overcome PTSD through Empowerment) (Johnson & Zlotnick, 2006, 2009; Johnson, Zlotnick, & Perez, 2011), have had good empirical support. Other treatment approaches with cognitive behavioral therapy has also shown promising results for women subjected to IPV. Studies of cognitive processing therapy, an adaptation of cognitive behavioral therapy for
women subjected to IPV, have found that women with reduced post-traumatic stress and depression levels after treatment had lower levels of IPV revictimization six months after treatment than non-responders (Iverson, Gradus, et al., 2011), and that cognitive processing therapy seems to be a good treatment for IPV survivors (Iverson, Resick, Suvak, Walling, & Taft, 2011). Dialectic behavioral therapy has also been tested in women subjected to IPV, and a 12-week treatment yielded reduced depression, hopelessness, and general psychiatric distress (Iverson, Shenk, & Fruzzetti, 2009).

To conclude this first section, mothers with young children are a particularly vulnerable group disproportionately affected by IPV. Aggression and violence against the mother by her partner or ex-partner puts the mother’s mental health at risk and might impair her parenting capacity. Impairment of the mothers’ mental health and parenting capacity might in turn negatively impact her ability to act as a secure base for her child and to support the child in the recovery process after exposure to IPV. Evidence-based support services for women subjected to IPV are scarce, and general counseling and advocacy services seem to be insufficient for many women subjected to IPV.
Section II
Child exposure to IPV

Being exposed to IPV can be characterized as a form of maltreatment (Gilbert et al., 2009; Holden, 2003). In Sweden, children exposed to IPV have been eligible for state compensation as victims of crime since 2006 (Eriksson, 2010). According to Swedish law, anyone who is a victim of crime can, in principle, claim damages from the perpetrator. Children (under 18 years) can, however, under some conditions, be entitled to criminal injuries compensation from the state even if they have not been the direct object of a crime. The first condition is that the child has seen or heard the crime, and the second is that the crime can be assumed to harm the child’s confidence and trust in a person with whom he or she has a close relationship (Criminal Injuries Law [1978:413]; Section 4a).

The UN Convention on the Rights of the Child (0–18 years) explicitly states that children have rights to protection, provision, and participation (United Nations, 1989). Hence, every child has the right to be protected against physical or psychological violence, abuse, or maltreatment. Both the child’s parents and the society are responsible for taking appropriate actions to ensure that the child is sheltered from violence (articles 19, 20, 34, and 37). The right to provision means that as far as possible the child should be ensured survival and development (article 6.2). Article 12 concerning participation asserts that in issues concerning the child, the child has the right to be heard and to voice an opinion. These articles together assert that a child living in a family in which IPV occurs has the right to be protected from further exposure and the right to services to cope with the effects of exposure to IPV. Furthermore, the child has the right to participate and to express opinions and preferences about services and possible custody and visitation issues following from the parents’ divorce or separation after IPV.

Terminology

Over the last 20 years, several studies have reported children’s experiences of having a caregiver threatened, insulted, and/or battered and the effects of that experience on their well-being and mental health. The terms used to describe this experience have varied. To witness IPV was used earlier, but because the term does not include hearing, being part of, or seeing the aftermath of IPV, this term is not used as often as before. The most appropriate phrase to use instead of witness to capture children’s experiences of IPV has been debated—some prefer the term “exposed to” IPV (Holden, 2003), others “being forced to live with” (Goddard & Bedi, 2010), and still others “experience” (Överlien, 2010) or being “subjected to” violence (Eriksson, 2010). All these terms have different connotations. For example “subjected to” signifies the child as a victim of crime.
and not merely an onlooker, and “being forced to live with” emphasizes the child’s lack of choice in a family where IPV occurs and is argued to hold a child-centered perspective. “Exposed to” violence has been criticized for picturing the child as a passive bystander and not fully capturing the active part children may play in IPV (Goddard & Bedi, 2010); however, exposed to violence will be used hereafter, mainly because it is the most commonly used expression and has been suggested as a suitable term (Holden, 2003). In the research literature, being exposed to IPV, in addition to direct witnessing or overhearing of violence, includes attempts to intervene in episodes of IPV or being told about or confronted with the consequences of IPV (bruises and marks, arrests, arrival of police, broken furniture, etc.); exposure to IPV under Swedish law, however, is primarily understood to mean direct sensory exposure such as seeing or overhearing violence (The Swedish National Council for Crime Prevention, 2006).

Mothers’ versus children’s reports
The vast majority of quantitative research reports on IPV and its impact on children have relied on mothers as informants about children’s functioning and mental health (Överlien, 2010). Not asking children themselves or keeping questions about children’s own experiences of IPV to a minimum may be motivated by recognition of their vulnerability and a wish to protect them from further harm (McWhirter, 2011). Excluding children from expressing their point of view about their experiences and health, however, is problematic. First, in general children should be considered as valid reporters of their own situation and be given the chance to voice their opinions and experiences. Second, the correspondence between child–parent ratings on children’s externalizing and internalizing problems is often weak to moderate (De Los Reyes & Kazdin, 2004; Gresham, Elliott, Cook, Vance, & Kettler, 2010). A meta-analysis showed that ratings of internalizing problems were more discordant between children and parents than ratings of externalizing problems (Achenbach, McConaughy, & Howell, 1987). Third, parents tend to underestimate children’s general exposure to violence as well as their exposure to IPV (Clements, Oxtoby, & Ogle, 2008). About one third of children and mothers disagreed about whether or not the child had actually been exposed to IPV (Hungerford, Ogle, & Clements, 2010). Discrepant parent and child reports of IPV exposure are common, as are reports from only one source of information (primarily the mother). These practices risk inaccurate estimates of child exposure to violence (Clements et al., 2008). In interviews with adolescents, ongoing abuse or IPV was clearly associated with their reports of internalizing symptoms, but reports from mothers and teachers did not show such an association (Sternberg, Lamb, Guterman, & Abbott, 2006).
That result stresses the importance of including children’s own reports of their adjustment and health. Similarly, reports of trauma symptoms are not highly correlated between children and their caregivers. One study compared children’s and caregivers’ ratings of child trauma symptoms and concluded that at times the correlations were “strikingly poor” (Stover, Hahn, Im, & Berkowitz, 2010, p. 164). Moderate concordance between children’s and mothers’ reports of trauma symptoms was found in another study (Lanktree et al., 2008). Caregivers and children likely have different views and experiences, and their reports can be seen as adding supplementary information; together they yield more information than single reports from either party (Lanktree et al., 2008).

Prevalence of child exposure to IPV

Many prevalence studies of IPV exposure include female to male IPV, not only unidirectional male to female IPV; therefore, unless otherwise stated, the studies referred to concern IPV of any kind.

Nearly 11% of Swedish youths (13 to 17 years of age) asked about exposure to any incident of IPV during their upbringing reported such experiences (Annerbäck, Wingren, Svedin, & Gustafsson, 2010), a figure similar to an earlier report among 15- to 16-years-olds in Sweden that revealed exposure rates between 8% and 10% (Gilbert et al., 2009). A somewhat lower figure (6%) was reported in a survey of approximately three thousand 15-year-old pupils in Sweden (Jansson, Jernbro & Långberg, 2011). In Finland, a national survey of pupils 15 years of age reported that lifetime exposure (before age 14) to father-perpetrated IPV was similar to mother-perpetrated IPV. Ten percent of the children had seen one parent slap or whip the other parent, but less than 5% had seen the other parent being battered, hit with a fist, hit with an object, kicked, or threatened with a gun or a knife (Ellonen, Kääriäinen, Salmi, & Sariola, 2008). In the U.S. 9% of adolescents (12 to 17 years) self-reported exposure to severe forms of IPV (e.g. choking, hit with an object, use of weapon) (Zinzow et al., 2009). Twelve percent of children in U.K. under 11 years and 17% of youths 11 to 17 years had been exposed at least once to physical IPV during their childhood (NSPCC, 2012). The rate of parent-reported severe forms of IPV in U.K. was 4% (Meltzer, Doos, Vostanis, Ford, & Goodman, 2009). In a longitudinal study from Canada with over 17,000 children, 9% of the children’s parents reported child exposure to any kind of violence in the family (Onyskiw, 2002).

Several studies have shown that children often are in the same room where the abuse occurs (Almqvist & Broberg, 2004; Edleson, 1999; Holden, 2003). In all, 95% of children in a population-based investigation in U.S. of police-reported IPV saw or heard the violence, while 75% were directly connected to the violence
or took part in it. Children six years or younger were more likely to be physically involved in the violence than older children (Fusco & Fantuzzo, 2009). This contrast with another study which found older children to be more likely to be directly involved in IPV episodes, especially in episodes where knifes or guns where used (Gewirtz, 2008). Another study of a large community-based sample of children exposed to IPV reported that nearly 84% saw or heard the violent event, and slightly over 8% had been injured (assaulted) during the IPV incident (Spilsbury et al., 2007). A similar rate was found in cases of violence in the home (mostly IPV, but also including homicide, and gunfire), in which 75% of the children were direct witnesses to the incident and 15% were also injured during the assault. The majority of those cases involved father-to-mother IPV (Drotar et al., 2003).

Different theoretical perspectives on child exposure to IPV and its presumed impact

Attachment and emotion regulation
Attachment theory holds that the children develop attachments to their caregivers during the first year of life, regardless of the quality of the relationship (Ainsworth, Blehar, Waters, & Wall, 1978). The child–caregiver relationship constitutes the base from which children shape internal working models, which function as blueprints for relationships outside the child–caregiver dyad and shape children's expectations about, and behavior towards, other people (Cassidy & Berlin, 1994).

Attachment figures are supposed to be safe haven in times of alarm and stress. However, if the parent is the source of alarm or fear (as when one parent abuses the other), the child is left to cope alone. Recurrent experiences of situations in which caregivers are the source of alarm or are emotionally unavailable increase the risk for children developing disorganized attachment, the most serious form of attachment insecurity (Hesse & Main, 2006). Young children exposed to IPV have an increased risk for developing an insecure attachment, and the more severe the violence the higher the likelihood for developing disorganized attachment (Zeanah et al., 1999), which is associated with later psychopathology (Bakermans-Kranenburg, Van Ijzendoorn, & Juffer, 2005). Disorganized attachment in infancy tends to increase the risk of children developing PTSD if exposed to later traumatic events (Macdonald et al., 2008).

Regulation of emotions is related to attachment and concerns the ability to control, manage, and modify emotional responses, positive or negative. Regulation can either reduce or heighten the intensity or frequency of an
emotional response and efforts to generate and sustain an emotional response.

Emotion regulation consists of internal and external processes involved in initiating, maintaining, and modulating the occurrence, intensity, and expression of emotions (Sheffield Morris, Silk, Steinberg, Myers, & Robinson, 2007, p. 363).

Thus, emotion regulation refers to both intrinsic (inside oneself) and extrinsic (outside the self) processes. Emotion regulation occurs at both conscious and unconscious (automatic) levels. Intrinsic self-regulatory processes are thought to have a temperamental base and are often referred to as effortful control (i.e. often including the voluntary abilities to shift and focus attention, to inhibit inappropriate behavior, and to execute behaviors despite a strong tendency to avoid them). Individual differences in basic emotion regulation seem to be fairly stable after the first two years of life (Eisenberg, Spinrad, & Eggum, 2010). The basic capacity to regulate emotion, however, is related to many factors other than temperament, including neurophysiology, cognitive development, and environmental factors (Eisenberg et al., 2010; Sheffield Morris et al., 2007). Research on the development of emotion regulation has usually focused on individual factors, rather than social or environmental factors (Sheffield Morris et al., 2007).

The social context, especially the family environment, impacts emotion regulation in what can be seen as an extrinsic process, for example when the child gets help with regulation from caregivers. In infancy and early childhood much of the regulation of emotions is dependent upon the child–caregiver dyad, and the child relies upon help from the parent to avoid distress. The child also learns about the regulation of emotion through observing how parents handle their own emotions and how emotions are socialized in the family (Sheffield Morris et al., 2007). However, when one or both parents are consistently unavailable emotionally or cannot provide support in emotion regulation, the child’s development of efficient regulation skills may be compromised. Emotion regulation, from an attachment perspective, develops from strategies the child uses to maintain attachment proximity (Cassidy & Berlin, 1994). Secure children develop an expectation that their emotion signals will be attended to in a sensitive and predictable way; insecure children, on the other hand, develop expectations that their emotion signals will not be attended to predictably or that only certain emotion signals will be attended to. Consequently, this leads to impairment in communication about emotions, and insecurely attached children are likely to develop less adaptive emotion regulation strategies, such as minimization or exaggeration (Cassidy & Berlin, 1994). IPV might undermine children’s capacity to understand and regulate emotions, in that violence and abuse might overwhelm their self-regulatory systems (Crittenden & Ainsworth,
Continuous exposure to IPV likely interferes with children’s ability to modulate arousal and evoked emotions. Children exposed to IPV are often left to self-soothe after frightening experiences. Since they have little or no power to stop the violence, the ability to regulate their own emotions may be of vital importance. Impaired emotion regulation can impede further social and emotional development (Alink et al., 2009) and is associated with poor mental health (Eisenberg et al., 2010; Nolen-Hoeksema, 2012) and relational aggression (Crick, 1995).

**Trauma and stress**

Exposure to IPV is a potentially traumatic event. The Diagnostic and Statistical manual of Mental Disorders (DMS-IV) defines a traumatic event as:

> involving direct personal experience of an event that involves actual or threatened death or serious injury, or other threat to one’s physical integrity; or witnessing an event that involves death, injury, or a threat to the physical integrity of another person; or learning about unexpected or violent death, serious harm, or threat of death or injury experienced by a family member or other close associate (American Psychiatric Association, 1994, p. 424).

Traumatization occurs when the child’s internal and external resources are overwhelmed. IPV exposure is a complex trauma that differs from single or non-interpersonal traumas in that it most often is a recurrent experience and it involves the child’s primary caretakers. Post-traumatic stress disorder (PTSD) is a set of enduring reactions to a traumatic event, and symptoms include 1) recurrent involuntarily re-experiences (e.g. nightmares; flashbacks), 2) avoidance (e.g. of places, things or memories related to or associated with the traumatic event’, emotional numbing), and/or 3) heightened arousal (e.g. difficulty sleeping or concentrating; hypervigilance).

Threat to the child’s caregiver is a strong predictive factor for developing post-traumatic stress, both in young children (Scheeringa & Zeanah, 2001) and in older children and adolescents (Scheeringa, Wright, Hunt, & Zeanah, 2006). About one fourth of children in women’s shelters have been found to have PTSD (McCloskey & Walker, 2000; Rossman & Ho, 2000), and a review pointed to rates between approximately 13% and 100% for PTSD (Lehmann, 2000). In a community-based sample of children receiving counseling after IPV exposure, nearly 12% had clinical levels of self-rated post-traumatic stress symptoms (Spilsbury et al., 2007). PTSD increases the risk for other mental health problems such as depression, substance abuse, and other anxiety disorders (AACAP, 2010). IPV is often recurrent and continues for years, and repeated exposure to
traumatic events likely leads to chronic stress activation. Three factors have been pointed out as important in how a child responds to a traumatic event and how much harm is caused: (1) the amount and duration of the stress response, (2) how often the stress response has been activated in the child’s past, and (3) the quality of the child’s relationship with the caregivers (Carpenter & Stacks, 2009). Stress activation is adaptive and has a survival function (McEwan, 2007), but prolonged stress activation has deleterious effects. The human body has two primary systems in response to stress, one quick and immediate, and the other slower. The quick system is often referred to as sympathetic activation and it involves the sympathetic-adrenal medulla axis, which releases adrenalin and noradrenaline, increasing energy and mobilizing resources (the “fight or flight response”). The slower pathway is the activation of the hypothalamus-pituitary-adrenal cortex axis (HPA axis) which is responsible for cortisol release. In the short run cortisol also mobilizes energy, but it has detrimental effects when the body is exposed to elevated levels over a longer period of time (Gunnar & Quevedo, 2007; McEwan, 2007).

Early life stress has been associated with behavioral problems (Loman, Gunnar, & Early Experience Stress, 2010), impaired cognitive functioning, and reduced well-being (Cook et al., 2005; Pechtel & Pizzagalli, 2011). One way severe trauma exposure is thought to influence later development is through dysregulation of the stress responses (“allostatic overload”). Chronic stress during early years tends to create vulnerability to later strains and is associated with more mental-health problems (Gunnar & Quevedo, 2007). Frequent stress response activation that results in allostatic overload has severe consequences on body and brain functions (McEwan, 2007; Pechtel & Pizzagalli, 2011). A longitudinal study of school-aged children found children exposed to IPV had lower physiological regulatory capacity than non-exposed children, indicating a greater vulnerability to stress. Four years after the first assessment, the exposed children had a decreased basal vagal tone (Rigterink, Katz, & Hessler, 2010). (Vagal tone is a measure of the function of the parasympathetic nervous system, particularly the vagus nerve, in the neural control of the heart. High activity has been associated with beneficial outcomes in children and low activity has been related to poorer outcomes (Porges, 1992)). Another study also found that children exposed to IPV had major symptoms of PTSD, higher salivary cortisol, and higher resting heart rates than children in clinical comparison group without a history of IPV exposure (Saltzman, Holden, & Holahan, 2005). The result pointed to dysregulation of both the HPA axis and the sympathetic nervous system. However, dysregulation of the stress response does not necessarily cause permanent injury. Children exposed to severe stress who were later cared for by responsible and sensitive foster caregivers had normalized stress-systems in a matter of a few months (Lupien, McEwen, Gunnar, & Heim, 2009).
Social learning
Children who grow up in a family characterized by IPV risk normalizing violent behavior. They may copy their parents’ use of violence and aggression. This copying or modeling of violent behavior is thought to be accompanied by internalized rules or principles that guide the child’s later behaviors in other situations (Bandura, 1973). Children can be directly reinforced or observe others being reinforced in their use of aggression and violence, and the use violence is often reinforced in the children because it is seen to help achieve desired goals (Widom, 1989). The modeling can take many forms, however, and may not be a direct imitation of the violent acts observed. Exposure to physical IPV may be modeled through hostile and punitive behavior in later relationships with peers, if this has been seen in the family as an effective way of getting one’s way and solving conflicts. Dominance, control, and blaming others during conflicts may also be used to solve interpersonal conflicts if this pattern has been a model in the family. Both boys and girls exposed to IPV are likely to engage in bullying in school (Baldry, 2003). The other side of the coin is that children may learn to accept bullying and aggression as legitimate ways to interact with their peers, and children exposed to IPV have also found to have an increased risk for become victims of bullying (Bauer et al., 2006).

Caregivers who parent under stress, such as mothers victimized by IPV, might fail to display warmth, involvement, and empathy, and may be poor role models for appropriate social interactions (Owen, Thompson, & Kaslow, 2006). Many children with experiences of IPV exposure show deficient problem solving and conflict-resolution skills (Graham-Bermann & Levendosky, 2011; Holt, Buckley, & Whelan, 2008; Schwartz, Hage, Bush, & Burns, 2006).

Social information processing
Social information processing theory has been applied to child adjustment. Children’s social cognitions (cognitive tasks involved when engaging in social interactions; encoding, storing, retrieval, and application of knowledge) are an important part in how children act and behave. One precursor of behavior is the interpretation of another person’s intent (Crick & Dodge, 1994). In any interaction there are cues (external as well as internal) and the interpretation and processing of these determine behavior in response to the other. Often used processing styles, adaptive or maladaptive, can become automatic and resemble habits of mind or personality characteristics. Physically aggressive children, for example, often misinterpret ambiguous cues as signaling malevolent intent, and so may feel provoked by others and react aggressively (Crick & Dodge, 1994). This is also true for children with tendencies toward relational aggressiveness, who also tend to attribute hostile intent to others (Crick, Grot彼得, & Bigbee,
2002) and respond by trying to hurt their peers through damaging and manipulating relationships (Kwako et al., 2011). This tendency to perceive hostile intent, hostile attribution is seen by some researchers to provoke an innate human tendency to retaliate when provoked. This bias towards hostile attribution when threatened or provoked, however, is usually counterbalanced in early childhood through socialization and learning to interpret many cues that resemble provocation as the result of benign intent (Dodge, 2006). The child learns that intent is not always demonstrated by outcome when caregivers help the child to identify cues that signal that another child has acted benignly rather than malevolently. For example, when a child riding a tricycle cannot steer away quickly enough and collides with another child, the caregiver can help the struck child interpret the tricycle rider’s actions and behaviors as accidental and not a deliberate attempt to hurt. However, parents can also teach their children to tend toward hostile attribution by the way they themselves interpret and express their interpretation of social situations. For example, a boy may be reinforced in his distrustful or skeptical interpretations of a girl’s behavior by an IPV perpetrating father, who may also explicitly express suspicion about women’s intentions in general.

The cognitive-contextual framework
One step in social information processing is the process of subjective evaluation and interpretation. This process (the cognitive-contextual framework) has been investigated primarily in relation to school-aged children exposed to IPV, but it was originally used to understand children’s reactions to non-violent conflicts between their parents (Grych & Fincham, 1990). The interpretations and meanings children make of episodes of IPV are thought to influence their adaptation in both the short and the long term (Grych, Fincham, Jouriles, & McDonald, 2000). Subjective appraisals are emotionally charged; a perceived threat is accompanied by fear, and perceived responsibility may be accompanied by self-blame and guilt (Fosco, DeBoard, & Grych, 2007). Thus, the subjective meaning children make of the violence between their caregivers shape the impact of IPV exposure on the child’s functioning and mental health. Perceived threat and self-blame for the violent episode seem to mediate the relationship between IPV exposure and the child’s adaptation (Fosco et al., 2007). Some findings also suggest that children’s beliefs in their own ability to effectively cope with IPV episodes influence their later levels of depression and anxiety (Fosco & Grych, 2008). Empirical studies have shown that child appraisals of being the cause of IPV (self-blame), augment behavioral and internalizing problems, and higher levels of threat appraisals elevate internalizing problems (Fosco & Grych, 2008). Appraisals have also been studied among preschool children, and the
amount of violence exposure predicted their level of threat-appraisal, but not of self-blame (Miller, Howell, & Graham-Bermann, 2012). A Canadian study of IPV-exposed children found that appraisals of self-blame did not mediate the relation between exposure to IPV and adjustment (Fortin, Doucet, & Damant, 2011). However, self-blame was related to parentification, the degree to which a child takes on an adult role and responsibility in relation to his/her parents, which in turn mediated adjustment. An earlier study by the same authors also found a mediating role for parentification on child adjustment following IPV, and the higher the level of violence the more the child took on a parental role (Fortin 2005, cited in Fortin et al., 2011).

To summarize, attachment theory, trauma theory, social learning, and information-processing theories are all influential theories in understanding the implications of exposure to IPV, and all strongly suggest that IPV puts the child’s psychological, physiological, and social development at risk.

Documented consequences of child IPV exposure

The consequences of exposure to IPV have been grouped into five major areas: emotions (e.g. mental health concerns, depression), behavior (e.g. externalizing problems), physical or biological functioning, cognitive development, and social adjustment (Adams, 2006). This grouping heuristic will be used in the review of documented consequences.

Meta-analyses: emotions & behavior
Four meta-analytic studies on the association between exposure to IPV and children’s mental health and adjustment (Chan & Yeung, 2009; Evans, Davies, & DiLillo, 2008; Kitzmann, Gaylord, Holt, & Kenny, 2003; Wolfe, Crooks, Lee, McIntyre-Smith, & Jaffe, 2003) included between 37 and 118 studies from as early as 1978 and as late as 2006. The majority of studies report mothers’ ratings of children’s behavior and adjustment. They all found a small to moderate association between exposure to IPV and behavioral problems (externalizing behavior and defiance) and emotional problems (internalizing problems such as anxiety and depression). One of the analyses also found a strong association with symptoms of trauma, but that analysis included only six studies reporting trauma symptoms (Evans et al., 2008).
Physical and psychological problems and use of somatic and psychiatric services
Children exposed to IPV attend both somatic and psychiatric services more often than non-exposed children. In a population-based survey in Sweden, children of mothers abused in the preceding year were more likely to make health care visits than non-exposed children and had an increased risk for asthma and allergy (Olofsson, Lindqvist, Gadin, Braback, & Danielsson, 2011). Health visits and physical symptoms did not differ between genders: daughters of abused mothers, however, had more psychological health problems than sons. No differences were found with regard to age (Olofsson et al., 2011). Preschool children of mothers subjected to physical IPV in New Zealand also had higher levels of health care service use than non-exposed children (Schluter & Paterson, 2009). Reports of physical health problems, particularly asthma and allergies have been found in preschoolers exposed to IPV (Kulhman, Howell & Graham-Bermann, 2012). Another study in the U.S. of preschool children exposed to trauma (including IPV) and with high levels of traumatic stress had higher rates of health-related problems such as asthma, allergy, and gastrointestinal problems than a national representative sample of children. Furthermore, psychiatric service attendance seems to be common in children exposed to IPV, who were three times more likely than children not exposed to receive psychiatric service after the violence had ceased (Rivara et al., 2007). In child psychiatric service units, children exposed to IPV are heavily represented. In Spain 20% of children in psychiatric units in Barcelona had been exposed to IPV (Olaya, Ezpeleta, de la Osa, Granero, & Domenech, 2010). A Swedish pilot study revealed about the same percentage (Hedtjärn, Hultman, & Broberg, 2009), and results from the national evaluation study showed that 23% of children in child psychiatric services had been exposed to IPV (Broberg et al., 2011). A similar level of child exposure to IPV (20%) was reported from a study of chart reviews of children in outpatient psychiatric treatment in the U.S. (Ford, Gagnon, Connor, & Pearson, 2011). In Norway, as many as 39% of children visiting psychiatric units reported being exposed to some type of violence in the family (Ormhaug-Morup, Jensen, Holt, & Egeland, 2012).

Cognitive development and functioning
IPV exposure has been linked to developmental delay and poor academic functioning. A prospective twin study with over 1000 dizygotic and monozygotic preschool twins found that IPV exposure negatively impacted neuropsychological functioning and intelligence. The more severe the violence exposure, the more negative the impact on cognitive functioning. Children exposed to severe IPV had an average IQ score of 8 points lower than non-exposed children on one
of the most used intelligence test for children, the Wechsler-scale (Koenen, Moffitt, Caspi, Taylor, & Purcell, 2003). One explanation put forward by the authors for the negative impact IPV seemed to have on children’s cognitive development is the stress IPV creates and the detrimental effects that prolonged stress can have on brain and body functioning (Koenen et al., 2003). A cross-sectional study compared executive functioning (planning, organization, working memory, sustained attention, and self-monitoring) among children exposed to interpersonal trauma (primarily IPV and sexual abuse) with a group of children with non-interpersonal traumas (traffic accidents and natural disaster) and a non-trauma group. Children exposed to interpersonal traumas performed significantly worse than children in the non-interpersonal trauma and non-trauma group controlling for factors such as anxiety, depression, and socioeconomic status (DePrince, Weinzierl, & Combs, 2009). Children exposed to various levels and kinds of early life stress (including exposure to IPV) have also shown compromised executive functioning (Pechtel & Pizzagalli, 2011; Perkins & Graham-Bermann, 2012). Impaired executive functioning likely impacts daily functioning in school, peer relationships, and control of behavior—difficulties often present in children exposed to IPV. Preschool children exposed to physical IPV have also been shown to have decreased explicit memory performance, but the relationship was weaker when the mother reported more signs of positive parenting (e.g. doing things together, listening, having good conversations) (Jouriles et al., 2008). Impaired verbal skills and abilities were also documented in preschoolers exposed to IPV against their mothers (Huth-Bocks, Levendosky, & Semel, 2001).

Social adjustment
Difficulties with peers, and later with intimate relationships, have been described in the literature on children exposed to IPV (Adams, 2006; Margolin & Gordis, 2000). Children exposed to IPV have been rated by both their mothers and their teachers as more aggressive than non-exposed children (Margolin & Gordis, 2000). Difficulties in developing friendships because of fear of inviting friends home have been reported as well as difficulties in trusting others. Relationship difficulties between IPV-exposed children and their mothers, exhibited in increased child aggressiveness and anger, have also been reported (Adams, 2006; Stanley, Miller, & Foster, 2012).

Lack of trust in others is an important consequence for maltreated children (Cicchetti & Toth, 1995) and children exposed to IPV face an increased risk of becoming involved in a violent dating relationship during adolescence (Glass et al., 2003; Gover et al., 2008). Dating violence, in turn, has a strong relation to poor health outcomes (Glass et al., 2003; Olsen, Parra, & Bennett, 2010). In a
national survey in the U.S. for children 12 to 17 years, revealed that those with experiences of physical teen dating violence all had experienced some other form of victimization, and more than two of three had been exposed to IPV (Hamby, Finkelhor, & Turner, 2012).

In summary, at the group level exposure to IPV is associated with a range of negative effects on children’s development and functioning in school, with peers, and in later dating relationships. Somatic complaints and health-care visits are more common among children exposed to IPV than among non-exposed children. Receiving psychiatric services is also more common, and approximately one fifth of children attending child psychiatric service have been exposed to IPV.

Factors possibly related to the impact and consequences of child IPV exposure

Amount of IPV exposure
Some results support the hypothesis that there is a dose–response relationship between exposure to IPV and adverse impact on children (Wood & Sommers, 2011). Different types and levels of exposure to IPV presumably render different psychological experiences that may have different short- and long-term consequences on children’s functioning and well-being. A meta-analysis found that children who had been exposed to more severe violence exhibited more symptoms than children exposed to less severe forms of violence (Kitzmann et al., 2003). Another study investigated both the amount of violence and the timing of violence exposure (age at first exposure), and the cumulative violence exposure was more predictive of the variation in children’s adjustment (amount of internalizing and externalizing behaviors) than age at first exposure (Graham-Bermann & Perkins, 2010). The frequency and severity of IPV exposure have also been connected to a higher internalizing symptom load (Grych, Wachsmuth-Schlaefer, & Klockow, 2002). Children who had been exposed to severe IPV including the use of knives and guns evinced more behavioral problems than children exposed to less severe forms of IPV that did not include weapons. This association also held after controlling for the frequency of IPV (Jouriles et al., 1998). Moreover, the child’s degree of involvement in violent episodes has been documented to have a positive association with the degree of post-traumatic stress (Jarvis, Gordon, & Novaco, 2005; Lee, 2001). The severity of IPV exposure seemed to affect the development of PTSD symptoms (Margolin & Vickerman, 2007). Having been injured during the IPV incident increased the risk for having clinical levels of trauma symptoms over that of children exposed to IPV but not injured (Spilsbury et al., 2007). However, other studies have not found a typical
dose–response relationship (Bayarri, Ezpeleta, & Granero, 2011; Kilpatrick & Williams, 1998; Wright & Fagan, 2012). When comparing children’s degree of exposure to IPV (witness only, involved in IPV episodes [i.e. intervened or participated in IPV], and victim [i.e. suffered verbal or physical aggression during IPV]), all children, regardless of degree of exposure, were similarly affected in terms of psychopathology and functional impairment according to their mothers’ reports. However, the results from the children themselves tended to show that those who had been victimized during the assault had increased psychopathology (Bayarri, Ezpeleta, Granero, de la Osa, & Domenech, 2011). The study by Kilpatrick and Williams concluded that all forms of IPV exposure had the potential to evoke trauma in the child and did not find the amount of violence exposure to mediate the relationship between exposure and child symptom levels (Kilpatrick & Williams, 1998).

**IPV exposure and gender**

Research on children and psychopathology has shown moderating effects of gender of life stress and child psychopathology in the direction of girls being more likely to respond with internalizing and boys with externalizing problems (Grant et al., 2006). Child gender has also been investigated as a moderator for the impact of IPV exposure and the results have hitherto been inconclusive. A mega-analysis found no gender effects on children’s internalizing or externalizing behavior problems (Sternberg, Baradaran, Abbott, Lamb, & Guterman, 2006), and neither did three meta-analyses (Chan & Yeung, 2009; Kitzmann et al., 2003; Wolfe et al., 2003). The meta-analysis by Evans and colleagues did, however, find that boys developed more externalizing problems than girls (Evans et al., 2008). The pattern that boys exposed to IPV developed more externalizing behavior problems and girls more internalizing problems, was also found in a longitudinal study (Yates, Dodds, Sroufe, & Egeland, 2003). In addition to mega- and meta-analyses a number of different studies have found gender differences (Georgsson, Almqvist, & Broberg, 2011; Sternberg, Lamb, et al., 2006) while others have not. Bayarri and colleagues investigated type of IPV exposure and presence or levels of psychopathology and impairment in Spanish youths. Their conclusion was that all children, irrespective of gender, age, and level of exposure to IPV had about the same amount of risk for developing psychological problems (Bayarri et al., 2011).

**IPV exposure and age**

As with gender, child age moderated the effect of IPV exposure in some studies, but in others no moderation was found. In some studies young children were
found to be more likely than older children to be exposed to IPV (Clements et al., 2008). None of the meta-analyses have found statistically different effects of the impact of IPV exposure by the age of the child (Chan & Yeung, 2009; Evans et al., 2008; Kitzmann et al., 2003; Wolfe et al., 2003). Sternberg and associates’ mega-analysis found age to moderate the effect of IPV exposure on externalizing symptoms but not on internalizing symptoms. The association between IPV exposure and child externalizing problems was weaker in children between 7 and 14 years old than in their younger or older counterparts (Sternberg, Baradaran, et al., 2006).

Most of the included studies in these meta and mega-analyses are cross-sectional and therefore one does not know if the impact differs in the long run depending on age and developmental level when first exposed.

IPV exposure, relation to or contact with the perpetrator, and gender considerations
Few studies have examined whether the gender of the IPV perpetrator impacts girls and boys differently. Some studies, however, do suggest that the child’s gender and relationship to the perpetrator might moderate the relationship between IPV exposure and outcome (Clements et al., 2008; Foster & Brooks-Gunn, 2009). Part of a cohort study in Chicago including 1,500 adolescents aged 12 and 15 years investigated this question. Severe mother-perpetrated IPV was significantly associated with girls’ reported internalizing symptoms (after controlling for child abuse, among other factors); this effect did not hold for boys. IPV perpetrated by the father or both parents and the total amount of IPV exposure, seemed to have a relatively small impact on boys and girls internalizing symptoms (Wright & Fagan, 2012). Another study of adolescent girls and boys with severe conduct and behavioral problems found a strong association between exposure to mother-perpetrated IPV and level of adolescent girls’ aggression towards friends and romantic partners. Boys exposed to mother-perpetrated physical IPV showed elevated rates of aggression toward romantic partners but not towards friends. Amount of father-perpetrated physical IPV was significantly associated with adolescent males’ aggression towards friends (not romantic partners) but unrelated to adolescent females’ aggression toward friends or romantic partners (Moretti, Obsuth, Odgers, & Reebye, 2006).

In a study of the relation between amount of contact with an IPV-perpetrating father and functioning in preschool children (Stover, Van Horn, Turner, Cooper, & Lieberman, 2003), those children who had less frequent contact with their father had higher internalizing symptoms than those who had regular contact; no gender effects were found. Externalizing problems were not affected by frequency of contact with the perpetrating father, but they were by
the severity of the violence (Stover et al., 2003). Another study of children 2 to 18 years old, found that the relationship to the perpetrator (father vs. step-father) did not predict children’s internalizing, externalizing, or trauma symptoms, but experiences of multiple male perpetrators (both father and step-father) yielded higher externalizing and internalizing problems according to mothers’ ratings after controlling for factors such as mothers’ symptoms levels and the extent of traumatic incidents in the child’s life (Israel & Stover, 2009). The authors of that study concluded that it was not only the amount of violence that contributed to children’s symptom levels, but also their multiple experiences of IPV-perpetrating men (Israel & Stover, 2009).

IPV exposure and co-occurrence with other adverse experiences

The overlap between exposure to IPV and other adversities such as child abuse was large in clinical sample but lower in community sample (Appel & Holden, 1998; Herrenkohl, Sousa, Tajima, Herrenkohl, & Moylan, 2008). The overall estimated co-occurrence of child abuse and IPV has been reported as 40% in one study and as varying from 22% to 67% in another (Knickerbocker, Heyman, Smith, Jouriles, & McDonald, 2007). In a Swedish study, 58% of youth exposed to IPV had been slapped on the face or hit by their parents at least once (Annerbäck et al., 2010). Another Swedish survey of 15-year-old pupils found that being exposed to IPV increased the risk for corporal punishment 10-fold (Jansson, Jernbro, & Långberg, 2011). Similarly, co-occurring IPV and parent-to-child aggression was common in a representative community sample of 3- to 7-year-old children. In all, the prevalence of any form of aggression in the family (between partners or parent to child) was 45% and 5% of the families reported both severe IPV and severe parent-to-child aggression (Slep & O’Leary, 2005).

Studies of children exposed to IPV suggest that IPV and child abuse impact their development similarly (Edleson, 1999; Litrownik, Newton, Hunter, English, & Everson, 2003). There are, however, findings suggesting that being exposed both to IPV and to child abuse increases the likelihood for mental health problems in a “double whammy” effect (Herrenkohl et al., 2008; Hughes, Parkinson, & Vargo, 1989). However, in the article that first reported the double whammy effect, it was evident only from the mothers’ reports of children’s behavior problems. According to the children’s own reports of symptoms of depression and anxiety, neither the abused and witnessing group, nor the witnessing-only group differed from comparison children (Hughes et al., 1989). This study result reflects the different findings concerning the possible dual effect of being both exposed to IPV and the victim of child abuse. For example one meta-analysis suggested that there was a tendency to the double whammy effect (Wolfe et al., 2003), but another found no evidence for the hypothesis (Kitzmann et al., 2003). In addition to higher prevalence of child abuse among children
exposed to IPV, there have been reports of higher rates of sexual abuse (Holt et al., 2008), and studies have shown that one such exposure or victimization is often accompanied by others (Dong et al., 2004; Dube, Anda, Felitti, Edwards, & Williamson, 2002).

Particularly troubling is the rate of multiple traumas (polyvictimization) among maltreated children. Different forms of adversity often occur in the family environment. Attachment theory assigns particular importance to three aspects of the caregiver environment: safety, stability and predictability of the caregiver’s behavior, and nurturing or sensitive responses to the child’s needs and signals (Ainsworth et al., 1978). These three aspects of family environment—safety, stability, and nurturing—were investigated in a national sample of 2- to 9-year-old children in a U.S. study of different types of victimization in the family (physical and sexual maltreatment, neglect, emotional maltreatment, IPV, and sibling victimization) (Turner et al., 2012). The study concluded that unsafe environments, instability, and low nurturing often co-occurred and had a cumulative effect on the child’s well-being. Exposure to IPV and sibling victimization were also related to the child’s symptom levels independently of all other forms of maltreatment (Turner et al., 2012).

Furthermore, in another national representative sample from the U.S. life-time exposure to different types of abuse or exposure to violence was assessed among children 2 to 17 years of age. Polyvictimization was defined as having experienced or witnessed several types of abusive events such as IPV, maltreatment, bullying, sexual assault, community violence, etc. The study concluded that polyvictimization was more strongly related to trauma symptoms than exposure to a repeated single type of trauma (Turner, Finkelhor, & Ormrod, 2010). A similar result was found in a two-year longitudinal study (Finkelhor, Ormrod, & Turner, 2007) that implies that a thorough assessment of exposure to different types violence and abuse is necessary in social services, child psychiatry services, and research on children exposed to IPV.

A person-oriented approach to different factors related to different patterns of adjustment in children exposed to IPV

All this body of research on the consequences of IPV exposure is based on groups and possible differences between groups, and results across all children in a group lack information about individual children or clients or different groups of children within the overall group. There are, however, a few studies with a person-centered approach that use cluster analysis. This approach still applies to groups of children, but it provides more differentiated information than analyses performed on one large group. Five cluster analyses on school-aged children have been performed to date, and all have tried to link different factors related to
different patterns of adjustment in children exposed to IPV. The first two studies involved children from women’s shelters (Grych, Jouriles, Swank, McDonald, & Norwood, 2000; Hughes & Luke, 1998) and the other three used community samples of children (Graham-Bermann, Gruber, Howell, & Girz, 2009; Lang & Stover, 2008; Spilsbury et al., 2008). The studies all found a relatively large group of children varying from 20% to 69% who seemed to function well (Hughes, 1998; Grych, 2000; Graham-Bermann, 2000; Spilsbury, 2008; Lang, 2008). Factors associated with children who were well-functioning differed between the studies. One study found children with low symptom levels were characterized by lower amounts of lifetime violence exposure and a less traumatic index event (Spilsbury et al., 2008), another by less severe overall trauma history (Lang & Stover, 2008), and others by having mothers with fewer symptoms of mental health impairment (Graham-Bermann et al., 2009; Lang & Stover, 2008).

Resilience in children exposed to IPV

Resilience (i.e. to bounce back), demonstrated as functioning well or adaptively in one or several domains after exposure to adversity seems to characterize a substantial part of children exposed to IPV. In the before mentioned performed cluster analyses on shelter and community samples, the proportion of children with no symptoms of mental health problems varied from 20% to 69% of the children. In all, a bit more than half (54%) of preschool children exposed to IPV and followed longitudinally, showed a positive developmental trajectory and were classified as showing resilience (Martinez-Torteya, Bogat, von Eye & Levendosky, 2009). Resilience in children was associated with having an easy temperament and nondepressed mothers (Martinez-Torteya et al., 2009). Risk- and protective factors interplay, and protective factors might buffer children from adverse experiences. Some common cited individual protective factors for children in at risk environments are an easy temperament, good intellectual ability, and social competence. Family and community factors that play an important protective function are secure attachments to caregivers and/or contact with other caring adults and living in a safe and supportive neighborhood (Repetti, Taylor & Seeman, 2002; Gewirtz & Edleson, 2007). Indeed, the functioning of children exposed to IPV is suggested to be related to three salient factors: parenting factors, child characteristics, and amount, type, severity and chronicity of IPV exposure (Holden, 1998, cited in Gewirtz & Edleson, 2007).

To summarize, many children exposed to IPV have experienced or witnessed multiple forms of violence and abuse, but a substantial proportion of children exposed to IPV function as well as non-exposed children. The mixed and sometimes contradictory findings of possible mediating or moderating factors
in the relationship between IPV and its impact on child functioning depend on factors related to the methodology of the studies that make it difficult to draw conclusions (Clements et al., 2008). Variations in methodology include different study designs (cross-sectional vs. longitudinal), different outcome measures, different respondents (children, parents, or third sources), different samples (drawn from the community, clinical populations, or women’s shelters) (Clements et al., 2008; Wolfe et al., 2003), and “lack of appropriate operational definitions of violence” (Clements et al., 2008, p. 121). These disparate findings may also point to other important contributing factors relating child exposure to IPV with child outcome and functioning. Other possible factors suggested are the mother’s mental health (Clements et al., 2008; Graham-Bermann, Howell, Lilly, & DeVoe, 2011), children’s individual coping resources (Foster & Brooks-Gunn, 2009), children’s perceived social support (Owen et al., 2008), and the quality of the child–parent relationship (Johnson & Lieberman, 2007).

### Intervention research on children exposed to IPV and their mothers

Research evaluating interventions for children exposed to IPV is sadly lacking:

… there is little adequate research on intervention for children exposed to IPV. The few studies that do exist are beset with design and method problems, for example, poorly defined samples, inappropriate or no comparison groups, and reliance on small samples that reduce confidence in results (Graham-Bermann, Lynch, Banyard, DeVoe, & Halabu, 2007, p. 199).

Internationally, the most common support offered to children exposed to IPV is the support group (McAlister Groves, 1999). Such groups often target children aged between 6 and 15 years, and group work is probably less effective for preschool children or severely traumatized children. Child–parent treatment has been recommended for younger children, and individually tailored treatment for severely traumatized children (McAlister Groves, 1999). Individual treatments for children exposed to IPV have sometimes been adopted from the trauma field (Källström-Cater, 2009; McAlister Groves, 1999). In these cases the treatment aims to stabilize the child’s current life situation, to help the child to integrate the experiences of violence and create a narrative around it, and to work with the child to identify feelings and manage symptoms related to the IPV experiences (Drotar et al., 2003; Källström-Cater, 2009; McAlister Groves, 1999). The Children Who Witness Violence Program (CWWVP) is an individual model
for children 0 to 17 years old who have experienced violence or abuse at home designed to reduce the psychological impact of the traumatic event. Key components include (1) a thorough assessment of child and family needs and an individualized treatment plan for the child and family, (2) safety planning, (3) crisis intervention for the child and parent, (4) family education and skill building, and (5) community support for the family (Drotar et al., 2003).

As stated previously, the most common support for children exposed to IPV is the support group, and there are a broad range of different programs. Many of these programs are developed by clinicians working in the field, and they are used with no or minimal evidence supporting their effectiveness. Whether these programs are effective remains to be seen in Sweden (Eriksson, Biller, & Balkmar, 2006), in the U.K. (Rivett, Howarth, & Harold, 2006), and even for many intervention programs in the U.S. (Groves & Gewirtz, 2006). In Sweden, as of 2011 there were no reported scientific evaluations of treatments for children exposed to IPV (Grip, Almqvist, & Broberg, 2011). Nor has there been a published meta-analysis of interventions tailored to children exposed to IPV. One of the first evaluations of interventions for children exposed to IPV was reported in the 1980s (Jaffe, Wilson, & Wolfe, 1986), but almost 30 years later there are still relatively few evaluations of the effectiveness of programs aimed to minimize the impact of IPV on children (Graham-Bermann, 2000; Graham-Bermann & Hughes, 2003). One review of direct or indirect (via parents) interventions for children exposed to IPV from 1990 to 2010 found 31 studies (Rizo, Macy, Ermentrout, & Johns, 2011). Common intervention goals for the children included education about IPV; promotion of open discussion of the children’s experiences; development of coping, communication, and problem-solving skills; exploration of attitudes about IPV; increased safety and safety planning; and improving trauma symptoms, psychological well-being, self-esteem, and emotion regulation. Group support for children is often accompanied by concurrent group support for mothers or caregivers. Goals for interventions targeting caregivers were often to increase caregivers’ knowledge of the impact of IPV on children; to promote more effective parenting discipline; to reduce parenting stress; to increase self-esteem, psychological well-being, communication and problem-solving skills; and improving the relationship between child and caregiver. The review concluded that the majority of the studies were non-experimental, carried out with few participants (often less than 40), and had no follow-up data collection and high attrition rates (Rizo et al., 2011). This contrasts with an earlier review by Graham-Bermann that identified three exemplary studies with a good design; they were all randomized controlled trials, of theoretically driven manualized therapies including multiple informants and using standardized instruments (Graham-Bermann & Hughes, 2003). Two of these interventions were the “The Kids’ Club” and “Project Support” and these interventions have been further evaluated since 2003 with good results. In a review of evidence-
based treatments for children exposed to IPV, Child–Parent Psychotherapy (CPP) and Trauma-focused Cognitive Behavioral Therapy (TF-CBT) were also found to have good support (Stover et al., 2009). Below a summary is provided for intervention methods with good empirical support tailored to children exposed to IPV.

**The Kids’ Club**
The Kids’ Club is a 10-week manualized group intervention developed in the U.S. for children between 6 and 12 years of age. The program has good empirical support and has been evaluated in several randomized controlled trials (Graham-Bermann, 2000; Graham-Bermann et al., 2007). It is a program for children exposed to IPV, and children do not need to have clinical levels of symptoms to participate. The program is informed by trauma theory and is focused on helping children handle their traumatic experiences and working with children’s attitudes towards violence. The children’s sessions are run in parallel with sessions for their mothers, in recognition of the importance of parents to children’s recovery. Children who received treatment in parallel with a parent had a greater reduction in behavioral problems than children receiving child sessions only (Graham-Bermann et al., 2007). The mothers’ program aims to empower the mothers and focuses on how to parent under stress and gain access to community resources. Every session has a theme and the themes are worked through in a non-directive manner. Overall, the program has been successful in reducing children’s externalizing and internalizing problems. This program has not yet been implemented in Sweden, but a first implementation study is to be carried out in 2012 and 2013 (Gomez-Jansson, Källström Cater & Grip, 2011), and another implementation study is underway in the Netherlands (Oveerbek, Claisen de Schipper, Lamers-Winkelman, & Schuengel, 2012).

**Project Support**
This program is focused on providing support in parenting in the aftermath of IPV to mothers of children aged 4 to 9 years who have been diagnosed with oppositional defiant disorder or conduct disorder. The treatment is individualized for the mother–child dyad and consists mainly of home visits once a week for 90 minutes each. The treatment continues for about eight months and the mean number of session is usually around 20. The treatment has two main aims: (1) to increase the mother’s social support and problem-solving skills and (2) to reduce the child’s oppositional defiant and conduct problems through parent management training. Mothers involved in the program have shown an increased parenting capacity and less psychiatric problems than mothers who
receive conventional treatment. Children whose mothers received project support had a significantly faster decrease in behavioral and oppositional problems than children in the comparison condition, and the decline in problematic behaviors continued even after the intervention (Jouriles et al., 2009; McDonald, Jouriles, & Skopp, 2006).

**Child-Parent Psychotherapy (CPP)**
CPP is grounded in psychodynamics, has a relationship focus, and has been developed for younger children. CPP has been evaluated in five trials and found effective in treating trauma in young children up to 6 years old of age. The treatment is focused on the parent–child relationship and the creation of a safe and nurturing environment for the child in which the child can name and process traumatic experiences. One of the goals for the child and the parent is to create a joint story around the trauma. Each session is about 60 minutes and the treatment lasts on average one year (Lieberman, Van Horn, & Gosh Ippen, 2005; Lieberman, Ippen, & Van Horn, 2006).

**Trauma Focused Behavioral Therapy (TF-CBT)**
Another treatment, not explicitly targeting IPV, is TF-CBT, and so far it is one of the best evidence-based treatments for children with trauma reactions (Silverman et al., 2008). One study of TF-CBT for sexually abused children showed that more than half of the children also had been exposed to IPV (Cohen, Mannarino, Murray, & Igelman, 2006). TF-CBT includes principles from interpersonal and family therapy along with trauma-focused techniques. The treatment starts with the provision of information about trauma and trauma symptoms, and parenting support and guidance is given throughout the treatment to help the parent manage the child’s symptoms. Other treatment components are relaxation training, identifying emotions, desensitization, cognitive processing of the trauma, and creating a story around the traumatic experiences. Children are treated individually first, but then in joint parent-child sessions. The treatment is usually provided over 12 to 16 sessions. TF-CBT has recently been evaluated with children exposed to IPV and the study reported moderately better effects in this population than in those undergoing conventional treatment (Cohen, Mannarino, & Iyengar, 2011). TF-CBT is currently being implemented in a randomized controlled study in Sweden with children exposed to IPV (Broberg & Hultman, 2011). TF-CBT was also tested in 3- to 6-year-old children exposed to various forms of trauma and a waiting-list control group, and post-traumatic stress symptoms were significantly reduced in
the study group compared with the controls (Scheeringa, Weems, Cohen, Amaya-Jackson, & Guthrie, 2011).

A general outline for treatment of complex trauma including exposure to IPV

A general outline for interventions involving children who have experienced complex traumas including IPV has been offered by Cook and associates (Cook et al., 2005). They suggest that interventions tailored to these children include six key components: (1) safety; (2) self-regulation of behavior, emotion, cognition, and physiology; (3) attention to creating narratives, reflecting on the past or present, and making decisions; (4) integration of traumatic memories into meaningful and productive self-narratives; (5) creation of working models of attachment and reparation of relationships; and (6) self-enhancement. The components build on each other in a sequence, but are often carried out concurrently in treatment. Suggested best practices allow flexibility, involve a systemic approach, and include multiple methods of intervention such as individual, family, and group psychotherapy, milieu-based interventions, and parent training. Interventions should both reduce symptoms and build on child and family strengths. Cooperation with other systems such as child protective services and the school system is also suggested (Cook et al., 2005). Other authors have argued for a “trauma-informed” approach for treating traumatized youths. Some key components in a trauma-informed approach are the use of trauma-specific knowledge and screening procedures; integration of evidence-based trauma-focused treatments; creation of a physically and psychologically safe, nurturing, and predictable social environment; help to children in improving relationships with caregivers; treatment of the entire person (exercise, spirituality, hobbies, etc.); interventions tailored to meet the needs of the specific child and family; interventions that are strength-based; and cross-system collaboration among different systems in which the child is involved (Conradi & Wilson, 2010).

Support to IPV exposed children in Sweden

In Sweden, the most common kind of support for children exposed to IPV is individual counseling, although support groups have become more widespread over the last decade. Knowledge about the effectiveness of the methods developed within and outside social services to support children who have been exposed to IPV is limited. In fact, it is almost nonexistent. No scientifically reported evaluations of support for IPV-exposed children were published until 2011
(Grip et al., 2011). Most of the current individual counseling relies on a crisis-intervention model called “The Stairs”, developed by Save The Children in a project run during the years 1996 and 1999 for children exposed to IPV. No program manual is available, but there is a short guiding handbook (Arnell & Ekbom, 2006). Each session in the model lasts about 1 hour, and the number of sessions varies depending on the child, usually from a minimum of three to as high as 10 or more. Contact is made first with the child’s caregiver before the therapist meets with the child. During this session the caregiver is asked about the child’s trauma, trauma reactions, and the caregiver’s perceptions of the child’s worst experiences. This information is intended to be used during the work with the child. The method is designed to be tailored to the individual child and consists of three basic steps: introduction and trust building, reconstruction of the traumatic incident, and psycho-education about trauma and trauma reactions. Drawing together and using pictures are important ways to connect with the child and open the conversation about the trauma. The goal is to help the child to create a narrative around the trauma that enables a coherent understanding and makes the traumatic memories less frightening and intrusive. In the last phase, the child is given information about common reactions after traumatic incidents. There is also work to create an “emergency help card” that the child and therapist would fill in with where and who the child can call in times of trouble. After the treatment sessions with the child, the therapist meets the caregiver again (sometimes with the child attending) to summarize the treatment (Arnell & Ekbom, 2006).

Many of the various group methods in use to support IPV-exposed children have been influenced or inspired by the program for children and adolescents with parents who have drug or alcohol addiction, ”Children Are People Too” (CAP) (Eriksson et al., 2006). CAP groups, composed of about four to eight children in the same age range, take an educational approach, and the 90-minute weekly sessions, called “lessons,” usually run for 10 to 15 weeks. The theme for each lesson is structured beforehand and introduced by a short presentation of information about a specific topic, followed by practical training and play. The themes are: hope, feelings, defenses, IPV, risks and choices, the family, and selfhood and personal integrity, some of which are repeated. Some groups, but not all, have concurrent group support for mothers. Support groups in Sweden for children exposed to IPV, such as the group support at Bojen presented in the summary section for Study I & II, are most commonly inspired by the CAP model.

In conclusion, there is a shortage of reported evaluations in scientific journals regarding services to children exposed to IPV in Sweden and in the other Nordic countries. Explanations for the scant research results might include the challenges connected with conducting evaluation research on community-based support and the vulnerable and unstable life situation faced by many mothers.
and children exposed to IPV. TF-CBT is currently implemented and evaluated in child psychiatric service. However, the vast majority of children exposed to IPV are not served by child psychiatric services, but by social services and community-based units connected to social services. The communities are also responsible for providing support to all children exposed to IPV. The national evaluation of common community-based treatments in Sweden rendered sobering results regarding improvements in children’s mental health and well-being (Broberg et al., 2011). In communities interest continues and initiatives for improving services to IPV-exposed children and their mothers are taken. Existing treatment models have been refined and treatment modules from parent management training programs or from cited evidence-based treatments in this field are sometimes incorporated in locally developed programs. This development is problematic, since the free incorporation of ingredients from successful interventions for other needs is unlikely to take into account those programs’ “deep” and “surface” structures (Sundell & Ferrer-Wreder, In press). Therefore they risk missing important aspects or changing treatment modules too much and making them ineffective. In light of the “free incorporation” of modules from different treatment programs into existing programs and the poor national evaluation results, a national strategy and funding for implementation of evidence-based treatments for children exposed to IPV is clearly needed.
Section III
Evaluation of effects of clinical intervention

How to best measure clinical outcomes is a frequently discussed question. Fundamental questions in the evaluation of therapy or psychosocial intervention outcomes are (1) *Is the treatment effective under optimal and controlled conditions?* (2) *Does the treatment work in ordinary daily practice?* and (3) *Does the treatment in question work for the individual client?*

Evaluations of treatment methods have often been classified as efficacy or effectiveness trials (Fonagy, Target, Cottrell, Phillips, & Kurtz, 2002). In efficacy trials the intervention is controlled and evaluated under the strict experimental conditions typical of randomized controlled studies. Efficacy trials are often carried out within a narrow range of practice settings, and they are often designed for single conditions or groups of closely related conditions. Efficacy studies can answer the first question, “Is the treatment effective under optimal and controlled conditions?” Interventions evaluated in efficacy trials, however, are not always as effective when applied in daily clinical practice. Effectiveness studies, applied in daily practice, are performed in a broader range of routine care settings in clients who may have multiple co-occurring problems and diagnoses. The second question of whether the treatment works in ordinary daily practice is addressed in effectiveness studies. This description of efficacy and effectiveness studies portrays a sharp border between the two types of studies, however, efficacy and effectiveness studies are currently viewed more along a continuum of internal validity and external validity than as opposing types of study (La Greca, Silverman, & Lochman, 2009).

The last question, whether the treatment in question works for the individual client, is not automatically answered by either efficacy or effectiveness studies, or for that matter in other studies with less controlled evaluation designs. There is a paucity of research on the individual client and the individual effects of a given intervention. The majority of evaluations have relied solely on reports of group level statistics, and significance testing in clinical trials has mainly concerned the differences in mean outcome in differently treated groups of clients. To compare differences in mean outcome between groups or within a group does not take individual changes into account (Wise, 2011). Evaluation research reporting outcomes on the individual level in addition to traditional statistical significance testing on group levels is usually called “patient-focused” research (Howard, Moras, Brill, Martinovich, & Lutz, 1996; Lambert & Ogles, 2009; Newnham & Page, 2010). Treatments outcomes may be reported according to three concepts of significance: statistical, practical, and clinical (Conner, 2010; Pintea, 2010).
Statistical significance
Statistical significance testing is carried out to answer questions about outcome impact and whether outcome changes are due to chance or reflect probable systematic effects. The \( p \)-value reflects the probability that findings or differences occurred by chance. Statistical significance testing has been criticized for not providing information about the magnitude of change or whether the change is meaningful (Jacobson & Truax, 1991). Statistically significant results can be of little clinical importance (Lambert & Ogles, 2009; Pintea, 2010; Wise, 2011) and give no information regarding the proportion of individuals who profited from treatment (Jacobson, Roberts, Berns, & McGlinchey, 1999; Wise, 2004). However, it is not uncommon to find confusion between statistical and clinical significance (Beutler & Moleiro, 2001; Hayat, 2010):

> Neither is it unusual to report and discuss nonsignificant findings (\( p < .10 \)) as constituting significant trends, as if proximity to .05 gives them special clinical meaning. In the presence of these tendencies, it is not surprising that the statistical definitions that have been used to identify empirically supported treatments have been widely misrepresented as bestowing clinical significance and utility on these treatments (Beutler & Moleiro, 2001, p. 441).

Practical significance
In attempts to capture the size of the effect and the possible practical benefits of outcomes (statistically significant changes) the field has relied on measures of effect size, sometimes referred to as practical significance (Pintea, 2010). Effect sizes are attempts to capture the size of a statistically significant effect or difference. There are different families of effect size measures, and one author found a total of 40 different measures to estimate the magnitude of effects (Kirk, 2001). A common way of summarizing results in terms of effect size is to express them either as Cohen’s \( d \), a standard unit of change, or as \( r \), similar in interpretation to the correlation coefficient. Other ways to estimate the effect is to make odds or risk calculations. There is no agreement over how to best estimate outcome effects, but there is agreement on the importance of estimating the effect or practical significance of an outcome (Wilkinson & Task Force on Statistical Inference, TFSI, 1999; Shearer-Underhill & Marker, 2010). In psychotherapy research, Cohen’s \( d \) has usually been used to report an estimate of the strength or magnitude of an effect. Rules of thumb for Cohen’s \( d \) interpret the size of an effect as small (\( \geq 0.2 \)), medium (\( \geq 0.5 \)), or large (\( \geq 0.8 \)). An objection to Cohen’s \( d \) is that it shows a comparison; study results are contrasted against something else, but that “something” is generally not specified. Cohen’s \( d \) was originally thought to be useful for planning studies (to estimate power, i.e. the likelihood
of detecting an effect) or when no other comparison could be made (Cohen, 1988, p. 25). To grasp the practical significance of an effect it is recommended to compare the effect with results from similar interventions, groups of people, or outcome measures (Cooper, 2008).

Furthermore, many measures of effect size have been criticized for not being easily comprehensible to people in general or to practicing clinicians (Conner, 2010). Arguments have been put forward for more easily understood measures of effect sizes, and one suggestion is to use the number of clients needed to be treated for one individual to recover (i.e. to no longer fulfill the criteria for the specific disorder or problem (Shearer-Underhill & Marker, 2010). A serious objection to measures of effect size is that the effect size does not convey any information about the clinical significance of the change measured. An effect size usually corresponds to general treatment effects, but it does not necessarily do so. Even trivial results can have large effect sizes (Jacobson et al., 1999; Jacobson & Truax, 1991).

The size of an effect is relatively independent of its clinical significance. For example, if a treatment for obesity results in a mean weight loss of 2lb and if subject in a control group average zero weight loss, the effect size could be quite large if variability within the groups were low. Yet the large effect size would not render the results any less trivial from a clinical standpoint (Jacobson & Truax, 1991, p. 12).

To improve the information and reliability of effect sizes, the use of confidence intervals has been stressed (Cumming & Finch, 2001). However, in clinical outcome studies in psychology, the use of confidence intervals is not common practice despite several recommendations (Finch & Cumming, 2009; Finch, Cumming, & Thomason, 2001). Even with the use of confidence intervals for effect sizes, however, nothing certain is conveyed about the proportion of study participants who improved with the treatment.

Clinical significance
Clinical significance is a concept that tries to capture whether the outcome has any meaningful impact at the individual level (Bauer, 2004). There are numerous definitions of clinical significance. One is that a clinically significant change is a return to normal functioning (Kendall, 1999; Ogles, Lunnen, & Bonesteel, 2001), that is an end-state functioning that falls within the normative range on important measures (Kendall, Marrs-Garcia, Nath, & Sheldrick, 1999, p. 285). Another definition asserts that a clinically significant change is a change that has practical value and makes a genuine difference in the everyday life of the client that is not necessarily reflected in reduced symptom levels or a return to normal
functioning (Kazdin, 1999; 2001). A meaningful improvement with practical value can, for instance, be when a patient hospitalized for depression or attempted suicide can return to everyday life even if the depressive symptoms remain much higher than in the general population or what is considered normative functioning. Yet another way to capture clinically significant change has been to look beyond symptom levels and measure the quality of life and well-being of the client (Gladis, Gosch, Dishuk, & Crits-Christoph, 1999).

Different definitions bring different ways of measuring clinical significance and there is no consensus on which method to use (Atkins, Bedics, McGlinchey, & Beauchaine, 2005; Bauer, Lambert, & Nielsen, 2004; Wise, 2004). One of the more popular, frequently used, and recommended operationalization of clinical significance is the reliable change index (RCI) developed in the 1980s (Jacobson & Truax, 1991; Lambert & Ogles, 2009). RCI is a measure that captures whether the outcome is statistically significant on the individual level (reliable change) as well as whether the change is large enough for the client to reach an end-state of functioning in the non-clinical range (normative comparison). RCI is a measure often used in psychotherapy research (Bauer et al., 2004; Wise, 2004), and it conveys information about the proportion of clients improved, unchanged, or deteriorated after treatment. From the client’s perspective a question of vital importance is, “What is the chance of me getting better?” and for clinicians; “Does my work have any significant impact?” Neither individual clients nor therapists are helped by reports stating the effects of a treatment evaluated only on the group level, since the primary interest of both parties lies in what happens in the individual case. Calculations of RCI require two steps. The first measures whether the individual’s change (pre- to post treatment) is statistically significant and not due to chance or measurement error. The second evaluates the clinical significance of the change. In the second step outcome measures are compared with normative ratings. Individual scores are classified according to whether the pre- and post-treatment scores belong in the “dysfunctional” (clinical) or “functional” (non-clinical) range. From these two steps classifying individual pre- and post-treatment scores, the changes are categorized as different types of outcomes: recovered (a statistically significant change from dysfunctional to functional range); improved (a statistically significant positive change within either the dysfunctional or functional range), worsened (a statistically significant negative change within either the dysfunctional or functional range), deteriorated (a statically significant negative change from the functional to the dysfunctional range), and unchanged (a non-significant individual change remaining either in the functional or dysfunctional range). The clinical significance of treatment outcome on the RCI gives reliable information about the proportion of clients improved or unchanged. Clients classified as improved after treatment have a 95% probability having had a real change in symptom load. Likewise, the probability of wrongly identifying someone as improved or deteriorated is 5%
RCI has been compared to other methods for calculating clinical significance because questions have been raised about regression towards the mean and base rate changes between dysfunctional and functional groups. Several studies have compared different measures with real data sets (Bauer et al., 2004; McGlinchey, Atkins, & Jacobson, 2002) and with simulated data (Atkins et al., 2005). The study by Atkins concluded that overall there were few differences shown in results using the different methods (Atkins et al., 2005). Bauer and colleagues compared RCI with modifications of RCI and with hierarchical linear modeling to measure clinically significant changes. Hierarchical linear modeling (HLM) classified the largest numbers of clients as unchanged and the smallest number as improved compared with the other methods, and it was concluded that HLM did not seem to be especially sensitive to change (Bauer et al., 2004). Recommendations have been made to use the RCI method (Bauer et al., 2004; Lambert & Ogles, 2009).

Some inherent problems with RCI calculations, however, are worth mentioning. First, the RCI criteria for recovery may be too stringent to apply to chronically ill clients. The criteria for recovery when the probability of return to normal functioning is low probably need to be adjusted (Jacobson et al., 1999; Lambert & Ogles, 2009). Similarly, people who enter treatment in the functional range cannot be classified as recovered since that classification in RCI relies on reduction of symptoms from clinical to non-clinical levels. To circumvent this problem, some researchers have tried to create intervals of symptom levels and to measure clinically significant change by the client's movement from one symptom level to another (Seggar, Lambert, & Hansen, 2002). Another strategy used by a Swedish research team with chronic pain patients has been to involve the clients in defining a clinically significant improvement and then applying the RCI method (Åsenlöf, Denison, & Lindberg, 2006). Finally, many frequently used instruments lack normative data, and it hampers RCI calculations if one does not want to use sample-specific data to determine functional and dysfunctional ranges.

In summary, there is a need to look beyond plain testing of statistical significance in evaluating intervention outcomes since such testing of differences of means between groups or within a group does not show how individual clients responded to treatment. Treatments that produce statistically significant changes may be quite different in their impact on the individual level of client functioning. Regardless of study design, however, RCI calculations do provide valuable information for clients, clinicians, and treatment units about how clients fare in treatment. It is argued that patient-focused research has the potential to reduce the gap between research and practice:

. . . whereas evidence of efficacy and effectiveness were encouraged in the past, in the present demonstrable treatment outcome are fast becoming
a necessity . . . recent methodologies that have the potential to bridge the gap between science and practice. These include (but are not limited to) use of clinical significance to assess recovery rates and identify poor responders in therapy . . . (Newnham & Page, 2010, p.128).

Finally, on the topic of clinical significance:

Group mean differences—the sine que non of publishability—are consequently harder to come by. Innovative methods of obtaining more useful information than a mean difference between groups are crucial to moving the field forward. As a clinician, and as an editor, it is intriguing to consider that clinical trial data could be presented in a format more useful to individual treatment planning than that which is typically available (Thompson-Brenner, 2011, p. 215).

Clinical significance in research on IPV interventions

To the best of my knowledge, there is only one intervention targeted to children exposed to IPV in which clinical significance has been calculated using an appropriate method. Using hierarchical linear modeling, the study reported the proportion of children changed from clinical levels of behavioral and internalizing problems to non-clinical levels of problems. In all, there was a 48% reduction of children with clinical levels of behavioral problems at study entry to post assessment and a 79% reduction at the follow-up for children who attended the Kids’ Club concurrent with their mothers attending a separate support group. The reduction rate for internalizing problems for children with a mother concurrently attending a support group was 65% from study entry to post assessment. Interestingly, children in the control group who received no intervention had a 24% reduction in clinical internalizing problems from study entry to post assessment (Graham-Bermann et al., 2007). This result possibly points to spontaneous recovery or the effects of time or development, which further stresses the need to include some form of control group in further evaluations. Only one study evaluating any IPV intervention calculated the clinical significance of the findings using the RCI. That study compared cognitive behavioral therapy with psychodynamic therapy for batterers. However, it only used the first step in the calculation of the reliable change index, i.e. whether the individual changes were significant or not (Lawson, 2010).

The review by Rizo and colleagues pointed to the limited number of evaluation studies concerning children exposed to IPV (Rizo et al., 2011). The evaluation research on programs for children exposed to IPV are, as stated earlier, are high attrition, lack of follow-up data, small sample sizes, and no comparison conditions, making it impossible to draw conclusions about the effects of the interventions (Rizo et al., 2011).
Overall summary

Mothers with young children constitute a particularly vulnerable group that is disproportionately afflicted by IPV. Numerous risk factors for women’s IPV victimization have been examined, but the research has often come up with contradictory findings. There seem to be no single causative factor for IPV victimization. Instead, presumably, the accumulation of different risk factors contributes to an increased risk for IPV victimization. Based on the review of commonly investigated risk factors for women’s IPV victimization, I conclude that a complementary focus on both protective factors and factors promoting resilience are warranted to improve understanding of mothers’ IPV victimization.

Being subjected to IPV puts a mother’s mental health at risk and might impair their parenting capacity. In turn, the toll on the mother’s mental health and parenting capacity might negatively affect her role as a secure base for her child, thus impinging on her support of the child in the recovery process in the aftermath of IPV exposure. The mother’s mental health seems to be one of the most important factors in determining the child’s outcome after traumatic events. There is a lack of evidence-based interventions specifically targeting women subjected to IPV, but there are a few individual therapeutic interventions with good empirical support, such as cognitive behavioral therapy for battered women, cognitive processing therapy, and HOPE. The most commonly provided supports, counseling and advocacy services, seem to be insufficient for many women subjected to IPV. In addition, most evaluations of support for women and mothers subjected to IPV have been carried out in North America. Hence, their applicability and the transportability of their results to other cultures are uncertain.

Exposure to IPV is a risk factor for a child’s emotional, psychological, physiological, and social development. Attachment, trauma, social learning, and information processing theories are some of the influential theories that outline the implications of exposure to IPV on child development. Secure attachment is a protective factor, associated with overall positive developmental outcomes in different domains. The capacity to regulate emotions (influenced both by inherited temperament and social learning), is associated with mental health and well-being in children, and can be of vital importance since many children might be left alone to self-soothe during episodes of IPV.

At the group level, exposure to IPV is associated with a range of negative effects on child development and functioning in school, with peers, and later with romantic partners, and many children exposed to IPV have experienced multiple exposures to and experiences of abuse in the family. A substantial minority of children exposed to IPV, however, function as well as non-exposed children. Most studies in the field have focused on pathological reactions following IPV.
and not on children’s overall subjective well-being. It remains unclear how different types of exposure to IPV (exposure only, involvement, or victimization) impact children. Several studies have failed to find any significant differences between exposure only and exposure with victimization, thus it seems that all types of IPV exposure, regardless of degree, might compromise child health. Studies have also revealed that the degree of IPV exposure and the effect of that exposure on the child’s mental health will be rated differently by the child and the mother. Another factor rarely studied is whether the child’s contact with the perpetrator is related to symptom levels or effects of treatment.

Treatment providers are confronted with the fact that children’s responses in the aftermath of IPV exposure are very different. Thus, they require correspondingly differentiated and integrated responses. There are a broad range of programs targeted to children exposed to IPV, mainly in the form of support groups. Unfortunately, many of these programs are used with no or minimal evidence to support their effectiveness. Evaluations in the field have typically lacked standardized instruments and long-term follow-up, and they have been plagued by high rates of attrition. There are, however, a few evidence-based programs, such as The Kids’ Club, Project Support, trauma-focused behavioral therapy, and child parent psychotherapy, all of which were developed in the U.S. Whether they are effective in other cultures remains to be tested.

There has been an apparent absence of focus on the individual client in intervention outcome studies. Evaluations that tap the clinical significance of intervention findings, in addition to traditional statistical and practical significance reported on the group level, are needed to better grasp the effects of the interventions provided. Treatments that produce statistically significant changes may be quite different in their impact on the level of client functioning. Regardless of study design, however, the calculation of clinical significance provides valuable information about how clients fare in treatment—for clients, clinicians, and treatment units.
Section IV
The empirical studies

The objectives of the thesis
Client-focused research is lacking in the evaluation of interventions for children exposed to IPV and their mothers, which might thus constitute a different angle of approach. Hence, the primary aim of the three evaluation studies was to measure the clinical significance of the service provided. A related aim was to explore possible factors related to outcome effects.

The majority of studies and intervention evaluations in the area of IPV rely on mothers’ reports rather than on data from the exposed children. Thus another overall aim was to give voice to IPV-exposed children, to relate their perceived health and impairment, and to measure the impact of the support services. The majority of studies with children exposed to IPV have primarily focused on pathogenic reactions and there are only a handful of reports of children’s quality of life and general health. Children’s perceived quality of life and its possible associated factors were therefore another area of interest in the thesis.

Studies I & II

Background and material
In 2004 a report revealed that a large number of children residing with their mothers in women’s shelters in the city of Gothenburg showed symptoms of psychiatric problems (Almqvist & Broberg, 2004). In response to the report, the Bojen (“Lifebuoy”) treatment unit (www.bojengoteborg.se) was formed in 2004. Bojen started as a project financed by the County Administrative Board of Västra Götaland and the city of Gothenburg. A prerequisite from the funders was that the service provided be evaluated. Hence, from the beginning an important feature was the embedded research and evaluation partnership between the unit and Professor Anders Broberg of Gothenburg University and Professor Kjerstin Almqvist of Karlstad University.

Bojen is now run as a foundation with support from the city of Gothenburg. The service targets children and adolescents exposed to IPV and their mothers, and it is free of charge for residents of the municipality of Gothenburg. Bojen primarily provides group support to children and mothers, but individual support can also be provided. The support group program builds on “Children Are People Too” (Hawthorne, 1990), a group treatment program from Minnesota U.S. for children of parents with alcohol and/or drug addiction. The program has been revised for IPV, for example, IPV is not treated as a disease in the Bojen program as is alcohol and drug abuse in the Minnesota program. To be included,
the child’s mother must have left the perpetrator. The program is defined by its developers as a “psycho-educational program with therapeutic effects,” and it embraces the following definition of violence:

Violence is any act directed against another person, where this act either harms, hurts or offends in a way that makes the person do something against his/her will or stop doing something that he/she would like to do (Isdal, 2002).

The mothers’ support program
The mothers’ support group, which runs in parallel to the children’s, includes six to eight mothers and is led by two experienced social workers. The program consists of 15 weekly 90-minute sessions. Each session’s work focuses on a specific theme. One session provides information about IPV, common reactions and symptoms following IPV victimization, and how IPV can impact the self and family. Another session encourages the women to open up and talk about their own history and experiences of IPV, their child’s functioning, and their parenting practice. The program ends with a shared celebration with the children (Table 2).
Table 2. The mothers’ support program at Bojen.

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<td>15. <strong>Family gathering and celebration</strong></td>
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The children’s support program
Six to eight children in the same age range meet with two social workers for 15 weekly 90-minute sessions, with a joint session with their mothers in the middle of the program and the shared celebration with their mothers at the end. A theme is presented at each session in the format of a short lesson, and practice and activities follow. The first seven themes are repeated and elaborated in the next five sessions. The overall focus of the program is on giving the children information about IPV and helping them to identify and express feelings, share experiences, and relieve possible feelings of guilt and shame (Table 3).
Table 3. The children’s support program at Bojen.

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Procedure of Studies I & II
During 2004 and 2007, mothers who contacted Bojen were invited to participate in the research project and given verbal information about the study by the unit staff. If the mothers agreed to take part in the study, an interview was scheduled with the research team. Inclusion criteria were 1) the mother had experienced IPV and wanted help for her child and herself, 2) she was not living with the perpetrator, and 3) she did not have an ongoing drug or alcohol abuse.

The group support was evaluated in an open study, without a control group, using a repeated measures design. In all, three rounds of assessment and interviews took place, at study entry (pretest), after the support program (post-test), and at follow-up one year later (follow-up). Mothers were given different self-reported measures as well as one measure about their child’s functioning. Semi-structured interviews were all tape-recorded and transcribed verbatim. The interviews concerned the mother’s current life situation, what type of violence she had been subjected to, and any physical injuries. The mother was also asked about her child’s functioning at home and with peers, the amount of exposure the child had had to IPV, and any symptoms she had seen in the child of post-traumatic stress. All interviews were carried out by social workers, a licensed psychologist, or master’s degree students in psychology. Children 7 years or older were also interviewed and self-reported on different symptoms. Results from the interviews and the self-ratings of the children are reported elsewhere (Georgsson, 2010).

No payment or other compensation was given for participation. The study was approved by the Regional Ethics Committee in Gothenburg (Dnr 292-05).

Study I
Aims and Methods
The aim was to evaluate the statistical, practical, and clinical significance of the Bojen group program for mothers. The mothers self-reported on their mental health (Brief Symptom Inventory, BSI), trauma symptoms (Impact of Event Scale, IES), sense of coherence (SOC), and perceived parental locus of control (PLOC). After finishing the program, the mothers also rated their satisfaction with it. Intent to treat (ITT) analyses were conducted to estimate the effects of the program on women who completed it.

Participants
In all, 42 mothers participated in the pretest and received group support. The mothers’ age averaged 39 years and the mean length of the violent relationship was seven years and ranged from less than one year to 20 years. All mothers
had a minimum of eleven years of education and 40% had at least one year of university. A substantial proportion of the mothers were unemployed (24%) or on prolonged sick-leave (>6 months) (11%). A fifth of the mothers were involved in custody or visitation disputes with the perpetrator and 44% had had their former partner prosecuted for assault and battery. The mothers had been subjected to a considerable amount of violence. A majority (78%) of them had stayed at a women’s shelter at least once and almost all had sought other kinds of help or treatment before contact with the treatment unit. More than half of the mothers had been subjected to violence 25 times or more, and 10% had had a fracture after a fight, 14% a broken tooth, and 26% suffered permanent injuries including miscarriage, slipped disc, and whiplash.

Results and Discussion
The mothers had a substantial level of mental health symptoms at study entry and their symptom load resembled a group of psychiatric outpatients, with 80% of the mothers scoring in the clinical range. Their trauma symptoms ranked close to the clinical cut-off score at the beginning of the group support, indicating possible PTSD, and almost half had trauma symptoms in the clinical range. Their sense of coherence was lower than that of Swedish women in the general population, as was their perceived ability to control and have an impact on their child’s behavior and conduct.

Following the program, significant improvements were found in the mothers’ mental health, trauma symptoms, and sense of coherence, but none in perceived parental locus of control. The effects, however, were all in the small to medium range. Calculations of clinically significant change painted a more complex picture. Many mothers with severe mental health problems, trauma symptoms, or a low sense of coherence or parental locus of control were unchanged following the intervention and did not reach non-clinical symptom levels. The proportion of mothers classified as improved and recovered from pretest to post-test was lowest for perceived parental locus of control (n = 1, 6%) and highest for trauma symptoms (n = 3, 33%) and mental health symptoms (n = 4, 25%) and sense of coherence (n = 1, 11%) in between. No mother was classified as being worsened in mental health, trauma symptoms, or sense of coherence; however, few mothers perceived a lower parental locus of control after the intervention than at the beginning. All mothers were very satisfied with the support group and the group leaders.

Based on mean differences for the group as a whole, mothers participating in the support group significantly reduced their level of mental health problems and trauma symptoms and increased their sense of coherence. On an individual level, however, the results painted a more complex picture. A substantial proportion of the mothers experienced decreased levels of distress after participating, but
far from the majority of mothers were classified as improved and recovered or as improved. The disadvantage of presenting treatment outcome data at only the group level is apparent. Higher rates of improved and recovered or improved mothers are desirable, not least to increase the attraction of the program and to persuade mothers suffering from the consequences of IPV to do the hard work of treatment. Higher rates of improvement are also important for policy makers in public health. Categorizing the sample into a functional and a dysfunctional group may be considered artificial, since mental health and functioning exist on a continuum rather than as distinct categories. On the other hand, when adequate norms or comparison groups for clinical and non-clinical populations exist, it seems feasible to use such a classification. Still, as a consumer of a supportive service, the participant would probably like to know whether the treatment she is about to start can be expected to make an impact and help return her to psychological health and functioning in the normal range.

The mothers reported high satisfaction with the intervention they received. However, satisfaction and symptom improvement are not necessarily synonymous. In fact, treatment satisfaction has been shown to be poorly related to symptom change (Garland, 2007). This indicates that satisfaction may tap into something unique in the experience of the individual who receives treatment; if satisfaction and symptom change were highly similar, there would be no need to examine both.

One important goal of treatment for mothers subjected to IPV is to help them cope with their victimization and recover. In this process of recovery, effective parenting is an important target. The mothers in this study did not improve their perceived parental locus of control. The majority of mothers rated themselves low on parental locus of control on entering and on finishing treatment, indicating a high sense of helplessness and many experiences of being unable to manage their children. Helplessness and abdication in the parental role in turn seems to be a marker for higher risk of disorganized attachment in the child. This raises questions about parenting and the attachment relationship between child and mother in the aftermath of IPV that are cause for further investigation.

Study II

Aims and Methods
The main focus was to investigate mothers’ perceived effects on their children’s behavioral problems; daily functioning at home, in school, and with friends; and prosocial behavior following a 15-week support group program. A further aim was to explore whether the mothers’ level of trauma and the children’s exposure to IPV at the start of treatment influenced the perceived effects of the group
support, and whether change in trauma symptoms in the mothers was associated with perceived changes in children’s behavioral problems.

The mothers rated their children’s behavioral problems on the SDQ-P (Strength and Difficulties Questionnaire) before intervention, after intervention, and at the one-year follow-up. The trauma symptoms of the mothers were assessed on the Impact of Event Scale (IES). Completer and last-observation-carried-forward (LOCF) analyses were performed. Clinical significance was calculated using the RCI.

Participants
Forty-six children (25 girls and 21 boys) aged 5 to 14 years (average 9 years) and their 34 mothers were included. The mean age for children’s first exposure to IPV was 3 years. The children’s mothers had lived in a violent relationship for an average of seven years. In 87% of the cases the IPV perpetrator was the child’s biological father. Half of the children (52.5%) either lived regularly with their father or had regular contact with him (at least every second week). The mothers claimed that all the children had been at home when the abuse took place at least once, and the majority had been in the same room when the abuse occurred. Nearly 70% of children had also been subjected to some kind of psychological, physical, or sexual abuse from the perpetrator according to their mothers. Furthermore, the mothers reported that a substantial proportion of the children (39%) hit their mother during disagreements or conflicts, and nearly 31% hit their mother at least two to three times a month.

Results and Discussion
The children evinced high levels of behavioral problems (SDQ-P) at the start of the group support, and about half of them had behavioral problems in the clinical range. Nearly 40% of the mothers stated that their children’s behavioral problems had a clear negative influence on the child’s daily functioning at home, in school, with peers, and/or in their spare time. The children’s prosocial behavior did not differ from Swedish children in general according to their mothers reports.

Both the completer and the LOCF analyses showed a perceived reduction in children’s behavioral problems and in the impact of those problems on their daily functioning from pre- to post assessment, but not from pre-assessment to the one-year follow-up. The magnitude of the effect from pre- to post assessment was in the medium range for behavioral problems and the confidence interval for effect size did not include zero. A small effect was found for the impact of behavioral problems on the children’s daily functioning, but the confidence interval for effect size included zero. No change was found in the children’s prosocial behavior. In terms of clinical significance, no children were rated as being worsened or deteriorated from pre-assessment to post assessment. The
majority of the children were, however, rated as unchanged following treatment, and of those children rated as having behavioral problem in the clinical range at the start of treatment, only two reached non-clinical levels of behavioral problems (improved and recovered) at the post assessment and three were improved but still had clinical levels of behavioral problems. When looking at factors possibly related to change in children’s symptom level, there was no association between the mothers’ rating of their own change in trauma symptoms and their rated changes of their children’s behavioral problems. The mother’s ratings of their trauma symptom load at study entry were however, associated with change in children’s behavioral problems. Children who had mothers with high trauma symptoms improved more than children with mothers’ low in trauma symptoms. It could be that

To our knowledge this was the first Swedish scientific report on child outcome following a support group for children exposed to IPV. The mothers perceived a significant drop in child behavioral problems and a decreased impairment of child problems on daily functioning. After treatment the mean score for behavioral problems as well as the degree of impairment were below the clinical cut-off scores. Overall the group support seemed to have some positive effects but unfortunately, the changes were not sustained at the one-year follow up. Less than one fifth of children who scored in the clinical range at study entry showed significant improvements on the individual level. However, no children were rated as having increased behavioral problems and in light of this, the program under study did fairly well since reported deterioration rates for youth’s have been between 14% and 24%.

Surprisingly, the children were rated by their mothers as having good prosocial capacity. From an attachment point of view, a concern could be raised since several of the items in the prosocial scale concerned the child’s behavior also toward adults. High levels of prosocial behavior in a risk group of children could be a sign of role reversal (i.e. compulsive caregiving). The result is also seemingly contradicting with the finding that 30% of the children regularly hit their mother during arguments or conflicts (at least 2 to 3 times a month). It also runs contrary to what could be expected seeing that reported problems with peers are rather common following exposure to IPV.

In summary, the findings from the study stress the importance of providing differentiated support to children exposed to IPV. About half of the current sample had a clinical symptom picture indicating the need for specialized psychiatric/psychotherapeutic treatment. Furthermore, the results point to the need to implement existing evidence-based programs like Trauma Focused Cognitive Behavioral Therapy (TF-CBT) and The Kids’ Club.
Studies III & IV

Background and material
The Swedish Government’s “Action plan for combating men’s violence against women, violence and oppression in the name of honor and violence in same-sex relationships” (Government offices of Sweden, 2007) included a commission to evaluate existing interventions for children exposed to IPV. In order to take on the commission a multidisciplinary research group was formed, including three different disciplines; psychology, social work and sociology and four universities: the universities of Karlstad, Örebro, Uppsala and Gothenburg. The project group consisted of five senior researchers, one project coordinator, one research assistant and three PhD students.

Procedure studies III & IV
The evaluation project was conducted between August 2008 and March 2011. In all, eight units aimed at working with children exposed to IPV were included. The research group selected the eight units to participate in the evaluation based on a report of national mapping of units working with children exposed to IPV against their mother from her partner (Eriksson et al., 2006). All eight were “promising”, financially-stable, and personnel-stable units which provided group support (five units) or individual support (three units) specifically directed at children who had been exposed to IPV against their mother from her partner (Figure 3). The comparison alternatives were child and adolescent outpatient psychiatry (psychiatric support ); women’s shelters, which protect and support primarily women, but often also children; and the social services, including the individual and family services, responsible for protection and support of children in general (social support), and family law primarily responsible for assessment (comparison group) (Figure 3).
The study used a quasi-experimental design with mothers and children from the family law unit as a comparison group. There were three exclusion criteria: 1) more than three years had passed since the mother was subjected to IPV, 2) the mother and her child were not able to conduct the interview and self-ratings in Swedish or English, and 3) the child was younger than 3 years of age or older than 13 years of age. The chosen age range (3 to 13 years) was motivated by the thought that children 3 years of age can form conscious memories of episodes of IPV, and children 13 or younger not having started to initiate own intimate relationships.

Screening for IPV was conducted in the family law, mental health and social service units by the unit staff using the Partner for Violence Screening. In the other units no screening was necessary because contact with those units implied experiences of IPV. Mothers in contact with the units were verbally informed about the research project and also given written information. If the mother was interested to take part in the research project she approved to let the unit staff give her contact information to the research group. The research group then contacted the mother and gave additional verbal and written information. If the mother accepted to take part in the research, a meeting was scheduled. The mother was then interviewed (60 to 120 minutes) with a semi-structured interview about her past relationships, current life situation, and her children. She also filled in self-report questionnaires about herself and her child/children. If the mother had a child between 9 to 13 years of age, she was also asked if she would agree to let the child be interviewed and self-report on his/her mental health and functioning. If the mother consented to let the child take part in the research and the child also assented, a second meeting was arranged to interview the child (30 to 60 minutes). In cases of joint custody, the father of the child had to give his consent for child participation. The mother was always asked if she would let us contact the child’s father and was shown the pre-written information to be sent to the father. The study was approved by the Regional Ethics committee in Gothenburg (Dnr 565-08). No compensation was given for participating.
Mothers’ (and children’s) interviews and ratings were obtained before or in proximity to the start of support (pretest), after six months (posttest) and after one year from the study entry (follow-up). In total, 219 mothers and their 315 children aged 3 to 13 years old took part in the research (Broberg et al., 2011).

Study III

Aims and Methods
This study addressed the effects of support given to children exposed to IPV using children’s (9 to 13 years of age) self-reports and their mothers as informants. The aims were 1) to describe the children’s mental health at study entry and relate their symptoms to their (a) contact with the IPV perpetrator and (b) amount of exposure to IPV (c) personal experience of violence from the IPV perpetrator and (d) mothers’ mental health. 2) (a) Investigate whether children’s behavioral problems, post-traumatic stress symptoms and general psychological problems changed following intervention, and (b) report the proportion of children identified as improved, worsened, or unchanged after intervention. Finally, 3) Test whether (a) the amount of contact with the perpetrator, (b) the amount of exposure to IPV, (c) personal experience of violence from the IPV perpetrator (d) mothers’ reported changes of her mental health, and (e) the number of treatment sessions attended were related to child outcome after intervention.

Children’s amount of IPV exposure and involvement in IPV episodes were measured at study entry (Child Exposure to Domestic Violence, CEDV). Children’s reported psychological and physical victimization from the father or step-father were measured with 12 questions constructed for the research project (Violence Directed at the Child, VDC). Mothers’ physical and psychological violence victimization were assessed with (the Revised Conflict Tactics Scales, CTS2) at study entry and at the one-year follow-up. The two assessments of violence victimization by the mother were combined to classify the recency and type of violence exposure (abbreviated CTS2-combined). The answers were coded as (0) the mother had never been subjected to physical but to psychological violence, (1) physical violence ended more than one year prior to study entry, (2) physical violence during the year of study entry, (3) psychological, but not physical, violence between study entry and follow-up and (4) physical violence between study entry and follow-up. To calculate the extent to which the child was exposed to IPV, mothers were also asked for 20 of the 39 victimization questions of CTS2 at study entry, to report if the child ever had been exposed to the violent tactics directed at her. A total score of the child-exposure was created by summing the answers yes (1) and no (0) (range 0-20), abbreviated CTS2-mother about child.
The mothers rated their own mental health (Symptom checklist-90, SLC-90) and the child’s behavioral problems (Strength and difficulties Questionnaire, SDQ-P), on all three assessments. Children self-reported on symptoms of post-traumatic stress and general psychological problems (Trauma Symptom Checklist for Children, TSCC-A) at study entry and at the one-year follow-up. Completer analyses and multiple imputations were used for analyses of effects. Associations between variables were analyzed with Pearson product moment correlations.

Participants
Self-reports from 62 children (34 girls and 28 boys) 9 to 13 years old (M = 11 years) and their 53 mothers were included. A majority (93%) of the children were born in Sweden. The father of the child was the assailant of the mother for 69% of the children and about one fourth (26 %) had regular contact (at least every second week) with the perpetrator. The mean age of the mothers was 38 years and they had lived in a violent relationship averaging 9 years, varying from less than a year to 25 years. Only one mother had an ongoing relationship with the perpetrator at study entry. The majority of the mothers had 12 years of education or more. The socio-economic position of the mothers was low compared to Swedish women in general, in part due to many mothers being on prolonged sick-leave ( > 6 months).

Results and Discussion
Total amount of psychological and physical violence from the father or stepfather (VDC) was associated with symptom level at the start of the intervention. Children who reported being victimized by more psychological and physical violence had higher symptom levels of post-traumatic stress and general psychological problems. Having regular contact with the perpetrator, mothers’ mental health or mothers’ reported amount of child exposure to IPV, were not related to child symptom load at study entry.

At study entry the children had elevated behavioral problems according to the mothers’ ratings on SDQ-P. In all, 47.5% of the children were rated as having clinical levels of problems. Following treatment children both in the completer and multiple imputations sample evidenced a significant reduction in the total difficulties score on SDQ-P. The effect size was small from pre- to post assessment and in the medium range for pre assessment to the one-year follow-up and the confidence interval for this effect size did not span over zero. One child was rated as improved and recovered and one as improved dysfunctional. Four children were improved functional but the majority of children were unchanged (n = 26, 78%).

The mothers rated their own mental health (SCL-90) as poor at study entry and no significant improvement was found in the completer or the multiple
imputations sample.

Significant reductions in children’s ratings of post-traumatic stress (TSCC-A) and general psychological problems (TSCC-A) were found for the completer and the multiple imputations sample. The effect size for symptoms of post-traumatic stress was in the medium range, the confidence interval did not cover zero and the effect size for general psychological problems was small and the confidence interval spanned over zero. Following treatment most children were unchanged with regard to post-traumatic stress (n = 25, 75%) and general psychological problems (n = 24, 72%).

The only variable associated with positive changes in behavioral problems (SDQ-P) was the mothers rated improvement in her own mental health (SCL-90). This implies that improved mental health in mothers is important for positive changes in child behavioral symptoms, and point to the necessity to target interventions concurrently to mothers and children.

Children’s self-rated IPV exposure (CEDV) at study entry was associated positively with change in general psychological problems (TSCC-A). No associations were found between number of treatment sessions, regular contact with the perpetrator, child exposure to IPV (CTS2-mother about child) or recency and type of mothers’ rated victimization (CTS2-combined) and change in behavioral problems, post-traumatic stress symptoms or general psychological problems.

As a group children showed a positive development regarding levels of post-traumatic stress symptoms and general psychological problems at the one-year follow-up. The mothers also perceived a reduction in children’s behavioral problems. However, the clinical significance of the findings was rather sobering. Importantly, few children rated themselves as being worse off one year after entering the support intervention, and so did their mothers. In general, the children’s and mothers’ reported symptom levels were not highly correlated, stressing the importance of including both children and mothers as informants.

**Study IV**

**Aims and Methods**

The last study concerned the children’s quality of life and recurrent health complaints at study entry. There were two main aims of the study. The first was to examine the distribution of quality of life, recurrent health complaints, perceived attachment security, negative emotionality, and emotion regulation among children exposed to IPV. The second aim was to examine (controlling for socioeconomic status) whether quality of life and recurrent health complaints were associated with (a) amount of exposure to IPV reported by the child and the
mother, (b) perceived security of attachment to mother and father, (c) negative emotionality, and (d) capacity for emotion regulation.

The children’s quality of life was measured with Kidscreen-10, recurrent health complaints with the Health Behavior in School-aged Children symptom checklist, and attachment security with the Security Scale. The children’s ratings of negative emotionality were assessed with three items based on the parental version of The Emotion Questionnaire, and emotion regulation with some of the questions from the instrument Emotion Regulation. Child exposure to IPV was captured using the CEDV, and the mothers’ victimization and her report of her child’s exposure to IPV with the Revised Conflict Tactics Scales (CTS2).

Participants
The sample in this study was the sample in study III with the addition of three children from the family law unit. All together 65 children were included in the study. The children averaged almost 11 years in age (range 9 to 13 years). The numbers of girls and boys were even, and most of the children were born in Sweden. According to the mothers reports, children had lived with IPV for varying times, ranging from less than one year to their whole lives. The children’s mothers had lived in an abusive relationship for an average of nine years, ranging from less than one year to 25 years. The majority of the mothers had at least 12 years of education, but their socio-economic position was lower than that of Swedish women in the general population with similar education levels, in part due to their high rate of prolonged sick-leave (22%). According to the mothers’ reports, the perpetrators had an average of 12 years of education. Half of the perpetrators were employed or studying, one fourth were unemployed and slightly more than one tenth were on prolonged sick-leave, and almost one fifth were reported to be in a category named “other” (e.g. in jail or on probation).

Results and Discussion
Almost one fourth of the children stated that the perpetrator had “sometimes” to “often” stopped their mother from sleeping or eating, one fifth that they had sometimes or often seen the perpetrator hurt a pet in the home. A total of 67% of the children had sometimes to often seen the perpetrator hurt their mothers physically, and one fourth of the children reported that the perpetrator had sometimes to often threatened their mother with a weapon.

Mothers’ reports of amount of child exposure revealed that about 44% of the children had sometimes seen the mother being hit, 46% had witnessed her being thrown against a wall, 37% kicked, 25% choked, 40% beaten up and being hit with an object, and 88% had seen the mother being cursed or humiliated.

Compared with a Swedish sample of 11-year-old children in the general population, the study group had a lower quality of life and 42% (n = 27) fell
at least 1.5 SD below the mean in the comparison sample. The children in the sample demonstrated significantly more recurrent health complaints than a Swedish sample of children in the same age range. In all, 34% (n = 22) had frequently occurring complaints such as head-ache, stomach-ache, and difficulty sleeping, and scored more than 1.5 SD above the mean in the comparison sample. Compared with Swedish children in general, the children in the study had lower ratings of attachment security to both their fathers and their mothers. When a cut-off score was used to categorize the sample into secure and insecure groups, 76% were securely attached to their mother and 27% to their father. In all, 20% (n = 13) reported perceived secure attachment to both parents, 17% (n = 11) insecure attachment to both parents, and 49% (n = 32) insecure-secure attachment to their parents. Of the 32 insecure-secure attachment pairings, 30 children rated themselves as secure with their mothers and insecure with their fathers. Nine children (14%) did not have ratings for both parents.

Children rated their capacity to regulate emotions of fear, sadness, and anger as well as a Swedish comparison sample. No comparison was possible for negative emotionality because we lacked comparison data. The correlation between children’s ratings of emotion regulation and emotionality was non-significant.

Factors associated with quality of life
All variables but child-rated exposure to violence explained a significant proportion of variance in quality of life, accounting for 52% of the variance. Higher socio-economic status, attachment security to both mother and father, higher capacity for emotion regulation, and having lower negative emotionality all predicted higher quality of life.

Factors associated with recurrent health complaints
Amount of child-rated exposure to violence and negative emotionality accounted for 30% of the variance in recurrent health complaints. Higher amounts of exposure to violence and higher negative emotionality contributed to explaining the variance in recurrent health complaints. Socio-economic position, attachment, and emotion regulation did not significantly explain variance in recurrent health complaints.

The results of this study showed great variability in the self-rated quality of life and recurrent health complaints of children exposed to IPV. Many children seemed to cope successfully and rebound from violent experiences. Approximately half of the children had no recurrent health complaints and rated their quality of life within the normal range. However, a relatively large group perceived their quality of life as impaired, and approximately one third had recurrent health complaints. As a group they also scored lower on quality of life and had more recurrent health complaints such as stomach-ache, back-ache, difficulty sleeping,
and feeling low than other Swedish children in the same age-range.

These results show the beneficial influence of attachment security on children’s rated quality of life. The association between greater attachment security and higher quality of life suggest that some parents could partly repair the damage caused by IPV. The possibility of repair is an important factor in the development of a secure relationship. In studies of the impact of exposure to IPV and in treatment outcome studies, the relationship to the perpetrating father could be the missing link. The father could affect the impact and outcome of IPV exposure on the child through repairing the overall child-father relationship. Other important factors to take into account in further studies as well as in treatment are individual characteristics such as emotion regulation and negative emotionality.
Section IV
General Discussion

The outcome of psychosocial treatments or psychotherapy can be evaluated either for the entire group under study or for each client individually. Contrary to methodological recommendations (Lambert & Ogles, 2009), reporting the clinical significance of outcomes at the individual level is not common practice. Some have argued that this may be because analyses of individual outcomes often appear less positive than analyses of group outcomes (Hiller, Schindler, & Lambert, 2012):

The consequence of using clinical significance methods softens our claims for the effects of psychotherapy and makes it clear that a portion of patients who undergo treatment do not respond to the degree that might be hoped for and that a small group of patients (…) actually worsen (Lambert & Ogles, 2009, p. 494).

The relatively large proportion of unchanged clients from the three evaluation studies (Studies I, II, & III), raise a question about the effectiveness of the services provided. At the group level of analysis the outcomes following support services were generally positive. However, when interpreting the results according to their clinical significance, the effects of the interventions seem more uncertain. Using clinical significance is likely even more important with less controlled study designs, since individual changes will be the same regardless of whether a control group is used, and therefore can give valuable information about the effects of the treatment. Evaluations using clinical significance when reporting outcomes, both in randomized controlled trials or in routine care with various therapies for different disorders, have generally showed that more than 50% of clients can be expected to be improved and recovered if they receive good treatment (Lambert & Ogles, 2009). Compared with those results, the effects shown in Studies I, II, and III are rather disheartening. On the other hand, the number of worsened and deteriorated clients is smaller or non-existent for several of the measures used than suggested by findings that rates of deterioration are usually higher. Among adult clients, the rate of deterioration has repeatedly been shown to lie between 5% and 10%, whether the treatment is given in routine practice or in clinical trials (Whipple & Lamb, 2011). For children and adolescents, the proportion of clients who deteriorate is reportedly even higher (Warren, Nelson, Mondragon, Baldwin, & Burlingame, 2010). In the field of psychotherapy and routine mental health care, extensive research has been conducted on how to predict non-responders to treatment and how to support treatment providers to detect non-responders and improve work with individual clients. Research results have showed that early positive response to treatment seems to be predictive of the overall success of the intervention in that client
To improve the outcomes of mental health treatments, trials have been conducted that monitor and report treatment responses to the therapist to guide ongoing treatment. This approach of continual monitoring and feedback seems to improve client’s outcome (Lambert & Shimokawa, 2011; Shimokawa, Lambert, & Smart, 2010; Whipple & Lamb, 2011). Monitoring treatment response during the intervention, however, raises the issue of evidence-based practice. A patient-focused approach does not take for granted that specific treatments (whether evidence-based or not) are certain to have positive effects. In the guidelines of the American Psychological Association (American Psychological Association (APA, 2006, p. 276-277) evidence-based practices include repeatedly evaluating the clients’ development during treatment, in addition to a balanced blend of the use of an evidence-based method, the treatment provider’s own expert knowledge and experiences, and the client’s preferences.

In times of increasing pressure on mental health agencies and treatment providers to be accountable for their services, straightforward information about the proportions of clients improved following treatment could be essential. Hence, outcome evaluation should ideally be incorporated in ongoing treatment work to support the effectiveness of the programs used and to improve services. However, there is a huge gap between current Swedish practice and what is suggested by the latest findings on psychotherapy and psychosocial treatment outcomes. Recommending the routine monitoring of clients’ responses and continual evaluation of services—a radically different way of working—is likely doomed to fail. Instead, steps need to be taken in the direction of a patient-focused approach, as will be discussed with suggestions for practice and research at the end of this section.

Closely related to outcome effects are client satisfaction ratings. Satisfaction has been used as a measure of treatment effectiveness and quality assurance (Edlund, Young, Kung, Sherbourne, & Wells, 2003), although satisfaction with treatment does not automatically imply symptom reduction. In fact, satisfaction ratings have been rather poorly related to symptom changes (Garland, Haine, & Boxmeyer, 2007; Kaplan, Busner, Chibnall, & Kang, 2001; Lunnen, Ogles, & Pappas, 2008) and do not seem to be a good “proxy for clinical treatment outcomes” (Turchik, Karpenko, Ogles, Demireva, & Probst, 2010, p. 286). Hence, satisfaction with treatment taps into one unique aspect of the client’s overall experience of the support. The mothers’ satisfaction with the treatment at Bojen (Study I) was very high, even though many mothers did not have a clinical significant reduction in mental health symptoms, increased sense of coherence, and/or increased confidence in their parenting capacity following treatment. Even among the children in Study III there was great content with treatment (Broberg et al., 2011). What children and mothers think of the service and whether they perceive their treatment providers to be respectful are important. The opinions
of mothers subjected to IPV may be even more important to elicit than those of other groups of clients, since their discontent with the support provided to them has been reported (Hamilton & Coates, 1993). Another reason to pay extra attention to how mothers subjected to IPV perceive the quality of their own treatment is that it is related to their continuation of treatment, and this in turn is related to their children continuing in concurrent treatment (Peled & Edleson, 1998). One general weakness of the studies including satisfaction ratings (both at Bojen and in the national evaluation project) was that they did not use psychometrically tested instruments, and this can often result in skewed data with limited variance. Thus, the translation and testing of a satisfaction instrument is very much needed in Sweden.

Another important conclusion to draw from the treatment project at Bojen (Study I & II) and the national evaluation study (Study III & IV) is the need for screening procedures in treatment units serving IPV-exposed children. Screening for symptoms of trauma is particularly warranted. A recent report of preschool children exposed to IPV found that more than a third also had been exposed to other types of trauma and that multiple traumas was associated with higher symptom load (Graham-Bermann, Castor, Miller & Howell, 2012). Children in contact with the units were heterogeneous in their symptom levels and experiences of IPV. About 40% percent of the children in the national evaluation project had self-rated trauma symptoms in the clinical range, suggesting possible PTSD (Study III). Mothers at Bojen reported high post-traumatic stress symptoms in both themselves and their children (Study I & II). About two thirds of the children at Bojen had self-rated trauma symptoms indicating possible PTSD (Georgsson, 2010). Guidelines for assessing trauma symptoms and treating PTSD in children and adolescents recommend that trauma symptoms be assessed and evaluated as soon as possible, since early detection of PTSD is important to its treatment (AACAP, 2010). Post-traumatic stress symptoms do not seem to dissipate over time or with treatment non-specific to trauma. Therefore, because some results show that post-traumatic symptoms can worsen with treatment non-specific to trauma (AACAP, 2010; Scheeringa, Zeah, Myers, & Putnam, 2005), when a child has PTSD, trauma-specific treatment should be given before any other intervention (AACAP, 2010). There is good empirical support for treatments of PTSD in children. In a review of evidence-based trauma treatments, TF-CBT had the best empirical support, but other treatments with good support were child cognitive behavioral treatment or family cognitive behavioral treatment, followed by treatments that are probably effective, such as school-based group cognitive behavioral therapy, to possibly effective treatments such as eye movement desensitization and reprocessing (EMDR), or child-parent psychotherapy (CPP) (Silverman et al., 2008). Group support can be provided children exposed to IPV after they have received trauma treatment. A support group can possibly help children to feel less alone, provide them an opportunity
to share experiences with other children, reduce their potential shame and self-blame, and improve their safety planning skills and understanding violence in intimate relationships. For mothers with high loads of trauma symptoms and PTSD, a trauma-specific treatment is also the treatment of choice, in combination with anti-depressive medication, if needed (SBU, 2005).

The lack of improvement in parenting capacity following the group support at Bojen (Study I), may be because before the mothers can work on their parenting skills, they first need to have a manageable load of trauma symptoms. Another possibility is that the self-rated parenting instrument was not sensitive to changes. The non-significant findings for parenting capacity are consistent with the reported effects of the Kids’ Club empowering program for mothers, which did not improve the mothers’ self-reported parenting skills either (Graham-Bermann et al., 2011).

IPV is a complex and sensitive social issue, and further intervention research in Sweden (and elsewhere) is clearly needed since the treatments provided in everyday practice in Sweden are supported by only minimal evidence of their effectiveness. The outcome results from Studies I, II, & III provide a foundation on which future research can strive to build and improve. The evaluation studies (Studies I, II & III), in the context of research on interventions for children and their mothers who have been victims or witnesses of IPV, clearly have several methodological challenges. Many of these have previously been identified by other researchers, e.g. small samples and lack of controls (Graham-Bermann, 2000; Graham-Bermann & Hughes, 2003; Rizo et al., 2011; Stover et al., 2009). Some of the methodological challenges in Studies I, II, and III concern measurement and internal validity issues. Particularly troubling is the high attrition over time and insufficient systematic tracking of the reasons participants withdraw from the studies. Another concern relates to the simultaneous evaluation of different treatment methods, which all differed somewhat in content, number of sessions, and delivery format. In addition, not all instruments were normed, and some were modified or created by the research team. Reliance on inadequate measurement instruments renders research data that is unclear and difficult to compare across studies. Furthermore, there is the question of whether or not the measures used were able to capture some of the outcomes intended by the group support. For example we did not have any attitudinal measure—although many treatment programs strive to change attitudes toward the use of violence. On the other hand, subtle changes in attitudes toward violence, relationships, and sex-role expectations may not be measured easily by self-report measures. Furthermore, many of the treatment units’ programs have general aims to reduce self-blame and the burden of IPV as a family secret and to increase self-esteem, and several of these general aims were not measured. Which outcome measures would have been the most appropriate to use is debatable. This leaves open the possibility that the treatments evaluated might have had effects
on factors we did not capture with the outcome measures chosen. We also lacked an outcome measure of parent capacity in the national evaluation study—a major limitation, since many of the children’s mothers received treatment aimed toward them specifically as mothers. It would also have been interesting to compare the results of the national evaluation study with the results from Bojen, which had a parenting outcome measure but did not show any changes in perceived parenting.

More broadly, in research into interventions for IPV in children and their mothers, more research is needed that clearly examines who does and who does not respond to treatment, and addressed whether treatments works differently in certain clients due to differences in such factors that may be moderators of treatment such as amount of exposure to violence, attachment status, emotion regulation, ethnicity, gender, and temperament. Other challenges for intervention research are to identify which factors are most likely to lead to change (mediators of treatment) and to reveal how those changes come about. Identification of moderators and mediators of change have been conducted for one study sample who received the Kids’ Club intervention (Graham-Bermann et al., 2011). The reduction in the mothers’ post-traumatic stress symptoms mediated the change in children’s internalizing behavior problems. This result further stresses the importance of effective and early treatment of the mothers’ symptoms of trauma. Identifying mediators of treatments for IPV-exposed children in group or individual support could increase understanding of what needs to be changed, which in turn could provide practitioners with valuable information and give flexibility in adapting treatments to variations in children’s and their mothers’ problems and conditions (La Greca et al., 2009). Much of the treatment research has hitherto been restricted to evaluating different treatments, while ignoring whether any evidence exists to support the proposed theoretical underpinnings of the different treatment’s techniques or programs. This is common in studies of many other psychosocial or psychological interventions as well. In fact, it has been stated that: “… with isolated exceptions, we do not know why or how therapies achieve therapeutic change” (Kazdin, 2009, p. 418). Research about mediators of treatment and mechanisms of change can improve theory, and if mediators are found consistently in studies (across various studies, samples, and conditions) inferences can be made about mediators of treatment. For researchers to understand mediators of treatment change it may be necessary to incorporate multiple repeated measures of the treatment outcomes:

Assessment on session-by-session basis (i.e., every occasion over the course of treatment) permits evaluation of the mediator of change and symptom reduction and considers individual differences in the course of these changes (Kazdin, 2009, p. 424).

An almost identical recommendation has also been expressed by other researchers
(La Greca et al., 2009). This goes hand in hand with a patient-focused evaluation, which recommends tracking individual changes during the treatment process, and the investigation of mediators of treatment change strengthens the argument for continual tracking of treatment changes. However, the investigation of mediators needs a theory to guide the research to possible mediators (La Greca et al., 2009). A problem of the support program at Bojen and the treatments evaluated in the national evaluation study is their general lack of a clear connection to any theory of change on which these programs and treatment techniques are based.

According to their self-reports (Study III & IV), children vary great in their amounts of exposure to IPV, as did the children’s mothers. It was not the case that children with higher exposure to violence had higher levels of trauma symptoms or general psychological problems at the start of treatment. The lack of a clear dose-response relationship between amount of violence exposure and symptom levels is counterintuitive. Trauma theory would suggest that intensity of exposure to potentially traumatic events lead to a higher probability of trauma reactions and negative impacts on mental health. On the other hand, the association of severity of trauma (measured on objective criteria) with risk for PTSD has been shown to vary widely in a meta-analytic study of risk factors for the development of PTSD in children and adolescents (Trickey, Siddaway, Meiser-Stedman, Serpell, & Field, 2012). The lack of association between children’s self-reported amount of IPV exposure and their trauma reactions and general psychological problems could be related to the intensity of the violence and the child’s lifetime exposure to IPV. A finer measure of IPV exposure, including the timing and duration, time, frequency, and severity of the incidents could probably have better captured differences in violence exposure, but several other studies were also unable to find a consistent relationship between the amount of exposure to violence and symptom levels (Bayarri et al., 2011; Bayarri et al., 2011; Kilpatrick & Williams, 1998; Wright & Fagan, 2012). In fact, in these studies any exposure to IPV, regardless of amount, was associated with mental health problems. In the ongoing randomized evaluation of TF-CBT in Gothenburg, Sweden, all but one of the first 19 randomized children had elevated levels of trauma symptoms. This result further indicates that exposure to IPV is associated with high levels of trauma symptoms (Broberg & Hultman, 2011).

Children’s self-rated amount of violence exposure was associated with greater change in general psychological problems following the intervention (Study III). The result is similar to the result of another study which also found that greater exposure to violence was associated with greater treatment effects (Graham-Bermann et al., 2011). It could be that children with higher exposure to violence felt greater relief during treatment than children with less exposure, and that explained their better improvement. Furthermore, the correlation between the children’s and the mothers’ ratings of the child’s exposure to violence was small.
The mothers’ ratings of the children’s exposure to IPV were not significantly related to either the child- or the mother-rated symptom load at study entry, nor to the effects of treatment (Study III & IV). This stresses the need, whenever possible, avoid relying solely on the mother’s reports of the child’s exposure to violence. Some studies have found that children’s reports of their exposure to IPV contain information relevant to understanding their adjustment that is not available in direct parental reports of the child’s exposure to IPV (Bayarri et al., 2011; Hungerford et al., 2010; Litrownik et al., 2003). In Study IV, child-rated exposure to violence was associated with recurrent health complaints, but mother-rated child exposure was not. Higher self-ratings of exposure of IPV by the child furthermore were associated with both recurrent health complaints and higher negative emotionality.

Children exposed to IPV have been shown to struggle with contradictory images of their violent fathers (Källström Cater, 2007). About one fourth of the children in Study III and slightly more than half of the children in Study II had continued contact with the perpetrator of IPV, either as alternating living arrangements or regular visitations. The number of children who were reported to have continued contact with the perpetrator also underscores the importance of monitoring the child-father relationship. The few studies at hand concerning IPV-perpetrating fathers have shown that they often use punitive and harsh methods of child-discipline (Fox & Benson, 2004). Interviews with IPV exposed children in women shelters have pointed to a general lack of perceived care and in general the children described their fathers as lazy and manipulative (Cater & Forssell, 2012). Indeed, many children reported being victimized at the hand of the perpetrator, and the amount of psychological and physical victimization was associated with higher symptoms of post-traumatic stress and general psychological problems in children at study entry (Study III), while the child’s amount of contact with the perpetrator was not. A study among a large sample of convicted IPV perpetrators revealed that the majority maintained some kind of parental role and had continued contact with their children even after being arrested (Salisbury, Henning, & Holdford, 2009). Many of them did not believe that exposure to IPV negatively impacted their child. Those who did, were generally better educated, older, and had been involved in a long-term relationship with the victim (Salisbury et al., 2009). The children’s relationship to the perpetrator (often the biological father of the child) (Study II & III), is largely an overlooked area. The fathers’ parenting is likely important in understanding children’s adjustment following IPV (Hungerford, Wait, Fritz, & Clements, 2012). Some IPV-perpetrating fathers might be willing to work on their role as fathers (Perel & Peled, 2008). A promising intervention targeting perpetrating men as fathers, the Canadian Caring Dads program (Scott & Crooks, 2006), was implemented in a study in Rinkeby-Kista, Sweden (Stranz, 2012). A major finding from this implementation study was, however, the large group number
of IPV-perpetrating fathers who did not want to participate or who dropped out of the treatment program, suggesting that many of them were not interested in working on improving their role as responsible fathers. For those fathers who do want to improve their parenting and take responsibility for their violence, specific support in repairing or strengthening the child-father relationship could perhaps be offered after other group or individual treatments. That is, the safety of the child and the mother must not be put at risk and the treatment should be on the terms of both the child and the mother. To my knowledge, no study has been published on work with former IPV-perpetrating fathers and their exposed children.

IPV exposure occurs within an attachment relationship and often begins early in the child’s life. The average age of first exposure to IPV was 3 years (Study II). Studies of attachment in IPV-exposed children are rare; we found no other published study on attachment in middle childhood among children exposed to IPV. Study IV revealed that self-reported attachment security to both the mother and the father was lower in the study group than in Swedish children in general. When a cut-off score was used to classify the children into secure and insecure groups, about three fourths were classified as secure in relation to their mother and about one fourth in relation to their father. Particularly striking is the low perceived attachment security to the father. Importantly, attachment security to the father was not significantly related to the child being victimized by the perpetrator or to the amount of violence exposure, and these correlations were non-significant both for fathers and step-fathers as perpetrators (Study IV). A secure attachment has been suggested to be a generally protective factor and possibly to impact how children adapt after exposure to IPV. Indeed, higher attachment security to both parents was related to higher perceived quality of life. This is consonant with the hypothesis that one secure attachment might buffer an insecure attachment (Bretherton, 1991). Higher security to both parents, controlling for socioeconomic status, was also associated with higher capacity for emotion regulation and lower negative emotionality. This has implications for the possible treatment of families affected by IPV, in which the work of maintaining or restoring the child’s attachment relationship with both parents should be a major focus. However, in light of the fathers’ limited willingness to attend treatment in the above-mentioned study that may be one of the first barriers to tackle.

The results of Study IV also raise a further point that concerns individual child characteristics such as capacity for emotion regulation and negative emotionality. Higher emotion regulation and lower negative emotionality were associated with higher quality of life. Emotion regulation has been associated with overall well-being and health (Gross & Munoz, 1995), but exposure to IPV can impact the development of emotion regulation as indicated by studies that show IPV can affect the child’s emotion regulation (Fainsilber Katz &
Rigterink, 2012; Perkins & Graham-Bermann, 2012). On the other hand, emotion regulation also has a base in temperament (Rothbart & Bates, 2006). Individual characteristics such as emotion regulation and negative emotionality can be seen as filters of risk factors (Lengua, 2002). One study in a community sample of children 9 to 11 years old showed that emotion regulation and negative emotionality acted as independent risk or protective factors for child adjustment. Emotion regulation and negative emotionality predicted child adjustment over and above the presence of different risk factors (e.g. low socio-economic status, mother's education level, ethnicity, single-parent status, etc.) (Lengua, 2002). Negative emotionality was associated with adjustment problems and emotion regulation to lower adjustment problems (Lengua, 2002). Regardless of whether one conceptualizes the capacity for emotion regulation as primarily impacted by family environment or not, these results highlight the importance of increasing and supporting the capacity of children exposed to IPV to handle and express their emotions and to examine in future studies of children exposed to IPV those individual characteristics that might impact their adjustment. An interesting ongoing pilot study is testing an intervention to increase parents’ capacity to support emotion regulation in children exposed to IPV (Fainsilber Katz & Rigterink, 2012).

The results of the included studies and the previous research prompt the following suggestions to treatment interventions for IPV-exposed children and their mothers and to research in the field in Sweden:

- Treatment units working with IPV-exposed children and their mothers are recommended to implement screening procedures for trauma symptoms. Clients with clinical levels of trauma symptoms likely need further evaluation and possibly trauma-specific treatment before they enroll in any other type of treatment.

- Treatment units are encouraged to continually measure short-term (before and after) treatment outcomes.

- To enhance existing treatments, several integrated components are necessary. Collaboration is encouraged with other treatment units that can provide more specialized or additional support, i.e. a trauma-informed approach.

- Intervention research should routinely evaluate how children and their mothers fare in treatment, both at the group and the individual level of analysis. Whenever possible evaluations should include several measuring points during treatment in addition to the pre-, post-, and follow-up assessments.

- Differentiate between outcome and client satisfaction measures of
treatment. The use of psychometrically evaluated satisfaction measures is warranted, and validated satisfaction questionnaires used internationally should be translated and tested in Sweden.

- Develop or translate appropriate outcome measures to use with individuals who speak neither Swedish nor English.

- Empirically supported treatments need to be implemented and evaluated in the Swedish context, instead of revised and developed into new methods. To implement new treatment methods, collaboration and partnership between researchers and practitioners is necessary. Realistically, implementation of new treatment methods and development of the assessment procedures need to be allocated to a few different centers, since most of the units working with IPV-exposed children are small, with only two or three persons on staff. Variation in outcome goals and organizational demands, depending on whether the treatment units are attached to health care or social services, suggest the necessity of centers for each type of organization. These centers could develop a consensus on meaningful assessments and evaluation instruments that are brief, clear, and realistic for use alongside the demands of practice. Researchers’ work should supply practitioners with useful materials (e.g. appropriate instruments, software evaluation programs, web-based questionnaires, etc.) applicable in everyday practice in order to develop a research-informed practice, while at the same time ensuring that research is informed by practice.

- The implementation and testing of new intervention methods are likely done in several steps. One suggested sequence for translation and implementation of evidence-based treatments developed abroad is to first test the evidence-based treatment in its original format without revising it. Evaluate the effects and how it was experienced by clients and treatment providers. From this primary evaluation, possibly make cultural adaptations to the program, and then test the culturally revised program against the original program to see if they are comparable (Sundell & Ferrer-Wreder, In press).

Finally, if there is to be significant change in the everyday practice of working with children exposed to IPV and their mothers, larger treatment units needs to be involved in a continual collaboration with researchers. Otherwise, there is a risk that the implementation of new working methods will develop along two diverging paths: the programmatic or “on paper” version of the researchers or policy makers, versus the practical “on the ground” version of practitioners working in the field.
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Appendices

The Reliable Change Index

\[ \frac{X_{\text{post}} - X_{\text{pre}}}{s_{\text{diff}}} \]

\( X_{\text{pre}} \) = Pretest score
\( X_{\text{post}} \) = Posttest score
\( s_{\text{diff}} \) = Standard error of the difference between the pre- and posttest scores

\[ s_{\text{diff}} = \sqrt{2(s_e)^2} \]

\( s_e = s_1 \sqrt{1 - r_{xx}} \)

\( s_e \) = Standard error
\( s_1 \) = Standard deviation of the pretest score
\( r_{xx} \) = The reliability of the instrument
The Damage Done

Children Exposed to Intimate Partner Violence and their Mothers—Towards empirically based interventions in order to reduce negative health effects in children

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