Distress after Criminal Victimization
Quantitative and Qualitative Aspects in a Two-Year Perspective

Olof Semb
“People have a hard time accepting the fact that bad things can happen to good people, and therefore, people will often alter their perceptions of a victim, assuming that they must somehow be at fault.”

(Albert Camus)
LIST OF PUBLICATIONS


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Abstract

**Background:** Criminal victimization entails a lifetime risk and is a salient problem in society. The reactions that an individual exhibit can have short- as well as longterm consequences. An important part in victimological research is to describe the characteristics of those who are at risk for developing severe mental health problems after victimization. Another important objective is to provide conclusions as to which support victims of crime want, which support they would benefit from and what form of treatment should be offered to those who develop the most handicapping reactions. Trauma theory and affect theory combined can be used to describe typical reactions after criminal victimization. **Objectives:** (I) to explore the prevalence of current suffering and the role of peritraumatic emotions and other risk factors for development of post-traumatic and general symptoms eight months post crime, (II) to examine the natural course of post-traumatic adjustment after two years in female and male victims who had experienced interpersonal violence, first assessed eight months after the crime, (III) to investigate the relationship between shame- and guilt-proneness, event-related shame and guilt, and post-victimization symptoms among victims of a single severe violent crime, and (IV) to use a qualitative analysis to describe individual post-crime trajectories.

**Methods:** The following questionnaires were used: Symptom Check List 90 (Derogatis & Cleary, 1977), Harvard Trauma Questionnaire (Mollica et al., 1992), the Test for Self-Conscious Affect (Tangney et al., 1989). Data were also obtained via semi-structured interviews, including use of Visual Analog Scales for subjective mental health measures. The participants in paper I were male and female Swedish adult victims of reported interpersonal violence eight months earlier. Participants were between 18 and 66 years of age (n=41). At follow-up (Paper II) the sample size had decreased (n=35). In paper III, adult victims between 18 and 64 years of age of reported interpersonal violence were assessed within two weeks of reported crime (n=35). In paper IV a subsample of 11 adult crime victims were drawn from the participants from papers I and II.

**Results:** Paper I showed that females reported more trauma-specific symptoms and other comorbid conditions than males. Prior trauma, adverse childhood, being female, previous psychiatric history, and unemployment were associated with more distress. Peritraumatic reactions (especially secondary emotions following cognitive appraisals after the event) predicted the three core PTSD symptoms and comorbid conditions. In a multivariate model psychiatric history, being female, intense negative reactions after crime, loss of control during crime and adverse childhood predicted trauma-specific symptoms as well as comorbid symptoms. Paper II confirmed most of the risk factors at eight months and that, in general, no further recovery took place between eight months and two years; however some differences were noted. Paper III showed that shame-proneness and event-related...
shame were highly intercorrelated and related to higher symptoms levels, while the guilt measures were unrelated to each other as well as to symptoms. Paper IV explored narratives of victimization. The results describe differences and similarities within the entire group, but also within the same trajectories. The crime victims in general expressed feeling abandoned as well as feeling misunderstood and questioned by authorities.

**Conclusions:** After criminal victimization women and men report trauma-specific as well as comorbid symptoms. The symptom levels of women are higher compared to men, but the men also report symptom levels above that of the Swedish norm on several scales. Risk factors explaining the outcome are psychiatric history, being female, intense negative reactions after crime, loss of control during crime and adverse childhood. Prior trauma and fear during crime did not contribute as much as expected. Shame and shame proneness are also important risk factors for postcrime distress, while guilt and guilt proneness are unrelated to distress after victimization. At two years most risk factors remain. Symptom levels remain unchanged, i.e. no significant improvement could be found. A majority of the participants had experienced new adversities between eight months and two years. The qualitative differences within the group and within trajectories highlight the need to address the background, current life situation and individual coping strategies of crime victims. The importance of individualized and flexible interventions after victimization is discussed.

**Keywords:** Criminal victimization, posttraumatic distress, risk factors
List of Abbreviations

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<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>APA</td>
<td>American Psychiatric Association</td>
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<td>HTQ</td>
<td>Harvard Trauma Questionnaire</td>
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<td>PLS</td>
<td>Partial Least Squares in latent structures</td>
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<td>PTG</td>
<td>Posttraumatic Growth</td>
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<td>PTSD</td>
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<td>SCL-90</td>
<td>The Symptom Checklist – 90</td>
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<td>SEM</td>
<td>Structural Equation Modeling</td>
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<td>TOSCA</td>
<td>The Test of Self-Conscious Affect</td>
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<td>VAS</td>
<td>Visual Analog Scale</td>
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Sammanfattning på svenska

**Bakgrund:** Våldsbrott drabbar många under livet och är ett betydande samhällsproblem. De reaktioner som en individ uppvisar på kort och lång sikt kan vara mycket handikappande. En viktig del i brottsofferforskning handlar om att försöka beskriva vilka som löper störst risk för att utveckla svåra hälsoproblem efter brottsutsatthet. Ett annat viktigt mål är att producera kunskap om vilket stöd brottsoffen själv vill ha, vilket stöd de har mest nytta av samt vilken behandling (t ex psykoterapi) som skall erbjudas de värst drabbade. Affekt- och trauma teori samverkar i att beskriva och förklara förväntade reaktioner efter brott. **Syfte:** (I) att undersöka reaktioner och symptom hos en grupp brottsoffer, bestående av kvinnor och män, samt att undersöka vilka riskfaktorer som bidrar till att förklara psykisk ohälsa i gruppen, (II) att undersöka det naturliga förloppet två år efter brott i samma grupp som inte erbjudits behandling genom att följa upp deltagarna i studie 1. Vidare att utvärdera de riskfaktorer som identifierats vid intervjun åtta månader efter brottet, (III) att undersöka sambandet mellan skam och skambenägenhet respektive skuld och skuldbenägenhet och symptom efter brott, (IV) att genomföra en kvalitativ analys av brottsoffrens egna berättelser och beskriva olika utfall över tid inom den undersökta gruppen.

**Metod:** Skattningsskalor och frågeformulär: Symptom Check List -90 (Derogatis & Cleary, 1977), Harvard Trauma Questionnaire (Mollica et al., 1992), the Test for Self-Conscious Affect (Tangney et al., 1989). Data inhämtades också med hjälp av semistrukturerade intervjuer. I dessa ingick självskattningsar av upplevd mental hälsa med VAS (Visual Analog Scales). Deltagarna i artikel I var vuxna svenska medborgare som anmält ett grovt våldsbrott åtta månader före intervjun. Deltagarna var mellan 18 och 66 år (n=41). Vid uppföljningen (Artikel II) hade antalet deltagare minskat (n=35). I artikel III undersöktes vuxna brottsoffer (n=35) mellan 18 och 64 år inom två veckor från ett anmält våldsbrott. I artikel IV gjordes ett urval bestående av 11 personer ur deltagargruppen från artikel I och II.

**Resultat:** Artikel I visar att kvinnor rapporterade högre nivåer av trauma specifika och generella symtom jämfört med män. Tidigare trauma, problematiska uppväxthändelser, kvinnligt kön, tidigare psykiatriska besvär och arbetslöshet associerades med ökat psykiskt lidande. Peritraumatiska faktorer (särskilt sekundära känslor som uppstätter efter att man hunnit reflektera över händelsen) predicerade de tre huvudsymtomen för posttraumatiskt stresssyndrom (PTSD) samt allmänpsykiatriska symtom.

**Introduction**

Interpersonal violence is both a social and a personal problem, affecting individual victims’ current level of functioning and future quality of life, psychologically as well as socially. Hedtke and her colleagues showed that lifetime exposure to violence is associated with poor mental health (Hedtke, et al., 2008); the greater frequency of exposure, the greater the risk for future severe mental health problems and the more severe an exposure the greater the risk for future severe mental health problems (e.g., Breslau & Peterson, 2010; Ramchand, Marshall, Schell, & Jaycox, 2008). Furthermore, it has been shown that interpersonal trauma, including violence, assault, and rape, tends to lead to a higher degree of mental health problems than other types of adverse events (Green, et al., 2000).

When individuals are exposed to events that are beyond their ability to cope, including unprovoked violence, they are confronted by overwhelming emotions, realizing that the only option is to submit to these emotions (Krystal, 1988). This submission is the first step in a traumatizing process that eventually threatens to impair all aspects of their psyche: perception, cognition, emotions, and identity. Trauma symptoms are therefore not primary effects of the trauma; they occur as a result of defense mechanisms, activated to protect the self from overwhelming affects (Krystal, 1985). Using Krystal’s affective model and Tomkins’ (1991) affect theory, it is possible to understand the multifaceted reactions apparent in many crime victims, even when they are not exhibiting severe psychiatric disability. Other trauma models are Brewin and colleagues’ dual representation theory (1996) and Ehlers and Clark’s cognitive model (2000).

Individual differences and individual vulnerability play a significant role in explaining trauma-related reactions and the development of mental health problems and distress. Current research shows that the development of posttraumatic distress is complex, with various factors active before, during, and after the event requiring consideration (for reviews, see Brewin, Andrews, & Valentine, 2000; Ozer, Best, Lipsey, & Weiss, 2003; Weaver & Clum, 1995).

**Emotions and trauma**

The basis for our conscious emotions is affects. According to Blum (2008), emotions are base affects combined with the reactions they trigger. The current view on affects is that of a communicative signaling system, with a highly motivating function. The affect or emotional state is assumed to be a
foundation for the categorization of our experiences. One of the greatest proponents of affect theory is Sylvan Tomkins (1991). A central view in this theory is the development of an affective awareness, meaning the individual’s ability to endure emotions without being overwhelmed by anxiety and without repressing or inhibiting emotions or isolating the cognitive content from the affective. Whenever the individual is at risk for becoming overwhelmed, due to the intensity and duration of the affect, the affect is modified by defense mechanisms. This is a natural way of modulating affect. Maladaptive behavior can be the result of deficiencies in the development of affective awareness but also a result of internal conflict, leading to the activation of defenses, which in turn transforms the experience as a means of protecting the self. The greater the affective awareness an individual possesses, the more tolerant he or she will be of his or her emotions (and the emotions of others). Blum (2008) summarizes the view on the maladaptive aspects of emotions as becoming maladaptive when expressed with too great intensity, too frequently, or in an inappropriate manner in relation to the demands of the situation at hand.

As for criminal victimization, a number of studies have investigated the role of emotions in the course of victimization. Andrews, Brewin, and Rose noted that shame and anger were associated with subsequent distress after a potentially traumatizing event (Andrews, Brewin, Rose, & Kirk, 2000). Notably, anger and shame were interrelated primarily when anger directed at the self was involved. Andrews and colleagues concluded that shame and anger independently predicted distress after victimization. In a longitudinal study, Orth, Cahill, Foa, and Mearcker (2006) found that trauma-specific symptoms predicted anger rather than the opposite, suggesting that outward anger is a result rather than a cause of distress. They also found that rumination mediated anger, further suggesting that rumination is a maladaptive coping strategy after victimization. This is also in line with other studies that have found an association between ruminations and mental health problems (e.g., McLaughlin & Nolen-Hoeksema, 2011).

Several studies have described the role of shame and guilt in victimization (Andrews, et al., 2000; Feiring & Taska, 2005; Harper & Arias, 2004). While shame and guilt are often discussed simultaneously, there are fundamental theoretical differences between the two concepts (e.g., Ginzburg, et al., 2009; Wilson, Drozddek, & Turkovic, 2006). Shame is a more global assault on the self, where wrongful actions lead to a total, negative self-evaluation. Guilt, on the other hand, is a self-evaluation aimed at a discrete behavior or an action, leading to a sense of doing wrong, rather than “being wrong”. Shame, therefore, is the emotion that makes us want to hide, disrupting attachment, while guilt motivates us to attempt some form of reparative actions, thereby
striving for attachment and belonging. Shame and guilt are gender-related, with females generally scoring higher on reported feelings of guilt and shame (e.g., Benetti-McQuoid & Bursik, 2005). Blum (2008) points to the importance of assessing shame and guilt after trauma, as these emotions influence help-seeking, diagnosis, treatment, recovery, and relapse. Shame has previously been associated with distress in several studies and groups (e.g., Ashby, Rice, & Martin, 2006; Averill, Diefenbach, Stanley, Breckenridge, & Lusby, 2002; Crossley & Rockett, 2005). Guilt has for the most part been shown to be unrelated to distress, but a possible protective aspect of guilt has also been discussed, whereby guilt has been shown to be negatively correlated with distress (Leskela, Dieprink, & Thuras, 2002). Supported by the discussion by Janoff-Bulman (1979), Leskela et al. argued that there was a possible protective effect of an attribution style characterized by a focus on action, i.e. guilt, rather than on negative global self-assessment, i.e., shame (2002).

One problem is that shame and guilt are not always differentiated. The concept of shame and guilt deals with the emotional state as well as the propensity to react with the former or the latter in a situation concerning a moral choice. This is also known as shame and guilt proneness. Tangney and colleagues refer to shame and guilt as moral emotions (Tangney, Stuewig, & Mashek, 2007). Shame and shame proneness have both, independently, been associated with distress after criminal victimization (e.g., Feiring & Taska, 2005; Feiring, Taska, & Lewis, 2002; Leskela, et al., 2002; Rizvi, Kaysen, Gutner, Griffin, & Resick, 2008), but few studies have combined the two in the same study. Rizvi and colleagues (2008) argued that, because negative affect (excluding fear) predicted posttraumatic distress (mainly depression), the full range of emotions after victimizations needs to be studied further.

There is a distinct similarity between the concept of guilt and that of self-blame. Guilt can be characteriological, directed at the perceived flaws in the persons self, as well as behavioral, reflecting appraisals of one’s wrongful actions (Janoff-Bulman, 1979). Others have described guilt as using self-blame coping (Delahanty, et al., 1997). Delahanty and colleagues examined self-blame among vehicle accident survivors and found it to be associated with more distress when used by those who attributed responsibility for the accident to themselves. However, attributing responsibility for the accident to oneself was associated with less distress over time compared to those who attributed the responsibility to others. Using self blame when not actually responsible for an accident is a maladaptive strategy, while using self-blame, when the attribution of responsibility is correct, might be adaptive over time. An issue with the concept of guilt is therefore that it seems to contain
adaptive as well as maladaptive aspects, whereas shame is almost exclusively related to pathology.

Cognitive neuroscience models of trauma

Krystal (1985) has proposed an affective model for traumatization pertaining to overwhelming affect (as described above), but many models explain how traumatization occurs and is maintained. For example, Brewin and colleagues have developed the dual representation theory, which explains posttraumatic distress through two different memory systems, whereby traumatic memories, due to the effect of stress on the hippocampus and amygdala, are encoded in a situational memory, characterized by spontaneous memory recovery as opposed to verbally accessible, deliberate recovery (Brewin, et al., 1996). A consequence of the dual representation theory is that treatment strives to transfer the more primitive situational memory to a verbally accessible memory system. Ehlers and Clark’s cognitive model (Ehlers & Clark, 2000) is perhaps the most well-known cognitive model in its field, stating that PTSD occurs as a result of excessively negative appraisal in combination with a disturbed autobiographical memory. The cognitive models, including factors like rumination, looming cognitive style, and negative attribution, have been suggested as the factors explaining the occurrence as well as maintenance of PTSD (e.g., Dunmore, Clark, & Ehlers, 1999; Elwood, Hahn, Olatunji, & Williams, 2009). Recently, the so-called dose-response model for explaining PTSD was deemed insufficient. The model explains the occurrence of PTSD as a result of the intensity and duration of the triggering event. The authors found a small but significant contribution of event duration to clinical status in the immediate aftermath of trauma but not at three-month follow-up (Kaysen, Rosen, Bowman, & Resick, 2010).

Diagnoses, symptoms, and distress

Posttraumatic stress syndrome (PTSD) is by definition the most relevant trauma-specific psychiatric disorder among adults (American Psychiatric Association, 1994). PTSD is an anxiety disorder characterized by experiencing, witnessing, or being confronted with a traumatic event that includes an actual or perceived threat to the self or others and reacting with fear, helplessness, or horror. The disorder is characterized by its three core symptoms: intrusion (or re-experiencing), avoidance (including behavioral avoidance as well as emotional numbing), and hyperarousal. PTSD is described as resulting from direct exposure to a distressing event, witnessing the exposure of others, or receiving information about such an event. It also
includes receiving information about loss or severe illness; moreover, it is required that the subject experiences clinically significant distress (American Psychiatric Association, 1994). In all, this involves a wide definition of trauma that underlines the difficulty in differentiating between trauma and general adverse and distressing life events. An additional post-trauma reaction is dissociation (experienced as emotional numbness, depersonalization, derealization, etc.). Dissociation is primarily an acute reaction and an integral part of Acut e Stress Disorder (American Psychiatric Association, 1994).

Thought certainly not the only outcome after a potentially traumatizing event, PTSD in the research literature demarks the most salient pathology after a potentially traumatizing event. Reviews show that the likelihood of developing PTSD after a crime varies greatly. For example, Elklit & Brink found 22% (and an additional 22% for subclinical PTSD) after interpersonal violence (Elklit & Brink, 2004), while Kilpatrick and Acierno (2003) reported a 23-39% prevalence of PTSD for physical assault. Carlsson & Dutton (2003), conversely, described a prevalence of a range of 21-50% after criminal victimization, while Ozer and colleagues reported lifetime prevalence for PTSD of between 7-12%(Ozer, et al., 2003).

Apart from the core posttraumatic symptoms of PTSD, other forms of mental health problems and impairments after traumatization have been noted, primarily depression (e.g., Freedman, Brandes, Peri, & Shalev, 1999; Tanskanen, et al., 2004). Among the posttraumatic symptomatology anxiety disorders, dysthymia, substance abuse and relapse into abuse, sleep disorders, and transitory but less impairing PTSD-like symptoms have been described (e.g., Saladin, et al., 2003). More specific symptoms have been described as well: learning and memory impairment (e.g., Emdad, Söndergaard, & Theorell, 2005), alexithymia (e.g., Yehuda, et al., 1997), increased sensitivity to trauma-related cues (e.g., Michael, Ehlers, & Halligan, 2005), self-harm (Dyer, et al., 2009), and nightmares (e.g., Krakow, et al., 2002).

In a study of the general population (Frans, 2003), the lifetime prevalence of trauma in Sweden was 5.6%, where 80.8% of the respondents had experienced at least one potentially traumatizing event. The major part of this percentage represents criminal victimization. It has been noted that in the Swedish setting, the highest risk for PTSD is associated with sexual and physical assault, robbery, and multiple trauma experiences; the least risk with motor accidents (Frans, Rimmö, Åberg, & Fredriksson, 2005).
While PTSD is a clear-cut diagnosis, the term *distress* is a more ambiguous concept, describing a more subjective experience of psychological suffering or pain. In general, this more inclusive term, describing the suffering of the participants, will be used in this thesis, since it includes wider descriptions of post-crime reactions beyond that of the disorder.

**Posttraumatic distress, subclinical PTSD, and crisis reactions**

One of the most salient comorbid symptoms after a potentially traumatizing event is depression (e.g., Boudreaux, Kilpatrick, Resnick, Best, & Saunders, 1998). Depression has alternately been discussed as a mediator for PTSD or as secondary to PTSD, while another discussion has been whether the association is illusory (Blanchard, Buckley, Hickling, & Taylor, 1998). The overlap between reports of trauma-specific symptoms and depressive symptoms indicates that when assessing mental health outcomes after trauma, depression must also be examined; the simultaneous presence of trauma-specific symptoms and depressive symptoms might well be the most common mental health outcome. It is conceivable that depressive symptoms could even completely mask the trauma in some cases.

While the common distinction in the field of traumatic stress is that between PTSD and complex PTSD (brought on by extreme experiences such as concentration camp experiences or torture), less has been discussed about subclinical PTSD and normal crisis reactions/adjustment disorder (PDM Task Force, 2006) after adverse life experiences. In recent years, it has been suggested that it is important to include subclinical PTSD (e.g., Carty, O'Donnell, & Creamer, 2006; O'Donnell, Bryant, Creamer, & Carty, 2008) to better describe the range of post-victimization distress and to better detect those who are at risk for developing PTSD. In studies, subclinical PTSD has been defined as lacking either one criteria of full PTSD, for example, fulfilling only two of three required criteria for one of the core symptoms, or lacking the F-criterion (i.e., the disturbance causes distress or impairment in functioning). The range of distress after a potentially traumatizing event likely includes subclinical PTSD as well as crisis reactions. An important reason for including subclinical PTSD is that delayed onset PTSD is often preceded by subclinical levels of trauma-specific distress (Carty, et al., 2006).

Crisis theory (e.g., Leick & Davidsen-Nielsen, 1991) describes a psychological crisis as an event that temporarily disrupts a person’s sense of predictability and control. This results in almost the same reactions as traumatization: the person experiences disruption of everyday cognitive schemas, intrusive thoughts on the triggering event (characterized by
rumination rather than focused problem-solving), and emotional instability. The crisis is described as having depressive or anxious aspects but a combination is likely the norm (PDM Task Force, 2006). The PDM Task Force uses the term “adjustment disorder” to describe crisis reactions.

**Gender and age differences and trauma**

Research consistently finds that, while men are twice as likely to experience PTEs, women are twice as likely to develop PTSD (Kimerling, Prins, Westrup, & Lee, 2002). This greater risk for women has been noted and discussed in several studies (e.g., Andrews, Brewin, & Rose, 2003; Christiansen & Elklit, 2008; Ditlevsen & Elklit, 2010; Frans, et al., 2005; Norris, Foster, & Weisshaar, 2002; Stein, Walker, & Forde, 2000). Stein *et al.* (2000) argue that exposure to sexual trauma is only a partial explanation for the increased risk for women.

Pimlott-Kubiak and Cortina (2003) concluded that gender vulnerability might be a “situational vulnerability” whereby female gender is a proxy variable for explaining increased vulnerability. Breslau (2009) recently concluded that “[d]irect evidence on the causes of the sex difference is unavailable” and that gender differences cannot be explained by exposure to sexual trauma, higher frequency of prior trauma, prior depression, or sex-related bias in reporting symptom levels. Ditlevsen and Elklit (2010) found a combined effect of gender and age, where the risk for PTSD peaked differently for men and women. The highest prevalence of PTSD was seen in the early 40s for men and in the early 50s for women, while the lowest prevalence for both genders was in the early 70s. The greatest difference was in the 21–25-year-old group, where the female to male ratio was highest (Ditlevsen & Elklit, 2010). Seery, Holman and Silver (2010) found that adverse events and age described a U-shaped relationship. The results of their study seem to indicate that there is a complex relationship between age and the number of adverse experiences. Seery *et al.* found that “some but nonzero” adverse events were associated with better functioning and a higher degree of quality of life (Seery, et al., 2010, p. 1025).

Studies on gender differences in recovery after trauma are scarcer. One exception is a review by Blain, Galowski, and Robinson (2010), who found ambiguous results regarding gender differences in recovery, especially in relation to treatment. They discovered some evidence that women fared better in treatment (although many studies seemed to show no gender differences) and that men had a higher dropout rate in therapy. Their conclusion was that more studies are needed to address gender differences in treatment and recovery outcomes. In another study, Kimerling *et al.*
concluded that the gender issue should be conceptualized as “an interaction between biologically based sex differences and the individual’s social context” (Kimerling, et al., 2002, p. 566).

Alcohol consumption, unconsciousness and trauma

In a study by Bisby et al. (Bisby, Brewin, Leitz, & Curran, 2009), an inverted U-shaped association was found to exist between the level of alcohol consumption and intrusive memories. The authors suggested that a low dose of alcohol impaired the conscious memory and its ability to suppress the situational (unconscious) memory, resulting in increased levels of intrusive memories. Individuals with a higher level of intoxication, however, suffered from more global impaired memory, and both conscious and unconscious memory were impaired, leading to lower levels of intrusive memories.

Being unconscious has been shown to have a protective effect, as it leads to fewer intrusions (Bryant, et al., 2009). In a related study, Harvey et al. (Harvey, Brewin, Jones, & Kopelman, 2003) argued that it is possible to resolve the paradox of the coexistence of PTSD and brain injury, putting forth that the presence of brain injury does not rule out PTSD and intrusive symptoms.

Studies on the effects of alcohol consumption in relation to other sequelae after trauma, like level of distress, anxiety, rumination, appraisal, and negative emotions, are scarce.

Predicting distress after violent crime

Few prospective studies have studied known risk factors before a traumatizing event, although one exception is Macklin et al. (1998). Meta analyses of risk factors show that most studies on risk factors have been carried out retrospectively. Some exceptions may be noted, however, e.g., Brewin et al. (2000) and Ozer et al. (2003), who studied risk factors after a traumatizing event but before the onset of mental health problems like PTSD. The retrospective studies have led to the questioning of the veracity of the predictors, whereas the retrospective reports could be biased as a result of the posttraumatic symptoms. Weaver and Clum (Weaver & Clum, 1995) concluded that subjective factors, like general appraisal and self-blame, had twice the impact of post-crime distress than objective factors like the use of a weapon or physical injury.
The results of the meta analysis by Brewin et al. (Brewin, et al., 2000) were that gender, age, and ethnicity had a predictive value in some studies but not in others. Education, adverse childhood experiences, and insecure rearing conditions had greater predictive power for the development of PTSD symptoms. The effect sizes of these risk factors, however, were rather modest compared to the effect size of factors like current life situation, trauma severity, lack of social support, and other current life stressors. These latter peri- and posttraumatic factors were all more strongly associated with posttraumatic distress than the pre-trauma factors. In a later meta study, Ozer et al. (2003) showed that insecure rearing conditions, prior trauma, and prior psychiatric status had lesser impact on post-trauma functioning than previously assumed. On the other hand, they found that individuals who reported high levels of dissociation and strong negative emotions were at greater risk for developing PTSD symptoms. One conclusion was that the individual’s subjective appraisal of the event was an important contributor to whether or not a victim of crime would experience distress.

Individual studies have reported various risk factors and predictors for post-trauma and post-crime distress. Cognitive factors like mental defeat, negative appraisal of others’ response to trauma, and negative appraisal of one’s own emotions, as well as earlier negative beliefs on criminal victimization, all predicted PTSD (Dunmore, Clark, & Ehlers, 2001). Continued dissociation and negative appraisal were found to maintain PTSD (Halligan, Michael, Clark, & Ehlers, 2003). Bachar, Hadar, and Shalev (2005) found that narcissistic vulnerability was associated with PTSD to such a degree that their conclusion was that it contributed to the occurrence of PTSD.

All reactions do not incur an increased risk for PTSD, however. In a study on traumatic brain injury after traffic accidents, Glaesser, Neuner, Lutgehetmann, Schmidt, and Elbert (2004) found that unconsciousness during a potentially traumatic event actually precluded PTSD. These patients, interestingly, also suffered from lower levels of re-experiencing.

The above-mentioned studies show that the associations are complex and that they vary with trauma severity, study design, method, and trauma type. Risk factors used as indicators to discern who needs treatment are not yet sufficient. An alternative approach has been suggested by the National Collaboration Center for Mental Health, who proposes a design characterized by watchful waiting (2005). O’Donnell, Bryant, Creamer, and Carty (2008) have suggested a variant follow-up paradigm whose design replaces or complements the current ways of studying risk factors retrospectively. They suggest using continuous mapping of reactions and
careful follow-up. The authors further suggest a paradigm where early interventions are offered to those exhibiting clinical impairment, combined with early screenings for vulnerabilities and later screenings for persistent symptoms after one month (O’Donnell, Creamer, et al., 2008).

Only a minority of adult trauma survivors are identified or treated for their posttraumatic psychological problems after crime events (e.g., Zatzick, et al., 2004), which could mean that many crime victims do not receive the treatment they need or would accept if offered. Identifying victims who are likely to develop long-term psychopathology and who would benefit from specialized mental health counseling is therefore essential.

One issue with the trauma construct is the difficulty in differentiating pathological from normal reactions. The question remains as to what is a normal, transient reaction as opposed to an actual disorder, like acute stress disorder. Freedman, Brandes, Peri, and Shalev (1999) describe intrusion, one of the criteria for acute stress disorder, as problematic, concluding that intrusive reactions, along with dissociation, are more important in the acute phase of traumatization, while depressive and avoidant reactions are more dominant in later phases. Acute stress disorder has been under debate (e.g., L. A. Zoellner, Jaycox, Watlington, & Foa, 2003). Several authors have found support for the validity of acute stress disorder predicting PTSD but it has been pointed out that both acute stress disorder and PTSD (disregarding the time criterion) predict PTSD after six months equally well (e.g., Brewin, Andrews, & Rose, 2003). Another problem is that many individuals fulfill a great number of PTSD criteria but do not receive the diagnosis because of the absence of criteria A2 (i.e., experiencing fear, helplessness, and/or horror). It has been argued that the focus on fear in PTSD entails an underestimation of the importance of other emotions experienced by traumatized individuals (Rizvi, et al., 2008). In a recent paper, Bryant concluded that acute stress disorder is an inadequate predictor of PTSD (Bryant, 2011). He also argued that a better way of understanding acute reactions is to describe the broad range of acute post-trauma reactions rather than focusing on predicting PTSD.

Recovery, resilience, and growth

Crime victims in general recover well from victimization (Dutton & Greene, 2010). When it comes to recovery from trauma, however, it is important to note that PTSD is subject to reactivation. Because of this, Freedman concluded that a formal or symptomatic recovery should not be confused with full recovery. If PTSD has been manifested for an extended period of time, incomplete recovery should be expected (Freedman, et al., 1999). An
important contribution to the description of sequelae of traumatization was made by O’Donnell and colleagues (2007) when they described the different symptom trajectories of the three core symptoms of PTSD, showing that development takes different, non-linear, paths over time, with arousal actually increasing in the PTSD group.

In a recent study, Vaile Wright, Collinsworth, and Fitzgerald (2010) underlined the importance of cognitions involved in the traumatization process, especially the importance of themes of intimacy, safety, and trust. They concluded that, for recovery to take place, these issues need to be addressed in trauma counseling and therapy.

Posttraumatic growth

Although still a relatively new area of inquiry, posttraumatic growth (PTG) has gained attention in recent years (for a review, see Joseph & Linley, 2006; T. Zoellner & Maercker, 2006). Benign factors facilitating growth have been suggested, e.g., marriage or a new relationship, having a child, or obtaining a job. While not always assessed as directly affecting recovery, these factors may contribute to newfound health and a sense of purpose in life. The PTG construct has been debated, however, and it has been noted that PTG contains adaptive and constructive as well as illusory aspects (T. Zoellner & Maercker, 2006; T. Zoellner, Rabe, Karl, & Maercker, 2008). Posttraumatic growth has also been discussed as a protective factor, decreasing the risk for revictimization (Kunst, Winkel, & Bogaerts, 2010).

Repeat victimization, traumatization, and ongoing life-stress

The risk of repeat victimization (being exposed to new crimes) and additional unrelated trauma between the occasion of assessment and the index event has been noted by several authors (e.g., Brewin, et al., 2000; Cougle, Resnick, & Kilpatrick, 2009; F. Norris, et al., 2002; Orth & Maercker, 2004). Hedtke et al. (2008) concluded that the risk of developing PTSD, depression, and/or substance use problems increased incrementally with the number of different types of violence experienced. Also, their results indicated that renewed violence within two years from the index crime led to more severe distress. While this risk of renewed victimization (and exposure to other traumatizing events) has been noted, more rarely, however, has the focus been on the concurrent individual life situation of the victims, with positive as well as negative factors influencing the victims’ wellbeing. For example, Sachs-Ericson, Cromer, and Kendall-Tackett (2009) pointed out that current life stress doubled the effect of previous child abuse on current health problems. It seems reasonable to assume that current life stressors
would have an added negative impact on recovery after victimization. Few studies to date have examined interventions aimed at reducing the risk of revictimization in single-event crime victims.

A sibling construct is revictimization. This has been described as a form of secondary traumatization caused by the distressing experiences a crime victim suffers in contact with the justice system (e.g., Orth & Maercker, 2004). Orth and colleagues, however, found that revictimization by the legal process (i.e., by experiences in court) was not the most common outcome.

Even in groups where recurrent trauma and victimization were not expected, studies have found an association with index trauma and previous adverse experiences (e.g., Green, et al., 2000; Kingma, 1999; Ramstad, Russo, & Zatzick, 2004). This has led some authors to propose a common profile, describing a background of accidents, abuse, drug/alcohol use, and elective surgery. This so-called DATES (drug abuse, assault, trauma, elective surgery) syndrome proposes that some individuals are more impulse prone and therefore expose themselves to accidents (e.g., Shepherd, Peak, Haria, & Sleeman, 1995). More recently, Witte and Kendra (2010) found that risk perception was delayed in victims of intimate partner violence. Messman-Moore and Brown (2006) found this in female college rape survivors as well, suggesting that delayed risk perception could be an important component in repeat victimization in general.

**Crisis intervention and support**

Various terms have been used to denote trauma interventions, and there is substantial lack of consensus in the field of traumatic stress and victimology. In this thesis, the term *crisis intervention* will be used to encompass professional contacts aimed at alleviating mental health problems and distress after victimization.

As mentioned above, a central view of the trauma experience is to be the victim’s subjective interpretation of the trauma, psychologically as well as existentially, the emotions associated with trauma, and strategies for defending against and coping with unbearable mental pain and, in extreme cases, for preventing total personality disorganization. An integral element of many approaches is to integrate the trauma with the individual’s total history. To achieve this, dissociated affective and cognitive aspects must be reunited (Kivling-Bodén, 2002). In the words of Varvin and Hauff, the trauma can then be “remembered or repressed, but will not be relived as an actual experience” (Varvin & Hauff, 1998). An important aspect of interventions after trauma is a focus on earlier experiences, because what is
lost during massive trauma is the good relationships the patient had with important others (Varvin & Hauff, 1998). An important goal is thus, according to Varvin and Hauff, to help the patient move from a position of being powerless to that of an active survivor (1998). According to Leick and Davidsen-Nielsen (1991), the crisis always includes an element of loss (of health, attachment, safety, dignity, etc.) and grief work is always a salient theme in recovery after trauma and crises. An important part of that process includes revisiting the trauma. However, Meichenbaum argued that this must be done gradually so that the intervention does not become an overwhelming experience (Meichenbaum, 2000). Cognitive-behavioral treatment approaches stress the need for restructuring dysfunctional cognitions and cognitive behaviors, like rumination and maladaptive attribution (Ehlers & Clark, 2000). Ehlers et al., (2010) conclude in a recent meta study that interventions must be trauma-focused to be optimally effective. There has been some criticism regarding the benefits of exposure, and Ehlers and Clark, for example, found evidence supporting the superiority of cognitive-behavioral interventions over exposure (Ehlers & Clark, 2003).

Describing sequelae after victimization is important in order to establish viable risk factors for distress and pathology and to direct interventions when necessary. An additional important reason to investigate the reactions and experiences of crime victims is to educate professionals in the legal system and other supportive authorities, like the social services. In a recent study, Ask (2010) showed that prosecutors and police in Sweden were very much affected by their own views on crime victims and that this had an impact on how the crime victims were treated in the legal process. For example, crime victims were expected to be distressed, meaning that crime victims who showed composure and low levels of distress were regarded as less truthful. Attitudes towards crime victims must therefore be countermeasured by updated knowledge about the full range of reactions of distress and coping strategies in crime victims. McNally (2003) argued that it is important to distinguish who will experience transient reactions to trauma and who will have more persistent symptoms, for which reason he recommended studies on mechanisms that mediate adaptation rather than a mere description of symptoms.
Aims

General aims for this thesis

The thesis deals with the sequelae of criminal victimization for victims experiencing a single event of interpersonal violence (robbery, assault, or rape) from a previously unknown perpetrator; what kind of reactions and experiences the crime victims reported; and what long-term consequences the crime had for the individual. A separate section of the thesis describes risk factors for distress after victimization.

Specific aims

I. The study aimed to (1) investigate the prevalence of distress among crime victims eight months after a violent crime, (2) explore how the association between self-reported distress is related to risk factors such as a) peritraumatic emotions (“primary” and “secondary”) and social support from family and friends, b) sociodemographic factors, and c) background factors like previous mental health problems, childhood adversity and previous experienced trauma, and (3) explore risk factors in aggregated form.

II. The study aimed to (1) evaluate the same victims and their subsequent pattern of mental health outcomes between eight months post crime to two years post crime, (2) investigate the predictive value of risk factors identified at eight months, and (3) explore self-reported positive and negative life events experienced post crime and reported by the victims as important to their recovery process.

III. The study aimed to investigate (1) the relationship between shame- and guilt-proneness, event-related shame and guilt, and symptoms in a group of victims who had recently experienced an isolated event of severe violent crime, (2) how shame- and guilt-proneness are related to event-related emotions in crime victims reflecting on the actual victimization.

IV. The study aimed to (1) describe the aftermath of criminal victimization in victims of a single violent crime, using a qualitative approach, and (2) use a sampling procedure for the selection of cases, based on a quantitative/statistical approach, to obtain a more systematic and transparent selection of participants.
The following main questions were addressed in the studies:

- What is the level of distress eight months post crime, and what risk factors could be identified at eight months? (Paper I)
- What is the long-term course of psychological distress, assessed two years post crime? (papers II and IV)
  - Has the level of symptoms changed between eight months and two years post crime?
  - Does the pattern of distress differ for women and men in a two-year perspective?
  - What is the long-term stability of the association found at eight months post crime between current distress and risk factors at the two-year follow-up?
- How are shame and guilt related to post-crime distress? (paper III)
- What are the similarities and differences in the narratives of victimization among the selected group of crime victims? (paper IV)

Methods

Participants

The participants in studies I-IV all took part in a larger research project (Sundbom, Semb, Strömsten, Fransson, & Heningsson, n.d.), whose main aim was to follow adult victims of violent crime over the course of two years, focusing on psychological consequences over time and with the objective of studying the effects of early interventions compared to a group where no intervention was offered. The present thesis mainly focused on the group where no treatment was offered, i.e., studying the natural course of recovery. Forty-one victims of interpersonal violence (robbery, assault, or rape), aged between 18 and 66, participated in the non-intervention group. Exclusion criteria for participation were domestic violence, known criminality, severe drug and/or alcohol addiction, known brain injury, and acute psychotic episode.

Interviews and instruments

The participants were assessed using a combination of interviews that included self-rated and expert-rated assessments.
Semi-structured interviews

The semi-structured interview started with an open-ended question about how the participants’ life had developed since the crime, including presence of additional trauma during the time between the crime and the interview. The interview covered retrospective and current reports by the victims for pre-, peri-, and post-trauma themes. Pre-trauma themes included childhood experiences and family history, previous mental health, previous experienced trauma (worded in the interview as: “Have you ever experienced anything like this before, that is, violence directed at yourself, or witnessed severe violence?”), marital status, education, occupational status, and ethnicity. Peri-traumatic themes included perceived fear, horror, and helplessness at the time of the trauma event (reflecting “primary” emotions) and intense negative emotional reactions shortly after or within the first few days after the crime (reflecting “secondary” emotions arising from subsequent cognitive appraisal) as well as available social network. Post-trauma themes included current mental physical health and social life situation, additional post-crime life stressors, and emotions associated with the crime eight months previous. The participants were also asked to talk about social support from their available network.

The two-year follow-up interview was conducted by telephone and careful notes from the interview were recorded in the interview manual. The telephone interview included current distress, coping strategies, VAS ratings of current mental health, and questions where the participants were asked to summarize their experiences of the past two years. Participants were also asked to rate the total impact of the index crime on a five-point Likert scale (1=none to 5=catastrophic), as well as to answer questions about repeat victimization and renewed trauma and about positive events and their possible impact on current mental health.

Self-rated health and post-victimization emotions

The Visual Analog Scale (VAS) is a widely used measurement. In a psychometric evaluation by Łukacz et al. (2004), the authors concluded that the VAS was a simple, reliable, and reproducible method. The idea is to use a 100 mm visual scale where the participant can opt either to point at the scale, indicating his or her response, or to state a number between 1 and 10 (or 1 to 100). The ratings used in this project were performed on a 100 mm scale ranging, in numbers, from 1 to 10. For example, subjective ratings of post-victimization emotions (e.g., shame and guilt) were obtained using a VAS where 1=low/little and 10=intense/very much. The trauma-related emotions were obtained by asking participants to rate the current intensity
of their emotions in association with victimization. Participants were asked to rate emotions using a discrete number, alternately indicating intensity by pointing directly at the scale. The question was worded, “To what extent do you currently experience the emotion xxx when thinking of the event?” Participants were reminded, when necessary, that a 0 (zero) response was not valid according to the scale. The same scale was used when assessing subjective mental and physical health, where 1=low/poor health and 10=high/good health. The scale is thus an inverse of the other symptom scales used in this project.

Assessment of the participants’ peri-traumatic reactions was derived from two questions in the interview. The participants were asked to describe the experienced crime as carefully as possible, paying special attention (apart from what actually happened) to: a) what they perceived, b) their bodily sensations, c) what they felt (i.e., their emotions), and d) whether there were parts of the event they had trouble remembering. From this description of the actual event, the assessments of fear during the crime and helplessness during the crime were obtained. The respondents were also asked to describe their immediate emotional reactions directly after or within a day after the crime. From this question, the assessment of immediate negative reactions and emotions after the crime was derived. The interviewer’s assessment of these peri-traumatic reactions was then made on a three-point ordinal scale (1=none/low, 2=moderate, 3=intense). In the statistical tests, the three-point scale was dichotomized into a two-point scale for the univariate analyses.

*Harvard Trauma Questionnaire (HTQ)*

The Harvard Trauma Questionnaire (Mollica, Caspi-Yavin, Bollini, & Truong, 1992) is a thirty-item questionnaire consisting of 16 items corresponding directly to the three major criteria for PTSD (intrusion, avoidance, and arousal) in the DSM-IV (American Psychiatric Association, 1994), and 14 general trauma items with a four-graded Likert scale (1=not at all, 2=some, 3=a lot, and 4=extreme). Respondents are instructed to report their trauma symptoms over the past seven days. A 2.5 clinical cutoff is generally used to determine presence of PTSD. Mollica et al. have suggested another way to determine caseness: by including scale items ≥3 on at least one of the re-experiencing symptoms (B criterion), at least three of the avoidance symptoms (C criterion), and at least two of the arousal symptoms (D criterion), provided that the A criterion is already fulfilled (Mollica, et al., 1999). The psychometrics in the original article by Mollica et al. (1992) showed good internal consistency, test-retest validity, and concurrent validity. Generally, HTQ ratings have been used as a continuous measure in
this thesis. The purpose of the studies in this thesis has not been to establish actual PTSD diagnosis, but to investigate the relationships between risk factors and trauma-specific distress. A dimensional approach to symptomatology measured by HTQ has been used in other, recent studies (e.g., Ditlevsen & Elklit, 2010).

*Symptom Checklist 90 (SCL-90)*

The Symptom Checklist (Derogatis & Cleary, 1977) is a 90-item questionnaire measuring current general psychiatric distress in the nine primary dimensions of somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, aggression (hostility), phobic anxiety, paranoid ideation, and psychoticism. It also has a scale that measures more wide-ranging symptoms (not specifically related to any other dimension), like disordered sleep and suicidal ideation. In addition, the scale contains three global subscales: global severity index (GSI) (mean regardless of subscale), positive Symptom Disorder Index (mean of all non-0 answers), and positive symptoms total (frequency of non-0 answers). Respondents are instructed to rate each item over the past seven days on a five-point scale (0=not at all to 5=extreme). Swedish standardization has existed since 2003 and has proved to have a good psychometrics and to be perceivable as a uniform scale (Fridell, Cesarec, Johansson, & Malling Thorsen, 2002). Langeland and colleagues have suggested different clinical cutoff values for each subscale (Langeland, Wahl, Kristoffersen, Nortvedt, & Havnestad Rokne, 2007).

*The Test of Self-Conscious Affect (TOSCA)*

The Test of Self-Conscious Affect (TOSCA) (Tangney, Wagner, & Gramzow, 1989) is a scenario-based self-report questionnaire comprised of 15 brief everyday scenarios, followed by four to five associated responses yielding phenomenological indices of shame, guilt, externalization, detachment, and pride in self (alpha pride) or pride in behavior (beta pride). Participants rate their responses on a five-point Likert scale (1=not likely to 5=very likely) for the probability of their responding in a similar manner. Scenario descriptions and response items in TOSCA are subject-generated, thus enhancing the ecological validity of the test. TOSCA is well validated in healthy adults with satisfactory test–retest reliability and internal consistency for the shame and guilt subscales (Benetti-McQuoid & Bursik, 2005; Woien, Ernst, Patock-Peckham, & Nagoshi, 2003). The externalization, detachment, and pride subscales were not included in the statistical analyses of the current thesis. The Swedish version of TOSCA used in this thesis (Sundbom, Holm, & Henningsson, 2000), was professionally
translated. The shame and guilt subscales acquired acceptable internal consistency estimates and the test’s internal structure has been tested with confirmatory factor analysis with acceptable results (Strömsten, Henningsson, Holm, & Sundbom, 2008).

Statistics and qualitative analysis

Descriptive statistics, mean comparisons, and correlations were performed using SPSS 16 and PASW 18. Partial least squares statistics were performed using the SIMCA software 8 and structural equation modeling was performed using AMOS release 16. WINPEPI release 9.2 was used for some of the mean comparisons when raw data was unavailable (Abramson, 2004).

Partial least squares in latent structures (PLS)

Principal Component Analysis (PCA) and its extension, the PLS method (Wold, et al., 1983), both follow the principle known as soft modeling, which means that models are analyzed based on empirical data rather than on theoretical or logical constructs, as in hard modeling (Sundbom, 1992). The purpose of a PCA is to find the inherent structure of a data set. All variables in a data set are processed simultaneously and then sorted to find the variables that have the strongest loading. Variables with too little information are discarded. These new information-bearing components are called principal components (Henningsson, Sundbom, Armelius, & Erdberg, 2001).

A minimal number of principal components are calculated in PLS. The main difference is that this is done for the X matrix as well as the Y matrix and that the relation between these data sets is maximized. Significance testing is done by use of cross-validation criteria (goodness of prediction, or Q2 value). The value of Q2 is a measure of the predictive power of a model and a Q2 value greater than 0.1 shows a significant power of prediction in the model. The values R2 (explained variance, or “goodness of fit” in a model) and Q2 stand in close relation to each other. By adding more components to a model, the explained variance (R2) can be increased. Initially, the predictive validity (Q2) will increase but by the time R2 and Q2 go separate ways, computations are terminated (Henningsson, et al., 2001).

Classical descriptive statistics often comprise a large number of participants and few variables. Strictly formulated uni- or bivariate hypotheses are used and tried with, for example, t-tests. In univariate methods, typically, one variable is analyzed at a time, which means that the relationship between variables is disregarded. This increases the risk of
making type II errors, especially since the variables are rarely truly independent in the field of psychology. In PLS, which is a multivariate method that is adapted to a smaller number of subjects and a larger number of variables, each variable contributes to the generation of latent variables who, taken together, explain an external variable, for example, patient-group membership. No single variable, thus, describes the differences between groups, or analogous differences, but rather all variables contribute to the diagnostic value of a model (Henningsson, et al., 2001).

Traditional analysis of data inevitably leads to loss of information, since data, by necessity, are subject to reduction. By not basing calculations on mean values, closeness to the individual participant’s values is maintained in a PLS data set. This means that the individual, rather than the variables, is in focus and the variables will therefore yield valuable information about the subjects. A further benefit of PLS is that one can obtain good information about a certain individual and clarity regarding the distance between individuals in the model through a graphic presentation (Henningsson, et al., 2001). Ideally, PLS could be used to bring clarity to complex patterns that could then be tested for their significance by use of traditional hard modeling.

Structural equation modeling (SEM)

Mediation analysis seeks to answer the questions of how an independent variable affects the dependent variable, once it has been established or assumed that the relationship exists. Kraemer et al. defined a risk factor as “a correlate shown to precede the outcome” and a causal risk factor as “a risk factor that, when changed, is shown to change the outcome” (Kraemer, Stice, Kazdin, Offord, & Kupfer, 2001, p. 848). Depending on the purpose of the study, a variable can be considered to be a mediator, moderator, or confounder.

Mediation can be analyzed using structural equation modeling (SEM) which, basically, is a regression analysis in which all paths (relations) are tested simultaneously (e.g., Maruyama, 1998). The term conveys two important aspects: 1) causality is represented by a series of structural equation (i.e., regressions) and 2) the structural relations can easily be illustrated to provide a good overview of the theory being tested (Byrne, 2001). An illustration of a mediation model of shame and distress (used in paper III of this thesis) can be found on page 15 in paper III. One principle of SEM is that an a priori model based on theoretical assumptions is tested. Typically, current software packages can suggest alternative models to the one tested. However, while these models might be more statistically sound,
their *ad hoc* nature entails a deviation from the original model with its theoretical foundation. SEM also allows the testing of competing models, providing statistical output describing their respective strengths. The bimodal way of evaluating risk factors measures the direct effect of the independent variable on the dependent variable. Another benefit of SEM is that the indirect effect (for the purposes of this thesis, the mediated effect) is evaluated at the same time and can be measured more accurately.

Structural Equation Models used in this thesis were run using Maximum Likelihood (ML) estimation for the analysis of the covariance matrix and were set to calculate direct, indirect, and total effects with standardized estimates. To evaluate the statistical significance of potential mediation effects, resampling methods in the form of effects bias-corrected bootstraps using 2000 bootstrap samples were computed, thus obtaining significance testing and standard errors (Bollen & Stine, 1990; MacKinnon, Fairchild, & Fritz, 2007; MacKinnon, Lockwood, & Williams, 2004; Shrout & Bolger, 2002). Because of the small sample size, cross-validation through percentile bootstraps was used in accordance with the recommendations of Cheung and Lau (Cheung & Lau, 2008). Technically, the study in this thesis (paper III) can be regarded as a risk factor analysis rather than a mediating analysis, according to Kraemer et al.’s way of reasoning (Kraemer, et al., 2001).

**Qualitative content analysis (QCA)**

Qualitative Content Analysis is often described as a time-consuming but versatile method for analyzing text (e.g., Cavanagh, 1997). A particular strength of QCA is that it allows closeness to the original text. After transcribing a text (e.g., an interview), the investigator works through condensation (removing redundant information while preserving the core), and abstraction (grouping together under higher order headings). During the abstraction process, the assigned codes maintain closeness to the original text. The codes, being “heuristic tools,” are later used to create categories (Graneheim & Lundman, 2004). As long as each individual text is not pooled into a larger mass of text, it remains easy to verify a category, throughout the abstraction process, by examining the original phrasing of the interview; this facilitates transparency and makes it easier to work with the analysis in a group of researchers, reaching some form of consensus.

The purpose of QCA is often described as looking for similarities and differences within a group, unlike grounded theory, which is often aimed at unearthing a unified model, or phenomenology, that tries to capture a common phenomenon describing the object of study.
An issue in general with papers based on a qualitative approach is that the procedure of how the individual participants were selected is rarely described in detail. Therefore, a more systematic sampling procedure, based on a quantitative/statistical approach, could prove more feasible and informative.

**Procedure**

The participants were selected by the police department in accordance with their own system of crime severity and thereafter recruited to the project. They were chosen retrospectively (but consecutively) from a set point in time, which resulted in their being interviewed eight months after the reported crime. The police made the first contact, explaining the project and offering the option to participate. If they accepted, they were then contacted by the project members and an interview was scheduled. Informed consent was obtained at the first interview. The face-to-face interviews were recorded on paper as well as digital audio (MP3 player). Whenever possible, the participants completed the questionnaires on location before leaving the interview locale. They were also informed about the planned follow-up during the interview.

**Ethical and methodological considerations**

The project was approved by the regional ethical review board. Some ethical considerations that became important to the project group were: first, it was important that the two interviews be conducted by the same interviewer. Many of the participants came to regard their participation as important and beneficial. Methodologically, this also enabled us to ask highly specific and individualized follow-up questions. This was very much an effect of the trust established by this procedure. Secondly, a psycho-educational approach seemed advisable in the context; merely asking the questions seemed to increase participants’ awareness of various reactions and sequelae after victimization.

It has been noted that research in the field of victimology, almost by definition, leads to some degree of advocacy. While a problematic aspect of this might be what is regarded in ethnological studies as “going native,” i.e. losing some of the researcher’s neutrality, it might also be argued that it has to do with empathy. After all, the position of a victimologist, at least to some extent, is to facilitate in letting the voices and experiences of crime victims be heard.
Results

**Paper 1: Trauma-related Symptoms after Violent Crime: The Role of Risk Factors before, during and Eight Months after Victimization.**

Gender differences were noted in the participant group; whereas female participants, compared to the males, reported a higher frequency of previous mental health problems ($\chi^2=10.85; \text{df} = 1; \ p < .01$) and adverse childhood ($\chi^2=7.78; \text{df} = 1; \ p < .05$). No significant difference in prior trauma was reported. No participant reported any additional trauma between the index crime and the time of measurement. The alpha values for HTQ were .91 for the 16 items used in the study, and for the subscales Intrusion .68, Avoidance .83 and Arousal .82.

The independent samples t-test revealed that female participants of the study, compared to males, reported higher scores on all trauma-specific symptom scales as well as on all but two of the general psychiatric symptom scales. Comparisons with the Swedish normative data for SCL-90 showed that both female and male participants reported higher symptom levels on several subscales. Self-rated mental health (VAS) was significantly lower than before the crime: A significant difference between before the crime and at eight months were detected for the whole group (t(33) = .002, $p < .05$) and for female participants (t(315) = .008 $p < .05$). The gender differences in symptom levels remained when trauma type was controlled for.

PLS (Partial Least Squares Regression) models of risk factors for outcomes on HTQ and GSI were tested. The test of risk factors for trauma specific symptoms yielded a model with one significant component where 30% of the variance in X explained 46% of the variance ($r^2$) in Y (HTQ16). The test of risk factors for GSI yielded a model with one significant component with a goodness of prediction value ($Q^2$) of 0.30, in which 30% of the variance in risk factors explained 48% in the outcome variable GSI. Risk factors (VIP value > 0.8) for HTQ were identified as being female, experiencing intense negative emotional reactions after crime, psychiatric history, experiencing helplessness during the crime, childhood adversity, prior trauma, and experiencing intense fear during the crime. For GSI the risk factors were psychiatric history, experiencing intense negative emotional reactions after crime, being female, childhood adversity, and experiencing helplessness during the crime.
In conclusion crime victims, especially females, suffer distress related to the crime eight months after the event. Risk factors identified by previous studies were found and the results seem to point at the importance of paying attentions to wide variety of risk factors and to include comorbid symptoms in clinical assessments.

**Paper II: Psychological Distress Associated with Interpersonal Violence: A Prospective Two-Year Follow-Up Study of Female and Male Crime Victims**

Paired samples t-tests indicated no significant difference in symptom levels between eight months and two years for HTQ (t=0.52, (25); p=.61) or for GSI (t=1.34, (27); p=.19). The Effect Sizes after two years were small, irrespective of gender. Gender differences in symptom levels remained after two years. A moderate ES was detected for males on the GSI scale (with a tendency noted in the paired samples t-test). Males, however, did not report clinically elevated GSI scores at eight months or two years, while female participants reported clinically significant scores on GSI at eight months as well as at two years. The HTQ scores remained significantly higher for females compared to males. Self-rated mental health (VAS) was no longer different between female and male participants.

Using an algorithm for determining cases of PTSD revealed that at eight months there were three PTSD cases and three sub-clinical PTSD cases. At two years this number had decreased to one and zero, respectively. Only two participants (6.2%) consistently reported no symptoms (i.e. lowest possible score on all items on GSI and SCL-90, respectively).

A test of risk factors showed that being female, having experienced intense negative emotional reactions after the crime, previous mental health problems, and childhood adversity remained as significant risk factors. These variables were related to fewer distress variables at two years than at eight months.

At two years, a majority of the participants, i.e., 18 of 29 (62%), reported at least one adverse or potentially traumatizing life in the time between eight months and the two-year follow-up; four (13%) reported more than one such event. These events were separation, bereavement, criminal victimization, and various indignities (like being accused of a crime). At two years 28% rated the impact of the index crime as “none” or “light”.

In conclusion crime victims, especially females report little to moderate recovery after two years following a crime if they have received little or no
support from society. A large part of the crime victims have also experienced new stressors and adversities. Some overlap between prior trauma and additional trauma existed, whereas 11 of the 18 reported both prior trauma and additional trauma. This suggests that at least some of the participants were already in a process of repeated victimization and highlights the necessity to assess prior as well as current stressors in crime victims. The results also highlight the need for more knowledge regarding early interventions for crime victims.


Both female and male participants scored higher on GSI compared to the Swedish norm. The overall results on TOSCA revealed no significant differences between the victimized group and a Swedish reference group. Females in the crime victim group had higher scores for shame- and guilt-proneness than males, but only the difference in the guilt measure was significant ($t = 4.82; p < .05$).

Bivariate and partial correlations revealed that event-related shame and shame proneness were strongly correlated to symptom outcomes; both trauma-specific and comorbid symptoms. The two shame measures were also highly intercorrelated. The guilt measures were found to be unrelated to symptom outcomes, as well as to each other. To test codomination by shame proneness and event-related shame partial correlations controlling for the shame measures respectively, in relation to symptom levels were performed. For each shame measure the correlation with symptom level remained.

Structural Equation Modeling (SEM) was used to test whether event-related shame would significantly mediate the association between shame proneness and post-victimization distress two models were tested; examining mediation for trauma-specific symptoms and GSI, respectively.

In conclusion the mediator models demonstrated event-related shame as a partial mediator for shame proneness in explaining post-victimization distress, and that both shame measures are relevant, and codominant, risk factors for post-crime distress. The study also seems to lend support to the stability of the construct of shame proneness.
Paper IV: Victimization After Severe Interpersonal Violence: A Qualitative Approach to Different Trajectories of Recovery

A subsample was drawn from the entire participant sample based on ipsative scores. VAS scores were ipsated to obtain a measure of relative change in VAS scores over time (trajectories). All trajectories were entered into a graph and individual trajectories were selected manually to obtain a maximized variation of trajectories. Two participants from each trajectory were picked to form the subsample on which the qualitative analysis was made.

Qualitative content analysis was used to obtain categories that were fitted to the timeline corresponding to measurements over the two year period. Two additional categories were created, because they did not readily fit into the established timeline.

Independent of trajectories the crime victims expressed wellness, an active lifestyle, and an absence of fear before the crime. The participants often also described having changed, conveying that an important aspect of the self had been lost or taken away as a result of victimization, leaving the participant feeling bereft or stunted. Immediately after the crime they described feeling unsafe, afraid, confused, and angry. Ruminations concerning possible consequences and outcomes, intrusive fantasies about worse things that could have happened, as well as dwelling on why it happened to them were frequently reported. After eight months participants reported maintaining a reasonable level of functioning (e.g., being able to work or go to school), but the narratives also conveyed a sense of not functioning optimally (e.g., being overly cautious, afraid, or isolated) and of persisting reactions (e.g., still being suspicious). Negative emotional responses over time that were merged into this core category were “feeling lonely and abandoned”, “feeling disappointed”, and “feeling misunderstood and questioned”. At eight months the participants frequently expressed feelings of indignity in regards to encounters with public authorities. At the two year follow-up many expressed some form of hope, with some conveying an element of fierce determination in that hope; others conveyed utter disillusionment even after two years.

In coping with the reactions after the crime the participants mainly reported trying to forget about it or relying on the support of friends and relatives. Varying degrees of success at coping with the reactions were reported. Some reports regarding the unexpected helpfulness from strangers were notably helpful in the recovery after and coping with the crime. In general, perpetrators were seldom described with hatred and bitterness; revenge was rarely expressed.
The different trajectories show differences in mental health and functioning before the crime, differences regarding availability in support and exposure to new adversities. Also variations in emotional reactions are salient, along with differences in the rating of the severity of impact of the crime at two years.

In conclusion the results indicate the importance of making room for additional adversities and current life-stress when assessing crime victims. Also, clinicians need to address individual and idiosyncratic reactions and coping strategies in order to offer relevant support to crime victims. While most victims recover relatively well, symptomatic recovery, when it takes place, is often a slow and arduous task.
Discussion

The studies in this thesis explored the sequelae of victimization, including level of distress at eight months and two years, risk factors and subjective experiences. Post crime emotions and emotional disposition were explored also as risk factors for post-crime distress. In the second and fourth paper, distress, reactions, and consequences were examined longitudinally, while distress and risk factors were examined retrospectively in papers I and cross-sectionally in paper III.

Distress after violence in the natural course

In study I, gender differences were noted with women reporting a significantly higher frequency of abusive childhood experiences and prior psychiatric problems than men, while there was no significant difference in prior traumas reported at eight months.

The participants reported symptom levels that were significantly higher than the Swedish norm for SCL-90, with the women reporting significantly higher levels than men. Trauma-specific symptoms and self-rated mental health (using VAS) at eight months were also significantly higher for women compared to men. The trauma-specific subscale arousal especially seemed elevated. These gender differences remained at the two-year follow-up. On most symptom scales, no significant difference between eight months and two years was noted, and effect sizes (Cohen’s d) in general, were small. The subjective ratings of mental health (VAS) did change, however, and a moderate effect size was detected. At two years, the gender difference from eight months had disappeared from the VAS measure. This could be explained by the instrument being more sensitive to change than the symptom scales (i.e., HTQ and SCL-90) or that the VAS measures, being more subjective, are more general and inclusive.

While the continuous measures showed little or no change over time, the number of PTSD cases (identified by the algorithm suggested for HTQ) and subclinical cases decreased. This points to the variation found when combining measures. An important difference between the continuous symptom scales and caseness is that the scales do not take clinically significant impairment into account. The results underline the importance of assessing a wide range of symptoms not limited to trauma-specific symptoms of intrusion, avoidance and arousal, and/or comorbid depression.
It also highlights the importance of using a combination of assessment instruments to capture the full range of post-victimization distress.

While Dutton and Greene (2010) and others have concluded that crime victims generally adjust fairly well after victimization, it is worth noting that the participants in this thesis, especially women, reported high degrees of symptoms over time compared to the Swedish norm. It is also noteworthy that as few as two participants (6.2%) reported no symptoms whatsoever (on the SCL-90 and HTQ symptom scales) over time. Perhaps this suggests that the subclinical interval needs to be expanded. In general, a conclusion that crime victims recover well needs to be discussed, especially since Dutton and Greene themselves acknowledged that recovery takes place over many domains. Studies I and II in this thesis describe sequelae in the natural course of event in crime victims not offered interventions from society. Left to deal with the distress and emotional-behavioral consequences on their own, a large proportion of crime victims will not recover to the level of mental health and functioning they had before the crime. A parallel issue is that studies have shown that events not fulfilling the A1 criterion for PTSD might yield similar levels of distress as events that do meet the A1 criterion (e.g., Frazier, et al., 2011; Green, et al., 2000; Robinson & Larson, 2010). If diagnosis remains the main focus in clinical settings, the results of this thesis indicate that many crime victims will not be eligible for interventions.

Most studies on alcohol and its relation to trauma pertain to the effect of alcohol on memory (e.g., Bisby, et al., 2009). In the experiences of most participants in studies I and II, alcohol was a frequent ingredient at the time of victimization (most were attacked on their way home from or in venues like nightclubs or pubs) but how this may have affected recall and the trauma process is unclear. Few participants, however, reported having trouble remembering the event and its subsequence. To what extent being intoxicated contributes to various post-crime reactions, such as secondary appraisals, self-blame, shame and anger, is not often reported. Possibly, the relationship between drunkenness and victimization is avoided for fear of evoking guilt and shame.

**Predicting postcrime distress – the role of risk factors**

The risk factors found in this study are similar to those identified in previous studies (e.g., Brewin, et al., 2000; Ozer, et al., 2003). Especially the peritraumatic reactions after secondary appraisal, discussed by Brewin et al., (2000), are salient predictors of distress. Among other things, this indicates that the relevant fear response takes place well after the actual event, rather than during. In fact, fear during crime contributed surprisingly little to the
explained variance in the multivariate models in this thesis, while loss of control during the crime contributed much more. Given the small sample size in study I, restriction of range and low power must be considered, but an alternative hypothesis could be that there is a moderating relationship between fear and loss of control, where fear is a predictor of posttraumatic distress if loss of control is experienced. A previous study found that helplessness was a strong predictor of PTSD, while fear was not (Roemer, Orsillo, Borkovec, & Litz, 1998). An alternative interpretation is that many of the participants never had time to react with fear during the crime. For many of the participants, the crime happened very quickly and the most salient memory of the event was surprise and shock, with fear coming after secondary appraisal, as discussed above. This was not true, however, for all participants. Some suffered longer duration and intensity during the crime itself. According to the dose-response model, these individuals should suffer higher levels of distress. The dose-response model, however, has been found insufficient (Kaysen, et al., 2010). Future prospective studies are required to elucidate the relationship between fear and helplessness. In this thesis, loss of control and helplessness were used without clearly defining or differentiating them, circumventing the issue, for instance, of whether the two constructs are similar or different. Rather, they represent an assessment of the situation; based on the participants’ narratives, their experience of being without control or feeling helpless was determined. More validated instruments for measuring loss of control/helplessness would probably render more conclusive results in future studies.

Secondary emotions (Brewin, et al., 2000) seem to be a stable indicator for later distress or PTSD diagnosis. This poses an interesting question as to how to differentiate the strong acute reactions that could be considered normal (since most people develop signs of acute stress disorder after a potentially traumatizing event) from reactions that actually predict failure to recover. Is this a matter of mediation, i.e., do different factors, masked by the acute reactions, actually explain the outcome of distress at a later time? Or is it multifactorial, i.e., are there different risk factors for different types of trauma?

Gender differences in susceptibility to PTSD and posttraumatic distress have frequently been noted, and the results in this thesis support this as well; being female was an important predictor of both outcome models. It is important to note that female gender, psychiatric history and peritraumatic reactions, predicted the outcome together.

Shame and shame proneness have been discussed as important factors behind the development of posttraumatic distress. Shame seems especially
relevant in the field of victimology. While shame seems to have an entirely negative impact on post-crime functioning, the experience of guilt and the impact of guilt proneness are more difficult to interpret. Leskela et al. (2002) found that guilt-proneness was negatively correlated with PTSD and suggested that guilt might have a protective effect in relation to trauma. Similar results were found in a more recent study by Robinaugh & McNally (2010). The results from study III showed that guilt and guilt-proneness were unrelated to post-trauma symptoms. It may be that in order to say that guilt-proneness has a protective effect, the results need to show a more consistently significant, negative correlation with symptomatology and that its mediating or moderating relationship needs to be described more fully. While the result from the correlations in this thesis, in particular the partial correlations, seems to suggest the presence of a possible protective effect, the results were not unequivocal enough to warrant testing it guilt a model.

Blum (2008) pointed out the inherent problem in differentiating state measures of shame and guilt due to their intercorrelation, especially in relation to psychological trauma. In this study, we chose to such a differentiation nonetheless, in order to further explore the role of shame and guilt in the sequelae of criminal victimization. Ginzburg and colleagues (2009) found support for the concept of two such constructs, with the guilt construct seeming more complex than the shame construct, as discussed, for example, by Delahanty et al. (1997) and Janoff-Bulman (1979). One explanation is that while shame is primarily an affective process, guilt is more related to attribution and appraisal, i.e., more related to cognitive processes akin to coping. The difference between shame and guilt may therefore be that shame, to a higher degree, leads to rumination and an activation of defense mechanisms, while guilt may instead replace shame, inhibit rumination and lead to more adaptive coping. As noted by Janoff-Bulman, crime victims sometimes engage in behavioral self-blame, attributing victimization to a modifiable behavior rather than a characteriological flaw (1979). To find a way to address guilt in clinical settings, future research should focus on testing for adaptive aspects of guilt and their possible protective and mediating effect in relation to distress. Also, phenomenological indices should be used for guilt measures in order to better differentiate guilt from shame.

**Follow-up and repeat victimization**

While no participant reported any new trauma at eight months (i.e., between index crime and the interview) comparable to the index trauma, more than half reported new adversities at the two-year follow-up (i.e., between the eight month interview and the two-year follow-up). A possible explanation
for this could be that initial avoidant behaviors result in a decreased risk of repeat victimization, thus also having protective aspects in a short-term perspective. Could it be that at two years people’s level of avoidance has decreased somewhat, making them vulnerable to new adversities? If so, this might be in line with the results of Freedman et al., who found that avoidant reactions were more dominant in the later phases of negative posttraumatic adjustment (Freedman, et al., 1999).

While no new adverse experiences comparable to the index trauma were reported at eight months, some described ongoing life stress of varying severity and, at two years, 18 participants reported additional trauma. Of these 18, 11 had reported experiencing trauma before the crime. This overlap between prior trauma and renewed adversities suggests that at least some of the participants were already in a process of repeat victimization and that the target stressor was not necessarily the first traumatizing event in their life. This is also concurrent with results from previous studies. For example Green and colleagues (2000) found that nearly all participants in their study had experienced previous adverse experiences and that many of those could be regarded as traumatic despite the fact that the A1 criterion was not fulfilled for all of them. Messman-Moore and Brown (2006) concluded that prior victimization and delayed risk response increased the risk of being victimized in the future. Witte and Kendra (2010) found that victims of intimate partner violence were less likely to identify risk in a violent situation. These findings, together with the frequent narratives of renewed adversities in the studies in this thesis, suggest the value of including these elements in interventions for crime victims aimed at improving risk perception.

As mentioned above, some participants reported ongoing life stressors that started before the index crime. In some of these cases, the index crime was in fact a mere parenthesis in comparison to the previous stressors. This highlights the complexity of trauma recovery. In conclusion, these findings, suggest the importance of not only assessing the distress associated with the current crime but also concurrent stressors and additional adverse events that might affect recovery.

**Qualitative results**

The crime victims’ narratives show that while many experienced subsyndromal levels of distress that do not qualify them for a PTSD diagnosis, many nonetheless described a recovery process that could be defined as a psychological crisis. Most participants describe a period of distress (crying; being anxious, afraid, or angry) behavioral change (staying
at home; feeling suspicious and having problems trusting people; exerting exaggerated control over friends and family members), and rumination (especially concerning the assailant and possible worse consequences the assault could have had). The majority describe being able to maintain a reasonable level of functioning (i.e., being able to go to work or attend school). The functioning, however, had its price. Many participants reported coming home depleted, needing the rest of the day to recover, or in some cases ruminating on the crime.

In general, however, the narratives of the crime victims suggest a far more resilient trajectory, with transient crisis reactions, determined hope- and grief work aided by social support and adaptive coping. Though rarely expressing bitterness or feelings of revenge, the group nevertheless feels abandoned, misunderstood, and questioned by authorities and social services. In communicating their need and desire for practical help, empathic care, and responsible action from authorities, we can conclude that the crime victims in this thesis, although exhibiting moderate symptom levels, feel abandoned by society and left to cope on their own.

The trajectories in study IV bear some affinity to a recent study on life course typologies constructed by Draucker and Martsolf (2010), who studied life-time narratives and constructed a number of victim typologies. Despite differences in methodology between this thesis and their paper, what is remarkable is how much similarity can be found. These similarities point to the possibility of amassing qualitative results, thereby increasing their analytical validity. By adding data to data, the results from Draucker and Martsolf seem to add to the transferability of this thesis as well.

**Methodological reflections**

The focus of the thesis was to investigate the effects of a single event of interpersonal violence perpetrated by a previously unknown assailant. In this respect, all participants can be regarded as having similar characteristics, despite the fact that the types of crime they were exposed to varied. It can be argued that mixing types of crime has its limitations. Even 16 years ago, Weaver and Clum argued that more representative samples of victims and crimes needed to be investigated (Weaver & Clum, 1995). In this thesis, the strict inclusion criteria led to a selection of participants, excluding known criminal behavior and substance abuse, as well as intimate partner violence. While this means that the group described in this thesis may not be equivalent to the statistically typical crime victim, the results may well apply to crime victims exposed to a single event of victimization by a previously unknown perpetrator. In some studies, different types of victims have been
mixed, like single rape perpetrated by a stranger mixed with repeated sexual victimization by an intimate partner. Sometimes, this is not even addressed as a limitation (e.g., Naifeh, et al., 2008). The conclusion is that more knowledge is needed about the differences between, and within, different types of events of interpersonal violence.

The thesis has a naturalistic approach, attempting to embrace the complexity of the human experience of violence. In research regarding treatment outcomes and risk factors, Randomized Controlled Trials (RCT) are considered the gold-standard. While there are many benefits of randomized, highly controlled studies, there are also drawbacks. Smedslund argues that RCT-designs ignore fundamental obstacles to empirical psychological research (Smedslund, 2009), concluding that the benefits of RCT are gained at the expense of ecological validity. Other researchers have found that the highly manualized treatment programs used in RCTs fail to address the multifaceted clinical presentations of many patients (e.g., O'Donnell, Bryant, et al., 2008). O’Donnell and Bryant, advocate that therapy manuals are used as strategic tools rather than formulaic prescriptions. Supported by their arguments, research designs need to be adapted to meet the heterogeneous presentation of “real world” patients. An approach that combines qualitative and quantitative methods has been put forth by several researchers (e.g., Testa, Livingston, & VanZile-Tamsen, 2011). Testa and her colleagues concluded that:

"integration of quantitative and qualitative methodology creates a synergy and leads to a deeper understanding than is possible with exclusive use of a single orientation" (Testa, et al., 2011, p. 246).

Another important complement to methodology would be using phenomenological and hermeneutic approaches. Testa et al., concluded that the use of qualitative methods is commonplace in studies of violence against women (Testa, et al., 2011) but that non-quantitative methods are not as frequent in the field of victimology in general. A hermeneutic approach could be useful in interpreting latent meanings in crime victims’ narratives and might offer insights into intrapersonal mechanisms after victimization, or lead to new hypothesis to be tested by quantitative, experimental methods. Being a highly subjective experience, phenomenology might offer insights into within-group variations among crime victims. This is akin to the perspective of identities in manifolds discussed by Sokolowski (2000). The arguments of Dutton and Greene (2010) and Luthar and colleagues (Luthar, Cicchetti, & Becker, 2000) also support the use of phenomenological inquiry, since they conclude that many predetermined criteria of investigation might not make sense to the crime victims and that crime victims might present reactions other than those expected.
Reflections on victimization

Experiences from this thesis also highlight the need for flexible, outreach interventions aimed at offering support to crime victims. This was recently argued for in a recent study (Kelly, Merrill, Shumway, Alvidrez, & Boccellari, 2010), that concluded:

Comprehensive programs emphasizing outreach, engagement, and practical assistance immediately following criminal victimization can provide an essential stabilizing influence, demonstrating to vulnerable individuals that they are cared for and allowing for thorough assessment of mental health needs and referral to appropriate mental health (Kelly, et al., 2010, p. 152).

To date, support and interventions from society are not yet sufficiently adequate and flexible when it comes to adult crime victims in general. Experiences from the current project show that crime victims do not always seek treatment. Recent studies (e.g., Wong, Kennedy, Marshall, & Gaillot, 2011) have also shown that traumatized individuals rarely attribute their reactions to the index trauma, making them less prone to seek help. In the experience of the crime victims in the present thesis, the acute medical care and primary care fail to meet the needs of the individual. One reason may be that subclinical distress and crisis reactions are considered too mild to warrant specialized intervention. In this thesis a frequent statement by the participants concerned the lack of early intervention and support. Crime victims also expressed a need for follow-up and the feeling that society should convey its responsibility. A general impression has also been that the participants in the project found the act of participation in the project, per se, to be beneficial and an important element in their recovery, as it relieved their isolation, had a psycho-educative effect, or simply helped them realize the importance of dealing with their own situation.

The inner chaos described by crisis theory helps explain the difficulties faced by crime victims (see fig. 1, p. 36), who, simultaneously with struggling with their crisis work, often have trouble dealing with a confusing environment of formalities, police investigations, work, and worried family members. Besides being traumatized or in crisis, struggling with avoidant symptoms and having limited access to intervention programs, many crime victims go without much needed support.
Crime victims and trauma survivors generally do not identify themselves as victims. What is more common is a survivor mentality (e.g., Summerfield, 1999). While victim status is not associated with post-crime distress (Littleton & Henderson, 2009), not feeling like a victim, in our experience, still seems to be associated with a certain degree of recovery or perspective.

The Swedish legal term for “plaintiff” (målsägande, case-owning) denotes someone who “owns the case” or “owns the right to speak in council.” The experiences of the crime victims of this project, however, seem to support neither definition: they are not victims in general nor are they active participants in the legal procedure. Hence, they can be more aptly described as survivors.

**Limitations of this thesis**

One limitation of the thesis was that the sample was ethnically homogenous. A great majority of the participants (90%) were of Swedish origin. This could have had some effect on the results, and generalizations should be made...
mainly to the non-ethnical part of the Swedish population. Furthermore, the presence of so-called hate crimes (i.e., crimes perpetrated against an individual for reasons of ethnicity, sexual orientation, gender, etc.) was not established. Being the victim of a hate crime could have a different subjective meaning to the victim, and the results of the studies in this thesis might not be applicable to survivors of such crimes.

Another limitation was that the sample in this project was drawn exclusively from reported crimes. It is a known fact that many crimes go unreported and this means that we have no data on the psychological sequelae of those who do not report crimes. Furthermore, only a few of the participants’ cases went to court. In fact, most cases were dropped due to lack of evidence (even the pre-trial investigation was often terminated because “no crime could be supported”). While studies have shown a variety of reactions related to the criminal trial, the proceedings are likely to have some impact for crime victims; some will likely feel vindicated and others might be further distressed. Recently, however, Orth and Maercker found that revictimization was not the likeliest outcome of a trial (2004).

The trust that was established between the interviewers and the participants might be construed as preventing researcher neutrality. On the other hand, it may be argued that establishing trust is an important part of good communication and that it may have allowed the participants to describe their reactions without fear of being judged. In this respect, ethics was preferred over methodology. Doing victimology research also leads to increased knowledge of the legal issues surrounding a crime victim; whenever we could, practical advice was offered. Thus, it is no surprise that many of the participants reported that their participation in the project was one of the factors they benefited the most from after the crime. Participation apparently had impact of some kind on the participants, perhaps entailing a treatment effect. While seeming to have alleviated some distress and decreased the participants’ feeling of being ignored and met with mistrust—which in turn may have counteracted dropout—this effect of participation was not properly evaluated.

This thesis is to a great extent based on retrospective reports, which was partly a necessity, since certain data could not have been accessed in any other way. Retrospective reports are susceptible to bias, however, which must always be kept in mind. Another potentially troublesome aspect of the thesis was the small size of the samples, which led to the use of statistical methods to handle small-n samples. Methods like PLS were originally constructed to handle small samples with many variables,
where independence between variables cannot be guaranteed. Measures like bootstrapping contribute to make the results more reliable.

**Main conclusions**

Recovery from criminal victimization is a slow, arduous task for many, characterized by “deliberate intent and hope work” (Esposito, 2005), and often taking longer than expected, both for the crime victims themselves and for their surrounding networks of friends and family. If crime victims are not offered interventions from society, their spontaneous recovery seems to halt, as evidenced by little or no discernable difference in recovery between eight months and two years. Women are especially vulnerable to distress if left unsupported. Use of social networks and avoidant coping strategies were the most frequently applied strategies, but their effectiveness and that of other coping strategies varied.

The ability to predict distress after victimization remains a complex issue. In this thesis, peritraumatic reactions and gender were the two strongest predictors of distress at eight months and two years, followed by previous mental health problems and childhood adversities, suggesting the importance of pre-existing vulnerabilities and the subjective experience. Feelings of crime-related shame and a disposition to react with shame in situations involving moral choice are also risk factors that independently predict distress. Shame seems to be an underestimated risk factor for post-victimization distress, as suggested by Rizvi et al. (2008).

Crime victims’ narratives convey a sense of struggle to maintain vocational or academic functionality, despite an experience of non-optimal functioning over time. The experience of victimization includes feeling disappointed and abandoned by society, as well as being questioned and met with mistrust. Few crime victims seem to harbor feelings of revenge and retaliation, which is a good sign, since this has been proven to be an important factor associated with recovery (Orth, Mondana, & Maercker, 2006). Similarly, recovery is associated with an ability to forgive, but forgiveness, importantly, is not a prerequisite for recovery (Orth, Berking, Walker, Meier, & Znoj, 2008). Lastly, crime victims want to be offered early interventions and would in all likelihood benefit from them, especially if they are characterized by practical help, outreach methodology, and flexibility.

**Implications for further studies**

The risk factors in this thesis mirror previous research to a large extent. However, the small contribution of fear and prior trauma in explaining
distress outcomes in this group requires further study. The relationship between helplessness/loss of control and fear needs to be investigated using validated instruments for measuring loss of control and using methods that allow the investigation of mediating effects. Likewise, the association between shame and distress needs to be investigated in larger samples, possibly in different victim types. The guilt construct also requires further exploration, especially the alluded protective aspects of guilt in relation to distress after victimization.

An interesting variable that has not been especially thoroughly investigated is *betrayal of trust*, a concept with affinity to attachment theory and object relations theory. In the qualitative results of this thesis, issues of trust were salient but not, however, previously operationalized. The need to investigate this concept and its relationship to trauma has been noted previously by Weaver and Clum (1995). Presumably, issues of trust are expressed differently by different types of victims.

Further studies on the effects on early interventions are needed within a paradigm of screening procedures. Effects on outreach treatment programs and their relationships with treatment attrition and effectiveness, measuring recovery, resilience, and risk with both qualitative and quantitative methods, need to be measured. Research needs to recognize that:

*Recovery may occur in multiple domains, such as mental health, physical health, interpersonal relationships, cognitive function, cognitive and affective processes, biological indicators, functional status, and existential perspectives.* (Dutton & Greene, 2010, p. 219)
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